Aria EIR <eir@aria.org.uk>

EIR 2004 — Exploring Climate Cooling programme: project list, locations, outdoor activity, releases

1 message

[redacted] 7 January 2026 at 23:57
To: EIR@aria.org.uk
Cc: [redacted]

Dear ARIA Information Rights Team,

Please treat this as a request for environmental information under the Environmental Information Regulations 2004 (and/or FOIA 2000 where applicable).

Please provide the current list/register of projects funded under ARIA's "Exploring Climate Cooling" programme, and for each project provide:

1. Project title and summary
2. Lead organisation and key delivery partners
3. All locations (UK and overseas) where fieldwork/outdoor activity is planned or taking place
4. Planned timeline (start/end dates and key milestones)
5. Whether any outdoor experiment is planned (Yes/No)
6. Whether any outdoor **release** of any material/particle/aerosol is planned (Yes/No). If Yes: material(s), approximate quantities/order-of-magnitude, method of release, and expected duration/persistence
7. Monitoring planned during/after any outdoor activity (e.g., environmental sampling/air measurements) and who conducts it

If this information is held in a tracker/spreadsheet/dashboard export, please provide it in that form (with necessary redactions).

If any part is withheld, please provide the remainder and explain the exemption relied upon and the public interest reasoning under EIR.

Kind regards,
[redacted]

[redacted]

[redacted]

20 January 2026

Dear [redacted],

Environmental Information Regulations 2004 ("EIR") Request

We are writing in response to your recent request for information to the Advanced Research + Invention Agency ("**ARIA**") dated 7 January 2026 in which you asked:

"Please provide the current list/register of projects funded under ARIA's "Exploring Climate Cooling" programme, and for each project provide:

1. *Project title and summary*
2. *Lead organisation and key delivery partners*
3. *All locations (UK and overseas) where fieldwork/outdoor activity is planned or taking place*
4. *Planned timeline (start/end dates and key milestones)*
5. *Whether any outdoor experiment is planned (Yes/No)*
6. *Whether any outdoor release of any material/particle/aerosol is planned (Yes/No). If Yes: material(s), approximate quantities/order-of-magnitude, method of release, and expected duration/persistence*
7. *Monitoring planned during/after any outdoor activity (e.g., environmental sampling/air measurements) and who conducts it*

If this information is held in a tracker/spreadsheet/dashboard export, please provide it in that form (with necessary redactions)."

Response to EIR request

You can find details of the projects being funded by ARIA's Exploring Climate Cooling programme on ARIA's website: Exploring Climate Cooling | Funded projects. For your convenience, the relevant extract of the website is attached at **Annex 1**. In addition, we have provided details relating to each of your queries below.

1. Project title and summary

The title of each project and a summary of the work being undertaken can be found on ARIA's website and at **Annex 1**.

2. Lead organisation and key delivery partners

Details of the project lead and key team members can be found on ARIA's website and at **Annex 1**. Where applicable, details of any sub-contractors can be found at Schedule 2 in each of the contracts attached at **Annex 2**.

3. All locations (UK and overseas) where fieldwork/outdoor activity is planned or taking place

Locations have not been finalised for all of the controlled outdoor experiments being funded by ARIA's Exploring Climate Cooling programme. When sites are provisionally selected, public engagement with the communities local to the experiment sites will be undertaken. Before any experiment starts, the project team will engage directly with local communities to explain their plans and adjust them based on feedback.

Where locations have already been finalised, these may be found on ARIA's website, at **Annex 1** and in Schedule 2 of the contracts attached at **Annex 2**.

At present, the location has been finalised for one outdoor experiment: Re-thickening Arctic Sea Ice (RASI). Further details about these activities, including their location, can be found on ARIA's website: Exploring Climate Cooling | Re-thickening Arctic Sea Ice. For your convenience, a screenshot of the relevant section is attached at **Annex 3**.

4. Planned timeline (start/end dates and key milestones)

Details of the milestones for each project can be found in Schedule 2 of each of the contracts attached at **Annex 2**.

At **Annex 4**, we have attached a spreadsheet containing Gantt charts which show the planned timelines for each project.

5. Whether any outdoor experiment is planned (Yes/No)

Details of all planned outdoor experiments can be found on ARIA's website, at **Annex 1** and in Schedule 2 of the contracts attached at **Annex 2**.

The outdoor experiments being funded by ARIA's Exploring Climate Cooling programme are as follows (for convenience, the names of the relevant projects have been included in brackets):

- One project will explore the efficacy of rethickening arctic sea ice (*Re-Thickening Arctic Sea Ice (RASi)*).
- Two projects will explore the effects of seawater spray on cloud reflectivity ([1] *Marine Cloud Brightening in a Complex World* and [2] *A REsponsible innovation Framework for assessing noveL spray tEChnology research To examine local albedo changes from marine brightening and its multi-scale impacts (REFLECT)*).
- One project will explore the effects of electric charge on cloud reflectivity (*BrightSpark – Cloud brightening with electric charge*).
- One project studies how milligram quantities of mineral dusts age in the stratosphere (*Natural Materials for Stratospheric Aerosol Injection*). In this controlled experiment, none of these materials will be released; all are returned to the ground for analysis by scientists.

6. Whether any outdoor release of any material/particle/aerosol is planned (Yes/No). If Yes: material(s), approximate quantities/order-of-magnitude, method of release, and expected duration/persistence

Where finalised, details of materials, quantities, methods of release and expected duration can be found at **Annex 1** and in Schedule 2 of the contracts attached at **Annex 2**.

At present, the materials to be used have been finalised for one outdoor experiment: Re-Thickening Arctic Sea Ice (RASi). This project will release seawater as part of its experiments. The quantities of seawater to be released are yet to be determined.

7. Monitoring planned during/after any outdoor activity (e.g., environmental sampling/air measurements) and who conducts it

Details of the planned monitoring of the controlled outdoor experiments can be found at **Annex 1** and in Schedule 2 of the contracts attached at **Annex 2**. All monitoring and sampling activities will be carried out by the project teams, whose details have been provided above.

Yours sincerely,

ARIA

You can ask us to review our response. If you want us to carry out a review, please let us know within 40 working days by emailing eir@aria.org.uk.

If you are still dissatisfied after our internal review, you may complain to the Information Commissioner's Office (ICO) for further investigation who can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF.

Annex 1: Exploring Climate Cooling Funded Projects

Opp space: Future Proofing Our Climate and Weather

Programme: Exploring Climate Cooling

Exploring Climate Cooling

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Our 22 funded research teams unite specialists across diverse disciplines – from atmospheric physics, chemistry, and climate modelling to chemical engineering, systems analysis, oceanography, and radiative transfer, alongside crucial expertise in governance and ethics – reflecting the programme's holistic approach. This group shares a deep commitment to objective research conducted transparently and responsibly, aiming to navigate the complex ethical dimensions and establish best practices within this field.

Projects will utilise a range of methodologies, including modelling, observations and monitoring, indoor testing and – where strictly necessary and in accordance with our oversight and governance principles – small scale, controlled outdoor experiments.

The programme will also fund projects exploring the broader societal aspects of this scientific research, including methods for public engagement, public attitudes to the field, and governance.

This research explores the crucial governance and ethical dimensions that must accompany any scientific investigation of climate cooling approaches. It includes work on potential governance frameworks, the development of engagement toolkits with Arctic and UK communities, understanding public perceptions in South Asia and the Philippines, and building research capacity across the Global South – all help ensure that this research field evolves inclusively and responsibly.

Strategic Foresight on Climate and Geopolitics: Toward governance of earth cooling approaches

Project Lead: Matthias Honegger, Centre for Future Generations

Award: £1.25 million over 17 months

Key team members and approximate budget breakdown: Matthias Honegger, Cynthia Scharf, Centre for Future Generations (£420k) | Trish Lavery, Australian National University Futures Hub (£150k) | Rafal Kierzenkowski, The Organisation for Economic Co-operation and Development (OECD) (£220k) | Danielle Young, University of Leeds (£460k)

Understanding if and how earth cooling approaches could be responsibly governed is critical in light of accelerating climate impacts and the risk of unwise use. This team will explore how these approaches could be responsibly governed at the global level in various future scenarios. They will start by outlining scenarios variously shaped by growing climate impacts, geopolitical challenges, the need for ongoing mitigation efforts, and the public's views. Their research will survey existing debates in both academic and policy circles, and discuss with policy makers and civil society organisations the risks, benefits and uncertainties they expect. Based on these scenarios, the project aims to develop foundational governance ideas to help ensure future decisions are socially and scientifically informed.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

How to speak about climate cooling? Co-creating an engagement toolkit in the Arctic and the UK

Award: £360k over 45 months

Emerging climate cooling technologies [illegible] tion. Meaningful dialogues are therefore a prerequisite for ensuring that research, [illegible], these approaches will be just and inclusive. This is especially true in the Arctic, a region where the voices of people who will be amongst the most impacted are often left out of conversations because of ongoing and historical power imbalances. This team will explore how people want to speak about climate cooling, and how they form and change their views over time. It will move beyond social opinion research by co-designing engagement programmes with local communities and rightsholders across the Arctic and in three UK locations. Beyond the aim of empowering communities to participate more fully in governance, research, and decision-making around these new scientific approaches for cooling the earth, the learnings from these engagements will be captured in a practical, open access toolkit that can be used for future engagement projects around climate cooling.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Evidence-based Assessments to Guide Perceptions, Governance, and Ethical Frameworks for South Asia: Comparing marine cloud brightening strategies vis-à-vis carbon dioxide removal and mitigation efforts

Project Lead: Athar Hussain, COMSATS University

Award: £574k over 3 years

Key team members and approximate budget breakdown: Athar Hussain, COMSATS University (£532k) | Thomas Fischer, University of Liverpool (£5k) | Sajida Kousar, International Islamic University (£8k) | Hassaan Sipra, The Alliance for Just Deliberation on Solar Geoengineering (£9k) | Muhammad Mumtaz, Fatima Jinnah Women University (£20k)

This project provides a comparative analysis of potential climate response pathways – evaluating the implications in South Asia of marine cloud brightening (MCB) against carbon dioxide removal efforts and conventional mitigation approaches. This analysis combines climate science, governance research, direct stakeholder engagement, and policy analysis, deepening our understanding of potential climate cooling technologies within the ethical, governance and social context of South Asia. This work will empower decisionmakers and communities in South Asia to develop inclusive, effective, and locally-grounded climate action strategies.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

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activity in the Philippine context

Project Lead: Lorena Sabino, University of the Philippines Los Baños, College of Forestry and Natural Resources

Award: £148k over 2 years

Key team members and approximate budget breakdown: Lorena Sabino, University of the Philippines Los Baños, College of Forestry and Natural Resources (UPLB-CFNR)

Communities in the Philippines living near volcanoes possess invaluable, real-world experience with atmospheric changes that share similar atmospheric processes to potential climate interventions like stratospheric aerosol injection (SAI). This project centers their unique perspectives, exploring the understanding, ethical viewpoints, and governance concerns surrounding such technologies directly within these communities through focused research. Gathering these insights is crucial for grounding abstract global discussions about SAI in lived reality, and ensuring that the voices of those most vulnerable to both climate change and potential interventions are central to the conversation. This work will help develop ethical, inclusive governance frameworks and foster informed climate leadership in the most affected regions.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Ethics and Governance of Earth Cooling Research: From concepts to implementation

Project Lead: Ignacio Mastroleo, National Scientific and Technical Research Council (CONICET)

Award: £453k over 2 years

Key team members: Ignacio Mastroleo, Timothy Daly, María Inés Carabajal, National Scientific and Technical Research Council (CONICET) + Inter-American Institute for Global Change Research (IAI)

Researching potential Earth cooling approaches raises profound ethical and societal questions that require careful consideration and robust governance frameworks, especially ensuring diverse global perspectives are included. This project focuses on building research capacity and developing ethical frameworks, particularly within the Global South. This project will build a Latin America/Caribbean-UK research network that will address fundamental questions regarding the governance of these approaches, as well as nurturing a new community of experts in the region. The work will explore societal implications, ethics frameworks for managing trade-offs and the breadth of opinions, co-production of knowledge and regional governance, particularly in the Latin America/Caribbean context.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

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Programme: Exploring Climate Cooling

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Projects will utilise a range of methodologies, including modelling, observations and monitoring, indoor testing and – where strictly necessary and in accordance with our oversight and governance principles – small scale, controlled outdoor experiments.

The programme will also fund projects exploring the broader societal aspects of this scientific research, including methods for public engagement, public attitudes to the field, and governance.

Leveraging advanced computer simulations and theoretical models, these projects will investigate the potential effects of various climate cooling approaches on global and regional climate systems, including sensitive areas like the Arctic and monsoon regions. This foundational research is crucial for improving our understanding of the feasibility and potential risks associated with these approaches.

GRID-CC: Global to Regional Impacts Downscaling for Climate Cooling

Project Lead: Andy Parker, The Degrees Initiative

Award: £2m over 3 years

Key team members and approximate budget breakdown: Andy Parker, The Degrees Initiative (£940k) | Babatunde Abiodun, Christopher Lennard, University of Cape Town (£770k) | Daniele Visioni, Cornell University (£290k)

Understanding the potential regional implications of earth cooling approaches is crucial, particularly for communities in the Global South which may be disproportionately affected. Yet, research capacity is often concentrated elsewhere. This project directly addresses this capacity gap by empowering researchers in the Global South. Through computational work, this project will build an open-access repository of detailed Global South climate data that will enable researchers to develop more accurate modelling of the global and regional impacts of these approaches. This project will create new research tools and hold expert convenings to help ensure that researchers in these regions have the evidence base to support scientifically-robust decision-making surrounding potential Earth cooling strategies.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Ecological Impact Assessment of Earth Cooling Experiments in the Arctic (Eco-ICE)

Project Lead: Amanda Burson, British Antarctic Survey

Award: £4.9 million over 4 years

Key team members and approximate budget breakdown: Amanda Burson, Jeremy Wilkinson, Louise Sime, Kate Hendry, Rhiannon Jones, Clara Manno, Florence Atherden, Rachel Cavanagh, Simeon Hill, British

Fragile polar ecosystems are critical to the global clim… …ntial ecological consequences of cli… …ention… …ders… …y exp…ents and computer modelling, this project will provide an independent im… …ntial climate interventions in the Arctic marine environment. The team will develop physical, climate and ecosystem models with direct input from bespoke biogeochemical and biological laboratory experimentation. This independent assessment by experts in modelling and ecology is critical to provide a thorough and balanced evaluation of potential climate interventions in the Arctic. The project will provide best-practice guidance for the ecological risk assessment of future proposed interventions within the polar marine environment.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Investigating the Impacts of Earth Cooling Approaches on the Variability and Wet-Dry Spell Dynamics of the West African Monsoon

Project Lead: Amadou Coulibaly, Institut Polytechnique Rural de Formation et de Recherche Appliquée (IPR-IFRA)

Award: £257k over 3 years

Key team members and approximate budget breakdown: Amadou Coulibaly, Abdoulaye Ballo, Institut Polytechnique Rural de Formation et de Recherche Appliquée (IPR/IFRA) | Sabina Abba Omar, University of Cape Town (at no cost to the project)

The West African Monsoon is a vital climate system supporting agriculture and water resources for millions. Understanding how potential earth cooling approaches might affect this sensitive system is crucial for regional stability and food security. This research directly addresses this need by exploring potential impacts on critical rainfall patterns, including wet and dry spells. Using advanced climate models, observational data, and scenarios from established model intercomparison platforms (such as GeoMIP), the study aims to address critical gaps in understanding how earth cooling approaches might influence regional climate systems and how they might interact with existing climate vulnerabilities. The project will provide actionable insights, helping the region understand how these approaches might mitigate adverse climate impacts while avoiding unintended consequences.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Space Reflector Baseline Survey

Project Lead: Morgan Goodwin, Planetary Sunshade Foundation

Award: £400k over 14 months

(NASA Jet Propulsion Laboratory, California Institute of [illegible] to the project)

To make informed choices about potential climate cooling [illegible] needs a clear understanding of possible options, including less-studied approaches like space-based reflectors. This theoretical study brings together leading space engineering teams with expert climate modellers to address a critical knowledge gap. This team will model six different conceptual designs for space reflector approaches and then use climate models to simulate their potential climate impacts (including atmospheric dynamics, chemistry, and ocean/ice feedbacks). The goal is not to deploy this technology, but to provide an initial assessment of which concepts might warrant further study based on their modelled efficiency, scalability, and potential side effects, fostering collaboration between the space engineering and climate modelling communities.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

An assessment of the feasibility of a space-based solar reflector

Project Lead: Colin McInnes, University of Glasgow

Award: £342k over 1 year

Key team members and approximate budget breakdown: Colin McInnes, Matteo Ceriotti, University of Glasgow (£161k) | Onur Çelik, Delft University of Technology (£156k) | Derek Bennet, AAC Clyde Space (£25k)

Highly speculative technologies like space-based solar reflectors require careful, early-stage assessment. This team is exploring the technical feasibility of space-based approaches to cooling the earth. This project is a desk-based study exploring the initial engineering steps and challenges involved in a hypothetical small-scale space mission to test the feasibility of a space-based sunlight reflector. This purely conceptual work is aimed at understanding the requirements for such a mission. Its purpose is to inform whether, and how, further research into this specific Earth cooling approach might proceed, ensuring resources are directed effectively based on sound engineering principles.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Towards Robust and Unbiased validation of SAI Simulations (TRUSS)

Project Lead: Heri Kuswanto, Institut Teknologi Sepuluh Nopember, Indonesia

Award: £345k over 3 years

outputs, this project looks to ensure that impact predictions, especially crucial regional assessments, are robust and unbiased. This foundational modelling work is vital for building confidence in the science and enabling genuinely informed decision-making by policymakers and the public.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Simulating the effects of earth cooling approaches on the Dynamics and Thermodynamics of Monsoon and Precipitation Extremes

Project Lead: Byju Pookkandy, The Energy and Resources Institute

Award: £140k over 2 years

Key team members: Byju Pookkandy, Kaagita Venkatramana, The Energy and Resources Institute (TERI)

Stable and predictable rainfall is fundamental to societies in both India and the UK, underpinning agriculture, water security, and protecting communities from floods and droughts. This research provides essential foresight into how proposals for earth cooling could potentially disrupt these vital precipitation patterns – affecting everything from the timing of seasonal rains in India to the intensity of precipitation extremes. By analysing detailed climate simulations from established model intercomparison platforms (such as GeoMIP) specifically designed for earth cooling scenarios, the study will pinpoint why these changes might occur, disentangling the complex factors driving rainfall. This computational analysis will deliver crucial, regionally-specific evidence to help evaluate the potential risks these approaches may pose to indispensable water cycles and resources.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Defining the minimum scale of an SAI test: A fundamental first step towards an outdoor experiment

Project Lead: Doug MacMartin

Award: £445k over 2 years

Key team members: Doug MacMartin, Daniele Visioni, Cornell University

these predictions. This project addresses this critical [illegible] theoretical modelling and analysis, as it aims to determine the minimum scale for [illegible] experiment that could provide the real-world data needed to substantially reduce this uncertainty. Identifying this minimum threshold is essential foundational work. It paves the way for designing any future research in the most responsible, efficient, and low-impact manner possible. Understanding this scale is also crucial for proactively developing the appropriate governance and oversight frameworks that would be necessary before any such small-scale atmospheric research were to take place.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Previous funding calls in this programme

The projects we are funding have been selected from teams and individuals who applied to our previous funding calls for this programme. You can read more about these calls below.

Exploring Climate Cooling | Proposals

Oversight + Governance

Meet the Oversight Committee and understand how we ensure rigorous governance across the programme

Learn more

FAQs

Check out the most frequently asked questions around this programme

Opp space: Future Proofing Our Climate and Weather

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Projects will utilise a range of methodologies, including modelling, observations and monitoring, indoor testing and – where strictly necessary and in accordance with our oversight and governance principles – small scale, controlled outdoor experiments.

The programme will also fund projects exploring the broader societal aspects of this scientific research, including methods for public engagement, public attitudes to the field, and governance.

These projects focus on gathering crucial real-world data about existing atmospheric processes, such as how soot affects clouds and how particles released in volcanic eruptions behave in the atmosphere. The goal is to enhance our ability to study the climate safely and effectively, and to ensure that we have the tools to understand both natural phenomena and the potential impacts that climate cooling approaches might have.

De-risking cirrus modification

Project Lead: Sebastian Eastham, Imperial College London

Award: £3.6m over 36 months

Key team members and approximate budget breakdown: Sebastian Eastham, Marc Stettler, Ed Gryspeerdt, Imperial College London (£740k) | Benjamin Murray, University of Leeds (£1.4m) | Blaž Gasparini, University of Vienna (£310k) | Takemasa Miyoshi, RIKEN (£270k)

High-altitude cirrus clouds have an overall warming effect on our climate, but how their formation is influenced by existing atmospheric particles (like dust or soot) remains a significant uncertainty in climate science. Improving our understanding of these natural processes is crucial for refining climate models and for establishing the knowledge needed to assess the potential risks and benefits of any future proposals to deliberately modify cirrus clouds. This project aims to gather vital real-world data on these natural cirrus cloud processes and how they are already being affected by the presence of aircraft engine soot.

The team will use a combination of computer modelling and analysis of existing satellite data. They will also conduct observational flights using research aircraft to directly measure how particles already present in the atmosphere, and the additional effects of aircraft engine soot, currently affect cirrus cloud properties. By observing and measuring these existing atmospheric processes, the team are looking to improve our fundamental understanding of cirrus cloud formation, providing essential baseline knowledge to help us understand if deliberately thinning cirrus clouds could ever offer a safe, predictable mechanism for cooling.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Ice-Nucleating Particles in the Upper Troposphere: Advancing Cirrus Control and Experimental Science Strength "INPUT:ACCESS"

Project lead: Thomas Whale, University of Leeds

Alexandre Baron, Cooperative Institute for Research in [illegible] (CIRES), University of Colorado Boulder (USA) | Joshua Schwarz, [illegible] (NOAA) Chemical Sciences Laboratory (at no cost to the project) | Sebastian Eastham, Imperial College London (£63k)

Cirrus clouds have a significant impact on Earth's temperature, yet prediction and modelling of their formation is challenging and constitutes a key uncertainty in climate models and projections. Lack of knowledge of the concentration and nature of the tiny particles suspended in the atmosphere on which cirrus clouds form, known as ice nucleating particles (INPs), is a major contributor to this uncertainty. This project aims to address this knowledge gap by developing new methods to observe and analyse these naturally occurring INPs high in the atmosphere.

Operating out of Colorado, USA, the team will develop and operate a specialised balloon-borne collector designed to gather naturally present INPs from the upper troposphere where cirrus clouds form. These collected samples will then be brought back for detailed laboratory analysis in the UK. This focused monitoring and observation work will generate critical information about the types and concentrations of particles involved in natural cirrus formation. This data is essential for improving the accuracy of climate projections and enhancing our ability to monitor natural atmospheric processes, providing a crucial baseline for climate science.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

StratoGuard - Global Monitoring of Climate Engineering using Micro High-Altitude Balloons

Project lead: Steve Tate, Voltitude

Award: £600k over 33 months

Key team members and approximate budget breakdown: Steve Tate, Richard Nash, Paul Stevens, Voltitude Ltd (£575k) | Chris Stopford, University of Hertfordshire (£25k)

Improving our ability to monitor the Earth's climate, particularly in remote regions, and developing the tools needed to safely observe and measure potential future climate interventions are crucial needs for both climate science and the responsible assessment of climate cooling approaches.

Project StratoGuard focuses on creating low-cost, lightweight micro-balloons (under 4kg, <5m diameter) equipped with sensors, capable of navigating the stratosphere above 55,000 feet for up to 30 days. This capability would support affordable, detailed, and sustained climate data collection across the globe. It would also enhance the capability for sophisticated and cost-effective monitoring of any future outdoor climate intervention activities. With test launches planned from 2026 and potential global launch capabilities (subject to local approvals), this project seeks to miniaturise core technologies for global sensing using small, safe balloons, operating in full compliance with existing regulatory frameworks. The overarching goal is to provide a vital new tool for comprehensive climate observation, as well as providing a monitoring capability essential for responsible research and assessment of potential climate interventions.

Monitoring Aerosol Climate Engineering (MACE)

Project lead: Matt Watson, University of Bristol

Award: £4.3m over 48 months

Key team members: Matt Watson, Arthur Richards, Tom Richardson, University of Bristol

Natural events, particularly volcanic eruptions, release tiny particles (aerosols) into the atmosphere and offer invaluable real-world opportunities to study processes relevant to climate science and potential climate interventions, such as how aerosols affect clouds and the Earth's energy balance. However, safely and rapidly collecting data from these events is challenging. This project aims to address this by developing advanced, automated drone technology specifically designed for observing and analysing emissions from active volcanoes.

The team will design, build, and test lightweight, easily operationalised drones capable of flying safely at high altitudes (10 km). Following initial test flights in the first year, the plan is to use the drones to study emissions from selected, regularly erupting volcanoes – Volcán de Fuego (Guatemala), Soufrière Hills (Montserrat), and Lascar (Chile). The team have flown in all three countries in the past under suitable permits. By analysing these natural volcanic emissions in situ, the research will investigate how tiny cloud droplets form and how natural aerosol layers affect radiation. A key goal is to develop a rapid-response capability using these drones, enabling the scientific community to safely gather crucial data from future significant volcanic eruptions, thereby improving our understanding of natural climate processes.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

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Projects will utilise a range of methodologies, including modelling, observations and monitoring, indoor testing and – where strictly necessary and in accordance with our oversight and governance principles – small scale, controlled outdoor experiments.

The programme will also fund projects exploring the broader societal aspects of this scientific research, including methods for public engagement, public attitudes to the field, and governance.

In cases where essential scientific questions cannot be answered by modelling or indoor experiments alone, these five projects will undertake carefully controlled outdoor experiments, allowing crucial real-world data to be gathered responsibly. These experiments will only proceed if ARIA's stringent governance requirements are met in full. An environmental impact assessment will be performed and made publicly available before any experiment starts, and experiments will have to be developed through engagement with local communities. All funded experiments will be time-bound and limited in size, scale so their effects dissipate within 24 hours or are fully reversible.

Re-Thickening Arctic Sea Ice (RASi)

Project Lead: Shaun Fitzgerald, Centre for Climate Repair

Award: £9.9m over 42 months

Key team members and approximate budget breakdown: Shaun Fitzgerald, University of Cambridge (£1.4m) | Geoff Evatt, University of Manchester (£0.63m) | Michel Tsamados, University College London (£0.63m) | Einar Ólason, Nansen Environmental and Remote Sensing Center (£0.4m) | Andrea Ceccolini, Real Ice (£3.5m) | Fonger Ypma, Arctic Reflections (£3.3m) | Edward Blanchard, University of Washington (£90k) | Steven Desch, Arizona State University (~£10k travel costs funded from Real Ice's share)

The Arctic is warming much faster than the global average, leading to dangerous sea ice loss with far-reaching consequences. This project investigates whether deliberately thickening sea ice during winter could be a viable way to slow summer melt, reduce Arctic warming, and mitigate further ice loss. The research aims to provide critical data on the feasibility, scalability, potential ecological impacts, and overall effectiveness of this approach, which involves accelerating natural freezing processes using seawater from underneath the ice.

Researchers will conduct controlled, small-scale experiments in Canada across three winter seasons (2025-26 to 2027-28). The process involves pumping seawater from beneath existing ice and spreading it on top, where the frigid air freezes it quickly, creating thicker ice patches. Over the course of the project (and if the early experiments suggest the approach is ecologically sound), later experiments will aim to cover areas up to 1 km^2 per experiment site. The key questions are whether this thicker ice lasts longer into the summer, how it might affect ice movement, and what the local ecological impacts are. These experiments will be conducted in close collaboration with local communities and under ARIA's stringent governance framework, prioritising safety and environmental monitoring. The goal is to gather essential real-world data to rigorously assess if this intervention warrants further consideration.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Project lead: Daniel Harrison, Southern Cross University

Award: £1m (potentially rising to £5m with matched funding) over 5 years, contingent upon security an additional £10m of funding from other sources

Key team members: Southern Cross University | Commonwealth Science and Industrial Research Organisation | University of New South Wales | Freie Universität Berlin | Queensland University of Technology | Shaun Fitzgerald, University of Cambridge (contributing and funded via the REFLECT project)

This project investigates Marine Cloud Brightening (MCB), a potential way to cool specific areas by enhancing cloud reflectivity using a spray of seawater. Building on their experience conducting previous small-scale outdoor experiments in partnership with local communities around the Great Barrier Reef, Australia, this team seeks to deepen our understanding of MCB. While the concept could potentially protect vulnerable ecosystems like coral reefs from heat stress, its real-world effectiveness remains uncertain. This research aims to address this critical knowledge gap by investigating the complex atmospheric dynamics and microphysical processes involved, moving beyond basic principles to assess if, and how, MCB could work safely and effectively.

The research combines advanced computer modelling with the development and indoor testing of sea salt sprayers. If these findings suggest promise, and subject to meeting ARIA's governance requirements, the project plans to conduct small-scale, controlled outdoor experiments over the Great Barrier Reef in years 3 and 4 of the 5-year project. These outdoor experiments are strictly contingent on prior results, rigorous independent safety reviews, regulatory approvals, and continued co-design and partnership with Traditional Owner groups, local stakeholders, and the broader community of the Great Barrier Reef Marine Park. If approved, these controlled experiments could involve brightening clouds within areas up to 10 km × 10 km, with seawater spraying taking place over 5-6 weeks, for 6 to 8 hours per day. All activities will fully adhere to ARIA's robust governance framework, emphasising transparency, environmental risk minimisation by design, and community engagement. The overall goal is to generate crucial real-world data to determine the effectiveness and risks of MCB, and its potential for protecting vulnerable ecosystems at a regional scale.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

A REsponsible innovation Framework for assessing noveL spray tEChnology research To examine local albedo changes from marine brightening and its multi-scale impacts (REFLECT)

Project Lead: Hugh Coe, University of Manchester

Award: £6.1m over 3 years (initial phase)

(£22k) | Sami Romakkaniemi, Finnish Meteorological Institute* (£100k)

*Finnish Meteorological Institute are contributing to the [illegible] this proposal and are not involved in any outdoor experimentation

Marine Cloud Brightening (MCB) and Marine Sky Brightening (MSB) – ideas for cooling the Earth by increasing the reflectivity of clouds or the sky using tiny droplets of seawater – depend critically on having the right technology to generate sprays of these droplets effectively. However, the technical feasibility and optimal methods for doing so are poorly understood. This project aims to address this gap by developing and responsibly testing the necessary spray technologies to determine if these approaches could be viable.

Over an initial three-year period, the team will undertake computer modelling, build bespoke sprayers based on the modelling results, and conduct indoor tests. A crucial part of this phase involves beginning collaborative engagement with local communities to co-design potential future outdoor experiments. Any small-scale, controlled outdoor experiments to test sprayer performance would only occur after this initial phase, contingent on further funding, successful co-design demonstrating community engagement and support, and strict adherence to ARIA's safety and governance protocols. These potential tests are expected to be undertaken in the UK (location to be determined). Initial tests, if approved, would be very limited, lasting only a few seconds and creating small plumes of seawater spray just a few hundred metres in size. Only if these initial tests prove successful and safe might later experiments explore brightening larger cloud areas, potentially up to 10 km long and a few hundred metres wide. These tests are inherently benign, replicating natural processes that generate sea spray over the ocean developing spray systems such as those that are already employed to cool crowds with fine mists of water and dampen construction sites to suppress pollution. The overall goal is to establish a robust and responsible experimental framework to assess the technical feasibility and optimal methods for MCB and MSB.

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

BrightSpark – Cloud brightening with electric charge

Project Lead: Giles Harrison, University of Reading

Award: £2m over 36 months

Key team members and approximate budget breakdown: Giles Harrison, Maarten Ambaum, Keri Nicoll, University of Reading (£1.75m) | John Mooney, Menapia Ltd (£170k)

Finding ways to influence cloud reflectivity is a key research challenge. This project investigates using controlled electric charge, a natural atmospheric phenomenon, to influence water droplets in fogs and clouds as an alternative to spraying seawater. The research aims to determine if carefully managed electrical charges could offer a safe and effective method for enhancing cloud reflectivity.

The team will investigate the fundamental science of how artificial charge release affects cloud and fog droplets. The project includes plans for very small-scale (on the order of 100 m × 100 m), controlled outdoor experiments in the UK during the third year of the project. These experiments are strictly conditional on

View the full grant agreement for this project, which outlines its objectives, milestones and deliverables here.

Natural Materials for Stratospheric Aerosol Injection

Project Lead: Hugh Hunt, University of Cambridge

Award: £5.5m over 36 months

Key team members and approximate budget breakdown: Hugh Hunt, University of Cambridge (£2.5m) | Frank Keutsch, Harvard University (£2.5m) | Sebastian Eastham, Imperial College London (£0.54m)

Stratospheric Aerosol Injection (SAI) is a widely discussed potential climate cooling method, but the most commonly proposed materials (sulfates) carry significant hazards in this context, including potential ozone depletion and toxicity. Addressing whether safer, alternative materials could ever be feasible or effective for SAI is therefore a critical, unanswered scientific question. This project will undertake fundamental research to investigate the properties and behaviour of innovative, non-toxic, non-sulfate materials in a very controlled manner.

The research combines laboratory studies and computational modelling with unique and contained material exposure experiments. In these experiments, tiny (milligram) amounts of materials that occur in natural mineral dust (such as limestone, dolomite, or corundum) will be secured onto supports inside the gondolas of specially adapted weather balloons. These balloons are likely to be launched from sites in the USA and/or the UK; the specific site will be determined in line with ARIA's requirements for community engagement. The balloons will carry the samples into the stratosphere for exposure periods ranging from hours to weeks before performing controlled descent for recovery. **Crucially, no materials will be released into the stratosphere**; this approach effectively brings the stratosphere to the samples. Studying the recovered samples will reveal how stratospheric conditions affect their properties over time. This foundational science is essential to advance understanding of the potential impacts of SAI and for determining if less harmful alternatives to sulfates might exist (and if they might warrant further study in the context of SAI).

View the full grant agreement for this project, which outlines its objectives, milestones, and deliverables here.

Previous funding calls in this programme

The projects we are funding have been selected from teams and individuals who applied to our previous funding calls for this programme. You can read more about these calls below.

Annex 2: Exploring Climate Cooling Contracts

Imperial College of Science Technology and Medicine **(Grant Recipient)**
Exhibition Road
South Kensington
London
SW7 2AZ
England

03 June 2025

Attention: Sebastian Eastham

Dear Sebastian,

FPCW-PR01-P007 De-risking cirrus modification – Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	De-risking cirrus modification. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£3,554,534 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 3 June 2025
Completion Date	The completion is 2 June 2028
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions

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Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £10 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Sebastian Eastham, Senior Lecturer in Sustainable Aviation, [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted], Faculty Chief Operating Officer, Faculty of Engineering, [redacted]
Notices	ARIA Contracts [redacted]	Head of Contracts, Faculty of Engineering, [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not Used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 6 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of Imperial College of Science Technology and Medicine to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

6.4 For the avoidance of doubt any decision to terminate the Grant Agreement as a result of a Go/No Go Milestone will be made at ARIA's sole discretion and done so in accordance with clause 22.6.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 Annually, and on each anniversary of the Commencement Date and at the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose

concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you

assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge] promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge] if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the [Future Proofing our Climate and Weather Intellectual Property Pledge], to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and
(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. Not used

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Go/No-Go Milestone means a decision point for ARIA to determine whether it wishes to proceed with or terminate the Project Activities (any decision regarding a Go/No-Go Milestone will be made at ARIA's sole discretion, following a Grant Review as outlined in Clause 6);

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

This project will evaluate whether it could in theory be possible to intentionally modify the properties of cirrus clouds to achieve a useful (>100 mW/m^2) global cooling effect. This includes understanding (1) how much susceptible cloud exists, (2) whether we might be able to increase outgoing longwave radiation (OLR), and (3) whether we can predict the circumstances under which this could potentially be done. We will address these questions in a two-phase experiment, starting with (P1) data mining followed by (P2) an aircraft campaign to observe existing atmospheric processes to resolve where and when cirrus modification might produce beneficial effects.

2. Aims and objectives of the Project Activities

The overall objective of the project is to experimentally evaluate the potential efficacy of cirrus cloud modification (CCM). This will be achieved by satisfying eight objectives across the two phases outlined above:

- O1A: Verify that clear-air aircraft soot produces observable changes in OLR from downwind cirrus.
- O1B: Establish instrument capabilities to measure ice nucleating particles (INPs) in-situ and therefore enable measurement of CCM in practice.
- O1C: Provide laboratory measurements of the ice nucleating properties of aircraft soot to inform O1A and Phase 2 campaign region selection.
- O1D: Establish modelling capabilities to predict the meteorological conditions under which aircraft soot produces an observable change in downwind cirrus.
- O1E: Develop a model which can translate research findings into an assessment of CCM efficacy.
- O2A: Execute an aircraft campaign testing our ability to achieve targeted CCM with exhaust soot.
- O2B: Translate findings into an assessment of the potential for at-scale CCM with optimal INPs.

Work packages to achieve these objectives are outlined below.

3. Project Activities

3.1 Funded activities are broken down into two phases:

Phase 1: Establish whether soot emissions from existing aircraft into soon-to-be ice supersaturated air already produce a satellite observable change in outgoing longwave radiation. Work packages in phase 1 are:

- **WP1: Signal quantification (ICL, O1A).** Identify circumstances in historical flight data (Milestone 2) where downwind cirrus was expected to form, and assess the effect of aircraft soot using satellite imaging (Milestone 4).

- **WP2: Forecast development (RIKEN, O1D).** Using historical data, implement a data assimilation system focused on identifying air masses which will later form cirrus clouds and are therefore likely to be modifiable by aircraft soot (Milestone 4).
- **WP3: Impact quantification (Vienna, O1E).** Incorporate developing understanding from WP1 into atmospheric modelling of cirrus modification, and thus better constrain the maximum potential for climate cooling (Milestone 4).
- **WP4: Instrumentation and lab experiments (Leeds, O1B/C).** Purchase and modify the instrument to sample ice nucleating particles (INPs) in-air (Milestones 2 and 6), and use the same techniques to quantify ice nucleation by aviation soot (Milestone 3).

Phase 2: Use a dedicated flight campaign with accurate INP measurements, using a custom-trained saturation prediction model, to verify that CCM can be achieved on demand – and in so doing determine the potential efficacy of CCM. Work packages in phase 2 are:

- **WP5: Execution (Leeds, O2A).** Plan (Milestone 6) and execute (Milestone 7) flight campaign to sample INPs and attempt to induce an observable change in downwind cirrus.
- **WP6: Forecasting (RIKEN, O2A).** Develop a forecasting plan (Milestone 6) and supply forecasts of soon-to-be-ice-supersaturated air masses for the flight campaign (Milestone 8).
- **WP7: Efficacy (ICL, O2A/B).** Use in-flight data and satellite imaging to evaluate whether the predicted cirrus modification was achieved through the addition of aircraft soot (Milestone 8).
- **WP8: Implications (Vienna, O2B).** Evaluate the degree to which the results of the aircraft campaign (Milestone 8) have further modified the predicted maximum achievable effect of cirrus modification.

Phasing, engagement, and administrative requirements (Milestones 1, 5, and 7) will be coordinated through ICL as the project lead.

If phases 1 and 2 are successful, there is also the potential for a phase 3, to support this you will provide:

- **WP9:** A proposal that sets a detailed mission plan, including team expansion requirements, information on regulation/health and safety and governance, and technical plans. The scope of the proposed phase 3 would present a measurable advance towards a near-term, practical option for regional and global cooling, evaluation of which is currently unable to proceed through modelling alone. For the avoidance of doubt WP9 is limited to the provision of a proposal only. Should ARIA choose to proceed with Phase 3, it would be contingent upon adherence to ARIA's technical and governance requirements for outdoor experiments, and subject to oversight from the designated oversight committee. **This is a Go/No Go Milestone**

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost sheet breakdown [redacted]

ID	Milestones	Measure	Date

1	Engagement plan available	Draft communication and engagement plan agreed with ARIA and oversight committee	Commencement Date + 6 months
2	Aircraft campaign dataset finalisation and initiation of Phase 2 prep.	All existing in-situ aircraft data acquired and processed; PINEair purchase agreed.	Commencement Date + 6 months
3	Emissions characterization	Characterization of ice nucleating ability of engine emissions including soot	Commencement Date + 12 months
4	Lock-in of Phase 2. **This is a Go/No Go Milestone**	Aircraft verified, flight time booked, and costs finalised for Phase 2 campaign in Nov 2027 – Feb 2028.	Commencement Date + 15 months
5	Completion of Phase 1	Magnitude of CCM signal identified in observational data, preliminary global impact assessment completed, and performance of RIKEN tools evaluated Scoping for WP9 begins	Commencement Date + 24 month
6	Campaign prep completion	PINEair certified and campaign ready; successful dry run of decision structure for a week-long campaign	Commencement Date + 30 months
7	Formal submission of proposals for Phase 3 (WP9) **Go/No Go for Phase 3.**	Submission of detailed mission plan, including team expansion requirements, information on regulation/health and safety and governance, and technical plans. Award of funding for Phase 3 will be conditional on additional, engagement, environmental impact	Commencement Date + 30 months

		assessment, governance and oversight requirements.	
8	Completion of Phase 2	Quantification of CCM achieved by the aircraft campaign	Commencement Date + 36 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted]

3.3 The intended long-term outcomes are summarised below:

- Establishment of a new INP measurement capability in the UK through PINEair
- New understanding of the potential for deliberate modification of cirrus by aircraft soot
- Development of supersaturation forecasting capabilities with performance quantified for UK airspace.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Planning	• Roles and responsibilities • External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting

	Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

For the purposes of clause 22.7, the following principal investigators or key researchers have been identified:

Name	Role	Organisation
Sebastian Eastham	Principal Investigator	Imperial College London
Marc Stettler	Imperial Co-PI	Imperial College London
Ed Gryspeerdt	Imperial Co-PI	Imperial College London

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location of organisation
University of Leeds	Lead PI for instrument development, lab testing, and aircraft activities	Leeds
University of Vienna	Leading modelling and impact quantification for at-scale CCM	Austria
RIKEN	Leading data assimilation and near-term forecasting activities	Japan

PART 2 - GRANT APPLICATION

Application titled “De-risking cirrus modification” submitted 9 December 2024.

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and

Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

British Antarctic Survey **(Grant Recipient)**

High Cross, Madingley Road

Cambridge

CB3 0ET

11 June 2025

Attention: Amanda Burson

Dear Amanda,

FPCW- PR01-P019 - Eco-ICE – Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to **Exploring Climate Cooling** and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	The project entitled Eco-ICE: Ecological Impact Assessment of Earth Cooling Experiments in the Arctic. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£4,926,602 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 01 June 2025
Completion Date	The completion is 31 May 2029
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process

	referred to in clause 6 of the Conditions	
Adequate Insurance	As a public body you do not take out insurance instead you will self-insure against any employer and public liabilities.	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Amanda Burson [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] Director of Science (Interim) - [redacted]
Notices	ARIA Contracts [redacted]	[redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. In the event that the following roles require an extended period of leave, such as parental, sick, or caring leave, which results in the PhD extending beyond the duration of the funding period, ARIA commits to covering the costs associated of completing the PhD, provided that the majority of the PhD is undertaken within the funding period:

5.1.1. BAS PHD student - Name to be confirmed no later than 31st December 2025

5.1.2 BAS PHD student - Name to be confirmed no later than 31st December 2025

For the avoidance of doubt, ARIA will not cover any directly incurred PhD-related costs during the extended period of leave. ARIA will consider proposals to temporarily backfill PhD roles in order to address capacity gaps during these periods of absence.

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 17 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of United Kingdom Research and Innovation, as represented by the British Antarctic Survey, to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must promptly notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if you become aware of any money being incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay those parts of any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(b), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time for a period of 10 years after the end

of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 Within six months after each anniversary of the Commencement Date and at the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. When ARIA is the recipient of a request under the Information Acts, ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 ARIA acknowledges that you are subject to the Information Acts and where you receive a request for disclosure that relates to ARIA or the Grant Agreement, ARIA will provide reasonable assistance and cooperation to you to assist your compliance with its information disclosure obligations. To the extent permissible and reasonably practical, you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters. When you are the recipient of a request under the Information Acts, you will be responsible for determining in your absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you

assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such Foreground IP (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the [Future Proofing our Climate and Weather Intellectual Property Pledge], to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance or self-insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and
(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause unless a liability limit or exclusion is permitted by law:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Small or Micro Company means a Small or Micro Company as defined by the European Commission https://single-market-economy.ec.europa.eu/smes/sme-fundamentals/sme-definition_en

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

Eco-ICE: Ecological Impact Assessment of Earth Cooling Experiments in the Arctic

Eco-ICE aims to develop new insights and frameworks into the evaluation and governance of climate intervention activities. It is hoped that these outputs will allow us to move beyond divisive positions by providing a benchmark against which the ecological impact of an intervention can be independently and robustly evaluated. Not only will this approach provide a comprehensive, rather than partial evaluation of uncertainties, it reduces project risk through adequate contribution and time of highly experienced scientists and provides both novel experimental laboratory capabilities and more extensive numerical simulations along with the necessary scientific personnel time to utilise these capabilities. Most importantly, it allows for the co-development of a comprehensive framework and sequential guidance for evaluating future climate interventions. Eco-ICE aims to provide (i) a robust, independent evaluation of other climate intervention activities within the Arctic, (ii) the advancement of dialogue, evaluation and decision-making about the governance of climate intervention activities (iii) better informed local, regional and international efforts regarding proposed climate intervention activities in the polar marine environment. This would be an extraordinary legacy for ARIA's climate cooling program.

2. Aims and objectives of the Project Activities

At the highest level, our objectives for the 'Gold Standard' programme are to provide:

1. A robust, science-based Evaluation Framework that will underpin an independent evaluation of the physical and cascading ecological impacts on the polar marine environment.
2. Quantification and multi-method attribution of physical changes induced by the intervention in the ocean, atmosphere, and sea-ice system. These outputs will support a robust assessment and attribution of biogeochemical responses to the physical changes at local to regional scales, including through tracking shifts in nutrient cycling and ocean chemistry.
3. Modelling of ecological consequences focusing on the potential impacts on key Arctic marine species and ecosystem structure and mediated carbon export.
4. An ecological risk assessment (ERA) of the specific intervention, including information on the magnitude, duration, and reversibility of ecological impact.
5. Targeted guidance for ARIA on the suitability and environmental trade-offs of the specific intervention approach.
6. Two-way dialogue on decision-making and governance of climate intervention activities with Arctic organisations (e.g. AMAP) and a 'best practices' guidance for evaluation of future climate interventions.

3. Project Activities

3.1 Project Activities are as set out below:

WP1 Development of a robust evaluation framework

Inputs: Other ARIA projects, all WPs, IBoA

Outputs: WP2, WP3, WP4, WP5

Co-Leads: Jeremy Wilkinson (BAS), PDRA1 (first 12 mo)

Participants/CO-I: Amanda Burson (BAS), co-leads from all WPs

Overview: WP1 will develop a robust, science-based Evaluation Framework that underpins an independent evaluation of the physical and cascading ecological impacts on the polar marine environment associated with each ARIA-selected experiment. A recognised method for quantifying the effects of outside impacts on a marine ecosystem, such as a climate intervention, is through the establishment of an Evaluation Framework (EF). A well-designed, scientifically robust EF allows for definitive conclusions (with quantified uncertainties) to be drawn on the cascading ecological impact across different trophic levels. The main objective of the EF is 1) identify key ecological components and associated environmental parameters that are most likely to be impacted by the intervention and 2) design observational experiments and modelling studies to quantify the ecological consequences of the proposed intervention.

WP1.1 Round Table assessment. To initiate the drafting of the EF a series of round-table meetings will be held with the proponents of the assessed intervention. The aim of these meetings is to obtain a more complete understanding of (i) the intervention and its spatiotemporal domain, (ii) its expected environmental impacts and (iii) the magnitude of the intended perturbation and how it varies under different future Shared Socioeconomic Pathways (SSPs). Co-leads of WP2 to WP4 will participate in the round tables to ensure their modelling and laboratory experiments can be better linked to each intervention. (M1.1).

WP1.2 Production of Evaluation Framework. Using the outputs of WP1.1 we will co-design (with WP5.1) a step-by-step EF from which an interlinked and comprehensive understanding of physical changes (WP2), biogeochemical changes (WP3) and biological changes (WP4) caused by the intervention can be derived. The EF will include (i) defining clear and achievable objectives, (ii) determining the threshold and boundaries, as well as spatiotemporal limitations of the analysis, (iii) robustly selecting the ecological, environmental and pressure indicators to evaluate, and (iv) to identify/compile a baseline (control) dataset from which an assessment of the spatiotemporal impacts of the intervention can be assessed. Data availability, reliability and knowledge gaps will be key considerations when developing the EF. Once the draft EF has been completed it will be delivered to WP5.1 for evaluation by an Independent expert Board of Advisors (IBoA). This peer-review process is aimed at strengthening the EF, as well as ensuring the framework is flexible enough to be used for future assessments (beyond the ARIA Exploring Cooling Climate programme). Whilst the EF will remain consistent for the evaluation of selected ARIA-funded experiments, the practicalities must be developed on a case-by-case basis. (M1.2)

Milestones: M1.1 (month 6): Report on round table meetings for intervention. M1.2 (Draft: month 8, Peer-Reviewed: month 12): Delivery of the peer-reviewed Evaluation Framework.

WP2: The Regional to Global Physical Changes Associated with Climate Interventions

Inputs: WP1, ARIA/RaSI team

Outputs: WP3, WP4, & WP5

Co-Leads: Louise Sime and Neven Fučkar

Participants/CO-I: ESM Engineer (Alison McLaren), PhD_Reading

Overview: WP2 will diagnose the physical changes associated with a range of sea ice thickening approaches, by implementing ice thickening scenarios in the UKESM. It will fully isolate and robustly attribute the intervention's impacts on sea ice, oceans and climate, and quantify associated uncertainties. This will directly support the WP3, WP4, and WP5 synthesis (M2.4). WP2 will develop the UKESM sea ice sub model code base to ensure it can directly track the pathways of the added ice throughout the UKESM sea ice domain and beyond, including ascertaining when and where it enters the ocean or atmosphere, and tracking it also through these domains. A large ensemble of UKESM simulations of the targeted ice thickening interventions will underpin the analysis and multi-method attribution of biogeochemical (WP3) and biological changes (WP4).

WP2.1 Implement Sea Ice Thickened Interventions in UKESM. WP2.1 will implement the sea ice thickening intervention – as discussed with the RaSI team – in the UKESM and produce a large ensemble of simulations to ascertain the physical changes, and key uncertainties, associated with the intervention.

WP2.2 Track Global and Regional Impacts in the Sea Ice and Beyond. The UKESM atmosphere and land surface sub-models are already equipped with unique ice and water tracking capabilities, developed over the last seven years in BAS. WP2.2 will extend this type of capability to the UKESM sea ice model, called SI3. This new capability allows both (i) detailed assessment and attribution of the ice, water, and climate impacts critical to understanding the changes and dynamics; and (ii) in WP3 this capability will be used to improve the tracking of nutrients associated with the sea ice thickening intervention.

WP2.3 Attribute Simulated Changes to Intervention versus Projected Climate Change. Large ensemble UKESM simulations of future climate projection(s) and the associated intervention simulations will enable robust estimation of causal processes, pathways of changes, and multi-method attribution to sea ice thickening intervention versus climate change. Both storyline and probabilistic approaches to attribution will be used to infer crucial mechanisms and pathways.

Milestones: M2.1 (month 12, annually updated thereafter): Large ensembles of UKESM simulations to assess how the ice thickening interventions will affect the physical world and provide (global scale) data required for subsequent risk assessments, robust attribution and physical context for WP3 and WP4. M2.2 (month 36): Fully updated UKESM code base with new capability to track all ice and water properties throughout the UKESM sea ice sub-model logged with the UKESM MetOffice/UKESM code owners. M2.3 (month 36): Multi-method attribution and causality analysis for the selected intervention. M2.4 (first report month 18, then annually, and the last report at month 42): Report summarising the potential physical changes and multi-method attribution associated with the Arctic sea ice thickening intervention, designed for ecological assessment purposes.

WP3: Modelling the biogeochemical implications

Inputs: WP1, WP2

Outputs: WP4, & WP5

Co-Leads: Kate Hendry and Rhiannon Jones

Participants/CO-I: ESM Engineer (Alison McLaren), Clara Manno, Amanda Burson, Neven Fučkar, Dave Munday, Florence Atherden, PhD_UEA

Overview: WP3 will focus on the sensitivity of regional biogeochemical cycling due to the selected interventions in the Arctic. The polar regions play a key role in driving global productivity and carbon cycling, both by direct supply of nutrients to the polar surface ocean, and by setting the nutrient signature of global-scale ocean circulation. The flow of nutrients, alkalinity, and carbon cycling between sea ice and ocean is a key driver of seasonal Arctic productivity. Using the outputs from the UKESM biogeochemical sub-model MEDUSA-2, and the WP2 investigation of physical changes, WP3 will assess the biogeochemical impacts and conduct a multi-method attribution of intervention scenarios using both numerical model output and laboratory-based experimental approaches. Primarily, WP3 will determine the key drivers and rates of biogeochemical change and quantify changes relative to a baseline. WP3 will effectively provide the biogeochemical context required to feed into WP4, identifying key potential bottom-up drivers of ecological impacts of climate interventions (M3.3).

WP3.1 Physical modelling of biogeochemical impacts of different scenarios. Laboratory analyses will be carried out to calculate changes in the distribution and fluxes of macronutrients, total alkalinity and dissolved inorganic carbon (DIC), using existing and newly procured BAS laboratory facilities (nutrients, total alkalinity, DIC). Critically, the acquisition of DIC and total alkalinity analysers will facilitate rapid and reactive parameter analysis by co-leads and laboratory support technicians, with in-house quality control, providing outputs that can inform biogeochemical modelling and ecological assessment more effectively and with additional scope for adaptation with respect to the 'single budget' capabilities. Support for the additional biological carbon pump work for WP4 will be made possible with in-house analysers and additional expertise time, enabling effective and reactive knowledge exchange.

WP3.2 Numerical modelling of biogeochemical impacts of climate interventions. Using the UKESM biogeochemical sub-model we will perform a set of sensitivity simulations to evaluate changes to biogeochemical cycles with respect to Arctic sea-ice-thickening interventions. The additional expert time will facilitate more complex and reactive modelling capabilities and enable modelling of multiple complex scenarios beyond a single-scenario sea ice-thickening intervention. Output will be used to investigate the implications and multi-method attribution for marine biogeochemical processes of intervention versus non-intervention futures.

Milestones: M3.1 (month 24): Develop capability for, and carry out, a laboratory set of sea ice thickening experiments, resolving fundamental nutrient exchange between ice and seawater during sea ice growth and loss. M3.2 (draft month 24, final report month 36): Deliver output of UKESM model biogeochemical implications to inform WP4, 5 and framework. M3.3 (initially month 24 then annually; final inputs month 42): Provide a synthesis report on the potential changes and

multi-method attribution to nutrient cycles following climate intervention method implementation and disseminate research.

WP4 Understanding the Biological Change

Inputs: WP1, WP2, WP3

Outputs: WP2, WP3, WP5

Co-Leads: Clara Manno and [redacted]

Participants/CO-I: PDRA2, Simeon Hill, Kate Hendry, Neven Fučkar, Rhiannon Jones, Amanda Burson

Overview: WP4 will evaluate the potential impact of climate interventions on the composition, functioning, and resilience of the proximal pelagic Arctic ecosystem and on the ability of this ecosystem to support the uptake, transport and storage of atmospheric CO2 in the deep ocean (biological carbon pump). The biological carbon pump at high latitudes has a significant influence on global climate regulation. The strength of the biological carbon pump in these regions is largely driven by plankton dynamics and food web process. We will focus on the impact of the intervention on the plankton component, which underpins both the biological carbon pump and the wider food web. We will assess individual and combined impacts of climate interventions including additive-synergistic and cascading effects. Using outputs from WP2 and WP3, we will identify potential direct (i.e. habitat changes, species mortality or displacement) and indirect impacts (i.e. altered community dynamics) on community structure and biological mediated carbon export along with multi-method attribution of these impacts from climate interventions. We will perform simulation experiments (using a combination of mesocosm incubation and modelling) where organisms will be exposed to environmental conditions reflecting pre- and post-ice thickening intervention scenarios. Findings will be relayed to WP2 and WP3 for any relevant adjustments to ecological models, synthesised to WP5, and disseminated through scientific publications.

WP4.1 Laboratory mesocosm simulation of biological impacts. Key marine plankton species will be cultivated/incubated and exposed to environmental stressors using multifactorial mesocosm experiments capable of supporting multiple treatments simulating different environmental conditions (i.e. control versus ice-thickening induced potential stressors, such as changed light or nutrient conditions). Any direct potential disturbances from equipment (such as chemical and plastic pollution) will also be addressed. Increased investigator time, coupled with adequate analysis and consumable budget, will allow us to incorporate experiments dedicated to understanding impacts to the highly climate relevant biological carbon pump. These mesocosm experiments will be carried out in BAS climate-controlled laboratories.

WP4.2 Modelling biological impacts. Models informed by WP4.1 outputs will be used to evaluate ecosystem impacts over larger spatial and temporal scales and to further explore the effects of individual and combined stressors. The 2D ecosystem models will represent the spatiotemporal dynamics and food web structure of marine plankton pre- and post- climate intervention. The models will be used to assess impacts and conduct multi-method attribution on regional biomass, species composition, network structure, predator-prey dynamics and their implications for ecological resilience including the cascading impact on the biological carbon pump. Additional investigator

time will facilitate a more comprehensive analysis of ecological resilience and crucially will include assessment of the biological carbon pump.

Milestones: M4.1 (month 30): Perform experiments to investigate impact on, and resilience of, plankton community structure and their role within the biological carbon pump after climate interventions. M4.2 (month 40): Deliver a model-based analysis of the impacts and multi-method attribution of climate interventions on plankton community structure, dynamics, resilience including the cascading effect on the biological carbon pump. M4.3 (Annually, final inputs month 42): Provide a synthesis report on the potential changes to the regional plankton community and biological carbon pump following climate intervention.

WP5 Synthesis and Ecological Risk Assessment reports

Inputs: WP2-4, IBoA, AMAP

Outputs: WP1, ARIA, UK policy Agencies

Co-Leads: Rachel Cavanagh and PDRA1 (mo. 13-48)

Participants/Co-I: [redacted] Amanda Burson, Simeon Hill, IBoA, all WP co-leads

Overview: WP5 will work with WP1 to ensure that the design of the Evaluation Framework (EF), is suitable for the delivery of an Ecological Risk Assessment (ERA), synthesise the modelling and experimental results from WP2-4, and produce an ERA report of the proposed climate intervention. Leads will ensure Eco-ICE addresses the three main phases of ecological risk: 1. problem formulation, 2. analysis of exposure and effects, and 3. risk characterisation with considerations of uncertainty.

WP5.1 Support development of Evaluation Framework. Once provided with an overview of the proposed climate intervention, WP5 will consult with the IBoA, via roundtable discussion, to inform the development of the EF. The environmental /ecological issues raised during the roundtable discussion will be collated and used to inform the EF design (M5.1).

WP5.2 Scientific synthesis of Eco-ICE programme. The results from WP2-4 will be collated, interpreted and summarised to provide a scientific synthesis report for the targeted climate intervention (M5.2). Importantly, the synthesis report will also identify uncertainties in analysis and results. The scientific synthesis report will be shared with the IBoA, as well as an expanded network of experts, if deemed necessary. Additional IBoA roundtable discussions will be held to incorporate input from a broad range of experts to yield a final scientific synthesis of the ecological impact which will ultimately inform the ERA. WP5 co-leads will meet regularly with WP2-4 research teams to receive a steady input of modelling and experimental results allowing a progressive development of the scientific synthesis report, and associated sections of the ERA, with a consolidated effort in the final months.

WP5.3 Ecological Risk Assessment report. Utilising the scientific synthesis report and the input from the IBoA roundtable discussions, an ERA will be undertaken to evaluate the level of ecological risk associated with the proposed ice-thickening (M5.3). This will include evaluation of the (i) likelihood (probability of impact occurring), (ii) magnitude (severity of the impact), (iii) duration (temporary, long-term, or permanent effects), (iv) reversibility (potential for recovery/restoration), and (v)

significance (ecological importance). We will provide scaling metrics for these evaluation criteria and ultimately provide a final assessment of the ecological risk associated with the ice-thickening intervention to be weighed against the potential climatological benefit. The structuring of the ERA will begin immediately following the development of the EF and progress in stages as new scientific results are documented during regular meetings with WP2-4 research teams. Upon completion, the ERA report will be disseminated to ARIA, the ice-thickening team and relevant stakeholders as well as presented at the end of project stakeholders conference.

WP5.4 Ecological Risk Assessment of Climate Interventions Guidance. Both the EF and ERA produced for the ice-thickening intervention will be used to develop the best practices guide for ecological risk assessment of other/future climate interventions in polar marine systems (M5.4). Both M5.3 and M5.4 will incorporate structuring from already established and utilised ERA frameworks in existence (i.e. from fisheries management, polar/marine infrastructure development etc.), but integrate aspects which are unique to climate interventions and are not currently accounted for in established ERA resources. M5.4 will differ from M5.3 as it will be a broader, guidance style document wherein future climate intervention assessors would provide the specific analysis appropriate to the intervention being assessed. This guidance framework will be co-developed with the IBoA formed for the ice-thickening intervention but also additional external bodies with vested interest in polar ecosystems and governance of future climate intervention efforts (e.g. AMAP).

Milestones: M5.1 (month 12): Hold IBoA roundtable discussions to support development of the EF with WP1. M5.2 (initial structuring from month 9, final conscripting month 40-45): Scientific synthesis report of modelling and experimental outputs of WP2-4. M5.3 (initial structuring from month 9, final conscripting 45-48): Development, completion and dissemination of ice-thickening ERA report. M5.4 (initial structuring from month 13, final conscripting 45-48): Development, completion and dissemination of EF & ERA best practice guides.

WP6 Project management and oversight

Inputs: WP1-5, ARIA, BAS Directorates

Outputs: WP1-5, ARIA

Co-Leads: Amanda Burson, BAS's Research Development and Support (ReDS) team

Participants/Co-I: All WP co-leads, BAS's Communication team, BAS's Polar Data Centre (PDC)

Overview: The project management structure of Eco-ICE is comparable to those utilised by similar-sized projects. To promote equality, diversity and inclusion, Eco-ICE have united professionals from various sectors, backgrounds and stages of career development. Importantly, we have ECR representation at all levels of our project, including co-leadership roles for all WPs, and we strive for gender balance within the project. Scientific and managerial decision-making revolves around the Project Management Team (PMT), which consists of the Project Lead (A. Burson), WP co-leads, and the British Antarctic Survey's (BAS) in-house Research Development and Support team (ReDS). Within ReDS, Eco-ICE has a dedicated Project Manager who will assist in management tasks including keeping track of deliverables, milestones and maintenance of a risk register. The PMT will oversee communication with the collaborators, organise the annual project meetings as well as facilitate quarterly updates on project activities and deliverables, dissemination priorities, ethics, and other reporting requirements to ARIA. Additionally, Eco-ICE has dedicated resources with BAS's

in-house communications team for support with project communications and outreach activities, including social media, website, and the stakeholder conference. Our annual project meetings (APM) will be in a hybrid format to ensure that all participants can equitably participate.

WP6.1 Establishment of the Data Management and Communication Management Plan. Due to the critical requirement for independent assessment, the Eco-ICE PMT will coordinate with the PDC and BAS's communications team to establish the best strategy to maintain this throughout the project. A Data Management Plan (DMP) and Communication Management Plan (CMP) will be established at the onset of the project in collaboration with the PDC and Communications team respectively. These plans will be reviewed regularly but at a minimum at quarterly PMT meetings to ensure continued fit for purpose.

WP6.2 Reporting to ARIA. The PMT will hold internal project meetings with WP co-leads minimally quarterly but more frequently as required. These project meetings will provide the needed updates on milestone progression, new learnings and developments and any challenges or changes which have occurred. We will also update/adjust the project risk register at these quarterly meetings. This information will then be passed onto ARIA via the quarterly project reports (M6.2). Finally, the PMT will develop the final project closure report as per ARIA's structuring requirements (M6.3).

Milestones: M6.1 (month 4): Establishment of the DMP and CMP for Eco-ICE programme. Hold IBoA roundtable discussions to support development of the EF with WP1. M6.2 (initial month 3, quarterly thereafter): Quarterly project reports on milestone progression and project developments/challenges. M6.3 (month 47-48): project closure report.

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted] (note these costs include an estimate for the use of the NERC facilities these costs are subject to agreement with NERC).

ID	Milestones	Measure	Date
M1.1	Report on round table meetings with ice-thickening team	Report is detailed enough to adequately inform the modelling parameterisations and experimental laboratory designs with WP2-4.	Commencement date + month 6
M1.2	Delivery of the peer-reviewed Evaluation Framework.	Dual purpose: to provide the scientific evidence-based framework for evaluation of sea-ice-thickening intervention as well flexible guidance for future programme assessments.	Commencement date + month 12
M2.1	Implementation of ice-thickening interventions	Large ensembles of UKESM simulations to assess how sea ice	Commencement date + 12 months, and annually

	in UKESM	thickening will affect the physical world and provide (global scale) data required for subsequent risk assessments, robust attribution and physical context for WP3 and WP4	updated thereafter
M2.2	Tracking global and regional impacts in sea ice	Fully updated UKESM code base with new capability to track ice and water throughout the UKESM sea ice sub-model logged with the UKESM MetOffice/UKESM code owners.	Commencement date + 36 months
M2.3	Attribute simulated changes from intervention vs. climate change	Multi-method attribution and causality analysis for the selected climate intervention.	Commencement date + 36 months
M2.4	WP2 input to synthesis report	Report summarising the potential physical changes and multi-method attribution associated with the Arctic sea ice thickening intervention, designed for ecological assessment purposes.	Commencement date + 18 months, then annually, and the final output at month 42
M3.1	Physical experiments of biogeochemical impacts	Develop capability for, and carry out, a set of sea ice thickening experiments in the laboratory, resolving fundamental nutrient exchange between ice and seawater during sea ice growth and loss.	Commencement date + 24 months
M3.2	Numerical modelling of biogeochemical impacts	Deliver output of UKESM model biogeochemical implications to inform WP4, 5 and framework	Commencement date + 36 months
M3.3	WP3 input to synthesis report	Provide a synthesis report on the potential changes and multi-method attribution to nutrient cycles following climate intervention method implementation and disseminate research.	Commencement date + 24 month, then annually and final input 42 months
M4.1	Laboratory mesocosms on biological impacts	M4.1 Perform laboratory experiments to investigate impact on and resilience of plankton community structure and the cascading effect on their role in the biological carbon pump after	Commencement date + 30 months

		ice-thickening interventions.	
M4.2	Modelling of biological impacts	Deliver a model-based analysis of the impacts and multi-method attribution of sea-ice-thickening interventions on plankton community structure, dynamics, resilience including the cascading effect on the biological carbon pump.	Commencement date + 40 months
M4.3	WP4 input to synthesis report	Provide a synthesis report on the potential changes to the regional plankton community and biological carbon pump efficiency following ice-thickening intervention	Commencement date + 30 months, final inputs 42 months
M5.1	Support development of Evaluation Framework (EF)	Develop and organise the Independent expert Board of Advisors for round table review of EF design.	Commencement date + 12 months
M5.2	Scientific synthesis report	Incorporate results from WP2-4 into scientific synthesis report on the ice-thickening project. Report will include uncertainties in analysis and results. It will be shared with IBoA and feedback from roundtable discussions will be incorporated. This provides the empirical basis for subsequent ERA.	Commencement date + 40-45 months
M5.3	Ecological Risk Assessment of ice-thickening project	ERA of ice-thickening intervention which evaluates the ecological impacts of the project including (i) likelihood, (ii) magnitude, (iii) duration, (iv) reversibility (v) and significance. Scaling metrics for these criteria will be included and weighed against the potential climatological benefit of the intervention.	Commencement date + 45-48 months
M5.4	Ecological Risk Assessment of Climate Interventions Guidance	Both the EF and ERA will be used to develop the best practices guidance on ecological risk evaluations of future climate intervention projects. This will be co-developed with IBoA	Commencement date + 45-48 months

		and additional external bodies with vested interest in polar ecosystems and governance of climate intervention efforts.	
M6.1	Establishment of Data and Communications Management plans	The project management team (PMT) will coordinate with the Polar Data Centre located with BAS and BAS's communications team to develop comprehensive Data Management and Communication Management Plans, respectively, for the project.	Commencement date + 4 months.

In addition to the above Milestones, the following project plan will be used to track progress throughout the project. The Project plan and may be reevaluated from time to time: [redacted]

3.3 The intended long-term outcomes are summarised below:

- The Evaluation Framework and Ecological Risk Assessment of ClimateInterventions Guidance are both long-term outcomes which will improve future ecological evaluations of interventions as well as provide a substantive legacy of due diligence for the ARIA programme.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Planning	• Roles and responsibilities • External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions

	• Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears based on actual costs incurred.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Amanda Burson	Principal Investigator, All WP participant	British Antarctic Survey
Jeremy Wilkinson	WP1 Co-lead	British Antarctic Survey
Louise Sime	WP2 Co-lead	British Antarctic Survey
Neven Fučkar	WP2 Co-lead, WP3 and WP4 participant	University of Oxford
Kate Hendry	WP3 Co-lead, WP4 participant	British Antarctic Survey
Rhiannon Jones*	WP3 Co-lead, WP4 participant	British Antarctic Survey
[redacted]	WP3, WP4 participant	British Antarctic Survey
Clara Manno	WP4 Co-lead, WP3 participant	British Antarctic Survey
Florence Atherden*	WP4 Co-lead, WP3 participant	British Antarctic Survey
Rachel Cavanagh	WP5 Co-lead,	British Antarctic Survey
Simeon Hill	WP4 Participant, WP5 participant	British Antarctic Survey
ESM Engineer [redacted]	WP2, WP3 participant	British Antarctic Survey
PDRA 1*	WP1 (12 mo) & 5 (36 mo)	British Antarctic Survey
PDRA 2*	WP4	British Antarctic Survey
PhD Student 1	TBC	University of East Anglia
PhD Student 1	TBC	University of Reading

* indicates Early Career Researcher (ECR)

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location

University of Oxford	WP2 Co-lead, WP3 and WP4 participant	Oxford, UK
University of East Anglia	WP3 PhD student co-supervision	Norwich, UK
University of Reading	WP2 PhD student co-supervision	Reading, UK

PART 2 - GRANT APPLICATION

Application titled "Eco-Gap: Ecological assessment of Geoengineering at the Poles" dated 09 December 2024

SCHEDULE 3

Royalty Percentages

1. Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

2. Where the Grant Recipient concludes, having first complied with clause 15.9 of the Grant Conditions (Inventor First Preference) that licence of the Foreground IP by the Grant Recipient or its technology transfer company to any third party other than a Small or Micro Company is the most viable route to commercialisation then the threshold restrictions related to net sales derived from the Foreground IP in paragraph 1 shall not apply.

3. In any case, the maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	**Applicable headline royalty percentage (up to)**
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. Subject to section 25 of this Grant Agreement, you shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations unless such a limit is permitted by law.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and

Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

Inter-American Institute for Global Change Research **(Grant Recipient)**

Av. Italia 6201

11500 Montevideo

Departamento de Montevideo

Uruguay

23 June 2025

Attention: Dr. Ignacio Mastroleo

Dear Dr. Mastroleo,

FPCW-PR01-P016 - Ethics and governance of solar geoengineering research: from concepts to implementation– Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling Programme and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Ethics and governance of solar geoengineering research: from concepts to implementation. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£464,395 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 23 June 2025
Completion Date	The completion is 22 June 2027

Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions	
Adequate Insurance	Employer's liability - As required by local laws	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Dr. Ignacio Mastroleo, [redacted]	
Grant Manager	Mark Symes, Programme Director, [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] IAI Science Director, [redacted]
Notices	ARIA Contracts [redacted]	[redacted] IAI Science Director, [redacted] [redacted] IAI Administration, Finance and Operations Officer, [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

For the avoidance of doubt, the following individuals are agreed as specified personnel:

5.1.1. Three PhD students:

- [redacted] at the University of Buenos Aires
- [redacted] at the University of Buenos Aires
- Name of final PhD student to be confirmed to ARIA no later than 31st July 2025

ARIA commits to funding these PhD students for the duration of the project only on the basis that there is no requirement for PhD students in Argentina to pay tuition fees. Students hired on the grant will be informed of this.

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 26 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of Inter-American Institute for Global Change Research to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period

about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 At the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and

Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially

within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;

(b) where you become a Non-UK Entity;

(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or

(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;
(b) loss of contracts or business opportunities;
(c) loss of anticipated savings;
(d) loss of goodwill or damage to reputation; or
(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or

(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,

and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked), (a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,

(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

Solar geoengineering (SG) is a disruptive, international technology that raises many technical and social questions. Our international team is a UK - Latin America and the Caribbean (LAC) network of social scientists, anthropologists, and climatologists. You will build on our previous experience working on the ethics and governance of SG to provide a conceptual foundation (via "conceptual engineering") of ethical concepts leading to the implementation of a governance framework for SG research. Importantly, our approach presupposes a neutral relational model for identification of climate interventions, making it applicable to both single SG interventions (e.g. stratospheric aerosol injection (SAI), marine cloud brightening (MCB), and cirrus management (CM)), or combined SG interventions (e.g. SAI+MCB, SAI+CM). You believe that this relational model of climate interventions, present in the literature of both climate models and social sciences, is necessary to provide a bridge between different approaches.

2. Aims and objectives of the Project Activities

There are two overarching and complementary long-term aims of the project related to content (workflow objectives) and capacity building (mentoring via senior researchers of research leads, postdoc researchers & PhD students in ethics and governance of SG research; expanding the UK—LAC network). Both priorities are central to the project's three pillars (PROCESSES, PAPERS, PEOPLE, see 3.1).

2.1. General aims. The project has three interrelated general aims:
(i) Contribute to ARIA's mission of enhancing responsible governance of research of SG and other climate interventions for the common good (Rayner et al 2013, ARIA 2024b);

(ii) build a research network across Argentina and further afield in Latin America and the Caribbean (LAC), alongside collaborators in the UK;

(iii) protect global society from possible destabilisation and negative social tipping points associated with irresponsible use of SG (Spaiser et al 2024). Here, you understand responsibility from a common good, interspecies, and intergenerational justice perspective (London 2022, COMEST 2023).

2.2 Specific objectives. There are three specific objectives:

(i) Content: provide an enhanced theoretical framework for proper governance of SG research that serves ARIA projects,

(ii) Capacity building: build global south research capacity around SG by hiring new researchers, research assistants (PhD and/or postdoc), and advisors tailored to the novel work packages (WP) & research questions,

(iii) Processes: build inclusive, participatory ethics & governance institutions for SG research for LAC that emphasise centralised public engagement.

2.3 Methodological approach

2.3.1. Conceptual engineering for ethics & governance analysis

One of the unique features of our project is including conceptual (re)engineering as a key element of an ethics & governance framework for SG research. Our conceptual engineering approach involves the development or revision (reengineering) of basic concepts (e.g. geoengineering, intervention, research, deployment, etc.) and assumed models (e.g. single intervention models, multiple or combined interventions models) at the heart of the most developed ethics and governance frameworks of SG research to carve out relevant distinctions between SG projects according to their practical aims to enhance precision and reduce confusion. This aims-based definition has the following three properties:

1) It distinguishes between SG research and deployment as two distinct yet connected activities
2) It applies to climate interventions with an insufficient level of evidence for regular use
3) It is neutral to scale (e.g. small or large, weather or climate), mechanisms of action (e.g. reflectivity, emissivity, solar-constant), outcome (e.g. successful or unsuccessful), and ethical status (e.g. responsible or irresponsible research).

2.3.2. Responsible participatory governance of solar geoengineering

Public engagement is crucial to ensure transparency in decision making and to support democratic governance. Improving participation and engagement should be treated as a standard operating procedure for research and potential deployment on emergent, complex and uncertain technologies such as SG. Discussions concerning the risks, benefits, and governance challenges of SG are growing, and governments need to be prepared for inclusive, transparent, and participatory dialogues.

There is a growing interest in SG in the LAC region, and countries will need to build capacities to make informed decisions and foster collaboration to nurture multilateral science-policy processes. In the LAC region, SG is not yet a priority in the climate change portfolio of mitigation and adaptation strategies nor a topic in the radar of LAC governments, but as discussions are growing and unexpected events are occurring, governments will need to be part of the global conversations, and to establish regulatory processes and governance structures that emphasise, among other concerns, the following three characteristics:

1) Multi-stakeholder public engagement
2) Upstream assessment of scientific merit
3) Legal compliance and transparency

3. Project Activities

Product	Activities	Aim	Pillars

WP1 **Daly**	**Clarifying concepts.** What does the claim "SG is a socio-technical intervention ensemble" mean?	Explain the meaning of SG as a transformable "socio-technical intervention" to understand small-scale perturbation field or outdoor trials as part of the larger research pathway of SG interventions.	**Papers & People**
WP2 [redacted]	**Debating reasonableness.** What is a reasonable disagreement on SG research?	Map a multi-agent continuum of rejection-hesitancy-acceptance of SG research based on analogies from bioethics research.	**Papers & People**
WP3 [redacted]	**Justifying ethical status.** Is SG research forbidden, permissible and/or mandatory?	Dealing with the research question of justification of SG small scale outdoor research.	**Papers & People**
WP4 **Carabajal**	**Implementing regional governance.** What is an appropriate model of ethics and governance of SG in LAC?	Learn from the Mexican government's intention to ban experimentation on SG following the Make Sunsets small-scale experimental deployment and put forward a participatory governance model.	**Papers & Processes**
WP5 **Mastroleo**	**Mentoring.** How should advanced SG researchers be educated?	Educating and training the next generation of UK-LAC advanced SG researchers, pre and postdoctoral, at the intersection of physical & human sciences.	**People**

3.1 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted]

3.2 In addition to the below Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted]

ID	Milestones	Measure	Date
1	Predoctoral and postdoctoral researchers kick-off (Capacity Building). PEOPLE pillar	6 PhD students/postdoc researchers recruited and thesis topics defined, evidenced by production of 3 page research plans for each student	Commencement Date + 6 months
2	Work in progress (WIP) versions of	WP4. **Make Sunsets paper + Open Access database**. A submitted manuscript on media analysis of the	Commencement Date + 9 months

	papers and translations. PAPERS pillar	Make Sunsets case in Mexico plus open access database of the media (~100 entries) both in Spanish and English (**metric**: submitted paper + database).[1]	
3	Submission of foundational paper. PAPERS pillar	WPs 1—2. **Intervention ensemble & relational model paper** submitted (a paper on the formalization of "socio-technical intervention ensemble" in SG research).	Commencement Date + 15 months
4	Submission of disagreement paper. PAPERS pillar	WPs 2—3. **Disagreement paper**. A narrative review on disagreements of SG research, including an analysis of informal arguments in favour and against SG research (**metric**: submitted paper).	Commencement Date + 18 months
5	End-of-project roundtable & report on ethics & governance of SG research in LAC. PROCESSES pillar	5.1. An organised roundtable between different stakeholders (ARIA team, advisors, society) to establish potential future institutional or other requirements for SG research in LAC (e.g. SG Research Ethics Committee(s)). 5.2. Final report on ethics & governance of SG research in LAC.	Commencement Date + 24 months

[1] In January 2025 we submitted the paper "*No governance is governance: Mapping solar geoengineering discussions in Latin American & the Caribbean*" to the Special issue on Climate Intervention Governance, European Journal of Risk Regulation (EJRR), co-edited by Alberto Alemanno and Masahiro Sugiyama. Current status: accepted with major revision, to be resubmitted 25 April. Original submitted version is available upon request.

3.3 The intended long-term outcomes are summarised below:

The following are some moon-shot long-term outcomes that may require work and funding beyond the current project. These are useful to understand the potential of the current project's aims and objectives.

- Provide the basis for an independent research ethics committee (REC) for SG research in Latin America (at country level or intergovernmental organization, e.g. Inter-American Institute for Global Change Research (IAI)) (2030 horizon).
- Content 1. Contribution to the elaboration of LAC ethical principles for SG research similar to Oxford, Tollgate, etc.
- Content 2. Revision of the latest AGU ethical principles based on our intervention ensemble and relational model.

- Capacity building 1. Creation of a larger UK-LAC network of STEMP (science, technology engineering, mathematics & philosophy) for climate interventions research. Our project and research could work as a bridge for further talent across the STEMP spectrum, not only in the social sciences and humanities.

- Capacity building 2. Creation of a 100% online training and education program in ethics and governance of climate intervention research in LAC. It could start with an introductory course or seminar[2], move to a 6-month certificate of postgraduate studies or 1-year diploma, 2-year Master's program, and then a PhD programme. This trajectory closely follows our 25 years of experience with the US National Institutes of Health (NIH) Fogarty Training Program for research ethics in the Americas, but we expect the current timeline to be shorter given our previous experience. Similar trajectory and education programs could be replicated and/or coordinated in other LMIC regions (e.g. Africa, Asia, etc.) like the US NIH Fogarty has done for biomedical research ethics education and training worldwide since 2000[3].

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement

[2] FLACSO has many such initiatives that currently exist.

[3] Saenz, C., Heitman, E., Luna, F., Litewka, S., Goodman, K. W., & Macklin, R. (2014). Twelve Years of Fogarty-Funded Bioethics Training in Latin America and the Caribbean: Achievements and Challenges. Journal of Empirical Research on Human Research Ethics : JERHRE, 9(2), 80–91. https://doi.org/10.1525/jer.2014.9.2.80

Kick off	• Roles and responsibilities • External communications • Project details
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Invoicing and cost reporting Optional: • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD Review meeting with ARIA Programme Team
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

Quarterly.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the

end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principal investigators or key researchers have been identified.

Name	Role	Current Organisation, set to change depending on hosting programmes
Ignacio Mastroleo	Principal investigator (WP5)	Program of Bioethics, FLACSO Argentina-CONICET[4]
[redacted]	Senior researcher(Climate science) (WP5)	University of Buenos Aires-CONICET; IPCC WG1
[redacted]	Senior researcher (Ethics & governance) (WP5)	Program of Bioethics, FLACSO Argentina-CONICET
[redacted]	Senior researcher (Logic & conceptual analysis) (WP5)	University of Buenos Aires-CONICET
Timothy Daly	Chief research officer & Research leader (WP1)	Program of Bioethics, FLACSO Argentina + UK/EU affiliation to be determined
[redacted]	Research fellow (WP2)	University of Tübingen
[redacted]	Research fellow (WP3)	University of Entre Ríos-CONICET
María Inés Carabajal	Chief research officer & Research leader (WP4)	University of Buenos Aires-CONICET
[To be determined]	Postdoc researcher 1 (WP1)	[To be determined]
[redacted]	Postdoc researcher 2 (WP2)	Postdoc Program, University of Buenos Aires; IIF-SADAF-CONICET[5]

[4] The National Scientific and Technical Research Council (Spanish: Consejo Nacional de Investigaciones Científicas y Técnicas, CONICET) is an Argentine government agency which directs and co-ordinates most of the scientific and technical research done in universities (e.g. FLACSO Argentina, University of Buenos Aires) and institutes in Argentina. In 2025, CONICET was ranked as the best Latin American government research institution by the Scimago Institutions Ranking. At the global level & all sectors ((including universities, governmental and private research institutions, research councils, etc.), CONICET holds the 125st position among the 9756 ranked research institutions worldwide. Scimago Lab. (2025). *Scimago Institutions Rankings*. https://www.scimagoir.com/rankings.php?ranking=Research&sector=all [consulted March 25, 2025]

[5] Instituto de Investigaciones Filosóficas (IFF, Philosophical Investigations Institute), Sociedad Argentina de Análisis Filosófico (Argentine Society of Philosophical Analysis), CONICET

[redacted]	PhD student 1 (WP2)	PhD Program, University of Buenos Aires; IIF-SADAF-CONICET
[redacted]	PhD student 2(WP2)	PhD Program, University of Buenos Aires; IIF-SADAF-CONICET
[To be determined]	PhD student 3 (WP3)	[To be determined]
[To be determined]	Postdoc researcher 3 (WP4)	[To be determined]

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
Federal University of Santa Catarina, Brazil	WP4. Social science consultancy and LAC network building	Brazil
University of Edinburgh	WP3. Governance consultancy and UK network building	Edinburgh, UK
University of Buenos Aires; IIF-SADAF-CONICET	WP2 Climate Science, Logic & conceptual analysis & WP5 Mentoring PhD students & posdoc researchers	Argentina
Program of Bioethics, FLACSO Argentina-CONICET	WP1 Conceptual engineering and WP5 Mentoring PhD Students & Postdoc researchers	Argentina
University of Tübingen	WP2 Climate Science, Logic & conceptual analysis	Germany

PART 2 - GRANT APPLICATION

Application titled "Ethics and governance of solar geoengineering research: from concepts to implementation" submitted 9 December 2024.

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

COMSATS University Islamabad **(Grant Recipient)**
Park Road, Tarlai Kalan
Islamabad 45550
Pakistan

27 June 2025

Attention: Prof. Dr. Athar Hussain

Dear Dr. Athar,

FPCW-PR01-P010 - Evidence-based Assessments to Guide Perceptions, Governance, and Ethical Frameworks for South Asia: Comparing Marine Cloud Brightening Deployment Strategies vis-à vis Carbon Dioxide Removal and Mitigation Efforts – Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Evidence-based Assessments to Guide Perceptions, Governance, and Ethical Frameworks for South Asia: Comparing Marine Cloud Brightening Deployment Strategies vis-à vis Carbon Dioxide Removal and Mitigation Efforts. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£574,032 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 27 June 2025

Completion Date	The completion is 26 June 2028	
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions	
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £5 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Dr. Athar Hussain Professor [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] Professor of Bio Science, Head Office of Research Innovation & Commercialization (ORIC) [redacted]

Notices	ARIA Contracts [redacted]	Dr. Athar Hussain Professor Department of Meteorology [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not used.

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 4 July 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of COMSATS University Islamabad to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period

about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 For Grants over £500k: Annually, and on each anniversary of the Commencement Date and at the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and

Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge] if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], if for any reason you choose not to exploit any such Results commercially

within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the [Future Proofing our Climate and Weather Intellectual Property Pledge], to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;

(b) where you become a Non-UK Entity;

(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or

(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;
(b) loss of contracts or business opportunities;
(c) loss of anticipated savings;
(d) loss of goodwill or damage to reputation; or
(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or

(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,

and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked), (a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,

(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

South Asia, a highly populated and climate-vulnerable region, faces significant environmental challenges, including extreme weather events, rising sea levels, glacial melt, and prolonged heatwaves. The region is home to nearly a quarter of the world's population and is characterized by diverse geography, including vast coastlines, fertile plains, and mountainous terrains. Climate risks in South Asia are exacerbated by socio-economic vulnerabilities, resource limitations, and governance complexities. Coastal nations such as India, Pakistan, and Bangladesh are increasingly threatened by rising sea levels and cyclonic storms, while landlocked countries like Nepal and Bhutan face challenges related to glacial melt, water scarcity, and temperature rise.

Marine Cloud Brightening (MCB) is a regional Solar Radiation Modification (SRM) technique aimed at increasing cloud reflectivity to cool atmospheric temperatures and mitigate some climate change impacts. This project seeks to evaluate the feasibility and potential consequences of MCB in South Asia by comparing it with Carbon Dioxide Removal (CDR) and traditional mitigation strategies. The study will explore technical, governance, and ethical considerations associated with the use of MCB and assess its socio-economic and political implications.

This project aims to address existing research disparities by centering South Asian perspectives, offering a framework for more inclusive and ethically grounded MCB research that holds global relevance. The study will focus on selected coastal countries (Bangladesh, India, Pakistan) and non-coastal nations (Bhutan, Nepal) to examine the socio-economic, political, and environmental dimensions critical to decision-making around the potential use or non-use of MCB. By integrating stakeholder perspectives—including policymakers, academics, civil society, and the media—alongside ethical considerations and governance frameworks, the project will develop inclusive and equitable SRM strategies tailored to the region.

While global research on MCB has been conducted, its application in South Asia remains largely unexplored. Existing studies on SRM have primarily focused on technical outcomes, with limited engagement of regional stakeholders. This project seeks to bridge that gap by integrating climate impact modeling with stakeholder engagement, policy analysis, and ethical evaluations to ensure that any potential interventions are both scientifically sound and socially acceptable. The study will generate region-specific insights to inform potential governance frameworks, supporting decision-making on climate interventions in South Asia. In this context, by bridging the gap between scientific innovation and socio-economic and political realities, this research seeks to contribute to a deeper understanding of how SRM strategies, particularly MCB, can be responsibly and effectively implemented in South Asia, if and when needed. Additionally, the study aims to provide key insights into governance structures and public perception analyses that will inform future climate intervention strategies in the region.

2. Aims and objectives of the Project Activities

The project aims to:

- Conduct comparative climate impact modeling analyses of MCB, CDR, and traditional mitigation approaches in South Asia.
- Investigate public perceptions, governance challenges, and ethical concerns associated with MCB.
- Develop governance frameworks for responsible climate intervention strategies in the region.
- Engage key stakeholders, including policymakers, civil society, academics, and media, to ensure inclusive decision-making.
- Assess the socio-economic implications and potential risks associated with the use of MCB in South Asia.

3. Project Activities

3.1 This project is divided into five interrelated research components:

WP1: MCB Climate Projection and Impact Modeling

- Employ MCB runs of CESM under CMIP6 framework to assess MCB's regional impacts, particularly on monsoon rainfall and coastal weather patterns.
- Analyze temperature, and precipitation, under different climate change and MCB scenarios, across South Asia.

WP2, WP3: Comparative Analysis with CDR and Mitigation Strategies

- Evaluate the feasibility, cost, and scalability of MCB compared to CDR techniques and conventional mitigation efforts.
- Develop a multi-criteria decision analysis framework for assessing trade-offs among these solutions.

WP1, WP2, WP3: Stakeholder Engagement and Perception Analysis

- Conduct surveys and focus groups across five South Asian countries (Bangladesh, Bhutan, India, Nepal, Pakistan) to understand public attitudes toward MCB.
- Ensure logistical feasibility by establishing clear protocols for survey distribution, data collection, and analysis.
- Develop partnerships with local institutions to facilitate data collection and ensure culturally appropriate engagement strategies.

- Utilize digital and in-person data collection methods to maximize outreach and accuracy of survey responses.

WP2, WP3: Policy Review and Ethical Framework Development

- Identify gaps in existing policies regarding SRM.
- Develop ethical guidelines that ensure equity, transparency, and inclusiveness in decision-making processes.

WP1, WP2, WP3: Risk Assessment and Governance Framework

- Address potential environmental, legal, and socio-economic risks associated with MCB.
- Develop governance mechanisms aligned with international climate agreements, and regional regulatory frameworks.

Logistics Plan for Data Collection and Survey Execution

- **Survey Methodology:** Surveys will be conducted using a mixed-methods approach, including structured questionnaires, semi-structured interviews, and focus groups.
- **Participant Selection:** A representative sample of stakeholders, including policymakers, civil society members, academics, and journalists, will be targeted in the five selected countries.
- **Data Collection Strategy:**

  - Digital surveys will be distributed through secure online platforms to maximize participation across diverse locations.
  - In-person data collection will be conducted where necessary, facilitated by regional research partners.

- **Survey Execution Timeline:**

  - **Until November 2025:** Development and pilot testing of survey instruments.
  - **Until May 2026:** Full-scale survey implementation in target countries.
  - **Until November 2026:** Data analysis and integration into governance and decision making frameworks.

- **Quality Control Measures:**

  - Cross-validation of survey responses through triangulation methods.

- Regular monitoring and reporting on survey response rates.
- Ethical considerations, including informed consent and data confidentiality, will be strictly followed.

Research Objectives

Comparative Analysis of MCB (GeoMIP) CDR (CDRMIP), mitigation (CMIP) Projections:

- Compare the efficacy of MCB and ocean alkalinization (CDR) in addressing climate vulnerabilities.
- Assess socio-political dimensions of MCB strategies in coastal (Bangladesh, India, Pakistan) vs. non-coastal (Bhutan, Nepal) countries, focusing on public perceptions, technical feasibility, governance, and ethical challenges.

Perceptions and Stakeholder Engagement:

- Investigate public perceptions of MCB and CDR across coastal and non-coastal countries in South Asia.
- Examine socio-economic factors influencing acceptance of MCB and assess stakeholder engagement, including governments, civil society, and local communities.

Policy Analysis:

- Analyse national and regional policies to identify gaps related to MCB.

Ethical Frameworks and Socio-Economic Dimensions:

- Review existing SRM ethical frameworks and develop guidelines for South Asia's geopolitical context.

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the [redacted]

ID	Milestones	Measure (Decision Points & Outputs)	Date
1	Completion of literature review and initial climate impact modelling	Literature review report, initial climate impact model outputs. Report submission	Commencement Date + 6 months
2	Stakeholder survey design pilot testing including logistics plan for data collection	Detailed survey execution plan, pilot survey completion report, survey validation, feasibility assessment	Commencement Date + 12 months
3	Full-scale climate modeling analyses, validation of survey methodology and survey execution	Verified climate impact model results, survey data collection completion, successful pilot survey completion	Commencement Date + 18 months
4	Stakeholder engagement and governance framework refinement	Focus group feedback summary, preliminary governance framework	Commencement Date + 24 months
5	Finalization of governance and ethical guidelines with stakeholder input	Ethical framework publication, governance recommendations plan	Commencement Date + 30 months
6	Project synthesis and dissemination of results	Final project report, stakeholder workshop, public dissemination materials and governance recommendations	Commencement Date + 36 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time:

Phase	Months	Key Activities
Phase 1: Project Initiation	1-6	Conduct literature review, finalize research methodology, develop impact climate models, establish initial stakeholder contacts, design survey instruments.
Phase 2: Data Collection & Initial Analysis	7-12	Implement climate impact modeling simulations, analyze early climate data trends, conduct pilot surveys, hold preliminary stakeholder consultations.
Phase 3: Full-Scale Stakeholder Engagement & Comparative Analysis	13-18	Execute large-scale stakeholder surveys, conduct focus group discussions, compare MCB with CDR and mitigation strategies, refine climate impact model projections.
Phase 4: Policy Review and Ethical Framework Development	19-24	Complete stakeholder data analysis, review existing policy frameworks, conduct validation workshops, engage policymakers for feedback.
Phase 5: Governance & Risk Mitigation Strategies	25-30	Finalize governance models, refine ethical guidelines, complete risk assessment studies, draft regulatory recommendations.
Phase 6: Dissemination & Final Recommendations	31-36	Publish research findings, organize dissemination workshops, present results at conferences, finalize governance recommendations.

3.3 The intended long-term outcomes are summarised below:

Enhanced Climate Resilience: The project will contribute to improving climate adaptation and resilience in South Asia by assessing the feasibility of MCB as a short-term intervention strategy.

Informed Decision making: Policymakers will have access to data-driven well-researched governance frameworks that balance climate intervention techniques with ethical considerations and regional needs.

Stakeholder-Driven Climate Strategies: By integrating community and expert perspectives, the project ensures that climate intervention strategies are inclusive and ethically responsible.

Scientific and Technological Advancements: The research will enhance climate impact modeling capabilities and contribute to the growing body of knowledge on SRM.

Global Relevance: The insights gained from South Asia will provide a template for similar assessments in other climate-vulnerable regions worldwide.

Guidance for Future Research: The ethical and governance frameworks developed will serve as a foundational reference for future studies and potential field experiments in climate intervention.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Planning	• Roles and responsibilities • External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD

Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principal investigators or key researchers have been identified:

Name	**Role**	**Organisation**
Dr. Athar Hussain	Principal Investigator. Leading project management (WP1, WP2, WP3)	COMSATS University Islamabad
Dr. Thomas Fischer	Collaborator, Technical Expert and Leading environmental assessment support (WP2, WP3)	University of Liverpool, UK
[redacted]	Team Member/Social Scientist-	COMSATS University

	Policy Analyst. Leading coordination with survey subcontractors, and leading key informant interviews, and ethical framings for research and publications outputs (WP1, WP2, WP3)	Islamabad
[redacted]	Team Member Coordinating communication between team members, and supporting key stakeholders, focus group discussions activities (WP1, WP2, WP3)	COMSATS University Islamabad
Dr. Sajida Kousar	Team Member/Expert in Analytic Model Development. Providing analytical modeling support for policy analysis and ethical framings project outputs (WP2, WP3)	International Islamic University, Islamabad
Mr. Hassaan Sipra	Team Member/Climate and SRM Governance. Supporting policy analysis and ethical framings research, publications outputs and project management (WP1, WP2, WP3)	The Alliance for Just Deliberation on Solar Geoengineering, Washington DC, USA
[redacted]	Data Development Specialist. Developing GIS and database outputs for project deliverables (WP2, WP3)	COMSATS University Islamabad
[redacted]	Team Member/Research Analyst. Leading climate modelling assessments for research and publications output (WP1, WP2)	COMSATS University Islamabad
[redacted]	Team Member/Research Analyst. Supporting climate modelling assessments for research and publications, and providing project management support (WP1, WP2)	COMSATS University Islamabad, Pakistan
[redacted]	Communication Manager (for media interactions across South	COMSATS University Islamabad, Pakistan

	Asia, development of briefings, website, short memos, etc.) (WP1, WP2, WP3)	
[redacted]	GIS Expert and support in Project Management (WP1, WP2, WP3)	COMSATS University Islamabad, Pakistan
[redacted]	Web Developer and Infographics Support (WP1, WP2, WP3)	COMSATS University Islamabad

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
Proposed Focal Person: Dr. Muhammad Mumtaz and [redacted]	Survey/Study across multiple demographics	Fatima Jinnah Women University, Rawalpindi And COMSATS University Islamabad, Pakistan
Proposed Focal Person: Mr. Hassaan Sipra	Focus group discussions activities	The Alliance for Just Deliberation on Solar Geoengineering, Washington DC, USA

PART 2 - GRANT APPLICATION

Application titled "Evidence-based Assessments to Guide Perceptions, Governance, and Ethical Frameworks for South Asia: Comparing Marine Cloud Brightening Deployment Strategies vis-à-vis Carbon Dioxide Removal and Mitigation Efforts" submitted 9 December 2024.

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

   For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

    For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

    This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and

Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

The Degrees Initiative **(Contractor)**
c/o Sedulo London
Office 605, Albert House
256–260 Old Street
London
EC1V 9DD
02 July 2025
Attention: Andy Parker
Dear Andy,

FPCW-PR01-P021 GRID-CC: Global to Regional Impacts Downscaling for Climate Cooling**– Research Contract Agreement - Offer Letter**

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling. We are pleased to confirm that ARIA wishes to appoint you to deliver the contract research services as described in the Project for ARIA, subject to the terms and conditions set out in this Offer Letter and its Schedules.

1. Overview of the Agreement

1.1. Any reference in this Offer Letter to you or your means the Contractor and any capitalised terms have the meanings given in Schedule 1 below).

Certain variables of the Agreement are set out in the table below:

Project	The project entitled GRID-CC: Global to Regional Impacts Downscaling for Climate Cooling, details of which can be found in Schedule 2.
Maximum Approved Cost (inclusive of taxes)	Maximum Approved Cost (inclusive of all taxes where applicable) is: £2,078,254
Commencement Date	The commencement date is 02 July 2025
Completion Date	The completion is 01 July 2028
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £10 million (per year in aggregate)

Monitoring and Reporting	The performance reports referred to in clause 7 of Schedule 1 shall be provided by you at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Contractor's Representative	[redacted] Programmes Director, [redacted] & cc [redacted] Chief Operating Officer, [redacted]	
ARIA's Representative	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Contractor**
	Chief Product Officer [redacted]	[redacted], Programmes Director, [redacted] & cc [redacted] Chief Operating Officer, [redacted]
Notices	ARIA Contracts [redacted]	[redacted] Programmes Director, [redacted] & cc [redacted] Chief Operating Officer, [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Contract and return it to finance@aria.org.uk.

3. Obligations

3.1. You will undertake the Project as a contract research and development project carried out at the direction of and for the benefit of ARIA's programmes.

3.2. ARIA will pay you the Approved Cost as set out in Schedule 2 for undertaking the Project in accordance with Offer Letter and its Schedules.

4. The Agreement

4.1. Once you sign a copy of this Offer Letter in accordance with paragraph 7 (Acceptance) below, it will form a binding **Agreement** between you and ARIA that includes and

incorporates the following documents:

4.1.1. the **Conditions** in Schedule 1;

4.1.2. the **Project Activities**, **Milestones** and **Application** in Schedule 2; and

4.1.3. the terms relating to Data Protection in Schedule 3.

4.2. The contract effected by the signing of this Offer Letter constitutes the whole agreement between the parties and supersedes all prior negotiations, agreements, representations or understandings between them relating to the subject matter of this Agreement.

4.3. Each party acknowledges that, in entering into the Agreement, it does not rely on any statement, representation, assurance or warranty (Representation) of any person (whether a party to this Agreement or not) other than as expressly set out in the Agreement. Each party agrees that the only remedies available to it arising out of or in connection with a Representation shall be for breach of contract.

5. Warranties

5.1. By signing this Offer Letter, you warrant and represent that:

5.1.1. your obligations under the Agreement are legal, valid, binding and enforceable;

5.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Agreement have been obtained;

5.1.3. the person signing the Agreement is duly authorised to sign on your behalf;

5.1.4. there are no actions, suits or proceedings pending or, to your knowledge, threatened against or affecting you before any court or administrative body or tribunal that might affect the ability of you to meet and carry out your obligations under this Agreement;

5.1.5. the Project will be carried out by appropriately experienced, qualified and trained personnel with all due skill, care and diligence;

5.1.6. you will discharge your obligations hereunder with all due skill, care and diligence, including, but not limited to, good industry practice and (without limiting the generality of the foregoing) in accordance with your own established internal procedures; and

5.1.7. the provision of the Project and ARIA's use of the Intellectual Property rights in the Foreground IP granted shall not infringe any Intellectual Property rights of any Third Party.

6. Amendments

Not Used

7. Acceptance

7.1. To confirm your acceptance of the Agreement please arrange for an authorised signatory to sign and date the duplicate copy of this Offer Letter as indicated below and return to ARIA as a complete signed original of the Offer Letter including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Agreement and to bind the Contractor.

7.2. This Offer Letter expires on 4 July 2025 and any acceptance received after this date will not be valid.

Yours sincerely

Signed by the duly authorised signatory of ARIA:

Signature

Name

Position

Date

Signed by the duly authorised signatory of The Degrees Initiative

Signature

Name

Position

Date

SCHEDULE 1 - CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up this Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Offer Letter;
(b) these Conditions;
(c) the remaining Schedules to this Agreement with the exception of Schedule 2 Part 2 (the Application);
(d) Schedule 2 Part 2 (the Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, this Agreement.

2. DURATION AND OBLIGATIONS OF THE PARTIES

2.1 The Agreement will subsist for the duration of the Project Period unless extended by agreement or terminated earlier in accordance with its terms. Any provision of the Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Agreement shall remain in full force and effect.

2.2 You shall manage and complete the Project in accordance with the specification as set out in Schedule 2 Part 1 and shall allocate sufficient resources to the Project to enable you to comply with this obligation.

2.3 ARIA may request changes to the Project Activities (including changing the Approved Cost and/or the scope of the Project Activities) by providing at least 30 days written notice to you of such changes and the rationale. ARIA will agree with you the terms of any variation to the Agreement requested by ARIA to implement such changes subject to clause 26 with your agreement to the variation not to be unreasonably withheld, delayed or conditioned.

2.4 You shall use reasonable endeavours to meet any performance dates specified in Schedule 2 Part 1 or elsewhere in the Agreement and the obligations of this clause 2.

2.5 You shall:

(a) reasonably co-operate with ARIA in all matters relating to the Project; and

(b) promptly inform ARIA of the absence of the Contractor's Representative and/or Key Staff and you must provide a suitably qualified replacement approved by ARIA (such approval not to be unreasonably withheld or delayed);

(c) observe, and ensure that all member of your Staff observe, all rules and regulations and any other reasonable requirements of ARIA that ARIA has provided to you; this shall include and not be limited to ensuring that the Approved Cost shall be utilised in accordance with the Project cost breakdown (referred to in Schedule 2) covering all Project materials, equipment and any applicable Sub-Contractor costs;

(d) notify ARIA as soon as you become aware of any issues which arise in relation to the Project; and

(e) before the Commencement Date obtain, and at all times maintain, all necessary licences and consents and comply with all relevant legislation in relation to your obligations under the Agreement.

3. ENVIRONMENTAL REQUIREMENTS

3.1 In performing the Project, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. ACCOUNTING AND PAYMENTS

4.1 The total amount to be paid by ARIA to you shall not exceed the Approved Cost. Invoices raised by you for Milestone Payments shall be paid by ARIA in accordance with the Agreement (including Schedule 2).

4.2 Payments to third parties including Sub-Contractors shall remain your responsibility and you shall ensure that such payments are made promptly within 30 days from the receipt of a valid invoice.

4.3 ARIA may suspend payment at any time if (i) in the view of ARIA, acting reasonably, satisfactory progress on the Project has not been maintained (but suspension shall be limited to the affected portions of the activities), or (ii) reports have not been submitted as required under Clause 7. In the event that ARIA suspends payment under (i), you may suspend performance of the Project Activities (and ARIA's corresponding payment obligations shall also suspend) until the parties have agreed, acting in a good faith, a course of action to progress the Project Activities, in which case you shall reinstate your performance of the Project Activities and ARIA shall resume payment (including, as agreed, in respect of any missed payments) in accordance with the provisions of this Agreement. If the parties are unable to agree a course of action and/or ARIA's payment suspension lasts for two (2) months, this Agreement shall automatically terminate.

4.4 On completion of the Project Period, the final payment in respect of costs properly incurred under the Agreement will be paid by ARIA to you within 30 (thirty) days, provided that:

(a) the Project has been completed in accordance with the Agreement;
(b) the reports required under clause 7 have been submitted by you; and
(c) an agreement has been reached in respect of any items remaining for disposal.

4.5 If at any time an overpayment has been made to you for any reason whatsoever, the amount of such overpayment shall be taken into account in the assessing of any further payments or shall be recoverable from you at ARIA's discretion.

4.6 You shall keep and maintain until seven years after this Agreement has been completed, or as long a period as may be agreed between the Parties, full and accurate records of the Project including:

(a) all aspects of the Project;
(b) all expenditure reimbursed by ARIA; and
(c) all payments made by ARIA;

and you shall on request afford ARIA or ARIA's representatives such access to those records as may be required in connection with the Agreement.

4.7 You shall make any payments due to ARIA without any deduction whether by way of set-off, counterclaim, discount, abatement or otherwise, unless you have a valid court order requiring an amount equal to such deduction to be paid by ARIA to you.

4.8 If any sum of money shall be due from you to ARIA or any other government department, the same may be deducted from any sum due now or in future to you under this Agreement or any other agreement with ARIA or with any other Crown Body.

5. NOT USED

6. PROJECT REVIEW

6.1 ARIA will review the Project at the intervals specified in Schedule 2 Part 1. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Services and the Project continuing in line with existing plans;
(b) increase or decrease the Approved Cost for the remainder of the Project Period, as applicable;
(c) redefine the Milestones;
(d) require you to carry out remedial activity with the aim of improving delivery of the Services; and/or
(e) terminate the Agreement in accordance with clause 22.

6.3 Any change to these Agreement terms, Project Activities, or Approved Cost pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 NOT USED

7.2 ARIA will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project against the specifications detailed in Schedule 2 Part 1. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against them at the intervals and for the periods of time specified in Schedule 2 Part 1 and otherwise in compliance with the request of ARIA's Representative and shall detail all Data, methods, Results and

provisional conclusions together with management information and any other information relating to the Project;

(b) verbal or written reports and ad hoc meetings or discussions as reasonably required by ARIA on any aspect of the Project; and.

(c) a quarterly report on your use of the Approved Costs, with details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its Project activities and compliance with the terms of the Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Project about any commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Agreement.

8. AUDITING AND ASSURANCE

8.1 You must provide supporting evidence as ARIA may reasonably require to prove that you have used the Approved Costs to carry out the Project and provide the Services in accordance with Schedule 2. The supporting evidence shall clearly identify all Project and associated overhead costs. You shall maintain proper financial records relating to the Project at all times during the Project Period and for a period of seven years after the end of the Project Period.

8.2 Subject to clause 11, ARIA and/or its authorised representative or any statutory or regulatory auditors may, at any time during the Project Period and for up to 7 years after the end of the Project Period, conduct audits in relation to your financial records for the Project and your compliance with this Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Project; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project and future Milestone Payments to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflict of interest between your and your Representatives obligations under the Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Project Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that they are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you to cease the conflicting activity and if that is not acceptable to you, either party may terminate this Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the Project, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of this Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information that is necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and to the extent that no exception to disclosure under them is applicable; or

(d) where ARIA (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under this Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable, the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the codes of practice issued and revised from time to time under the Information Acts (other than the FOIA), may disclose information concerning you and this Agreement without consulting you. ARIA must notify you of any request for information to the extent that it is permissible and reasonably practical for it to do so and will give you adequate opportunity to make representations to ARIA before it discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or this Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with this Agreement. Where either party anticipates that the other will process any Personal Data on its behalf under this Agreement it must notify the other party and the parties must agree a variation to this Agreement to incorporate appropriate provisions (such as those set out in Schedule 3) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. NOT USED

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 This Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Term if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership and licensing

15.3 Subject to Clauses 15.4 and 16.2, the Foreground IP shall belong to you and:

(a) you hereby grant to ARIA a royalty-free non-exclusive licence to use the Foreground IP for internal non-commercial purposes in ARIA's programmes; and

(b) you will cooperate with ARIA to facilitate collaborations and future licensing arrangements with Third Parties, including by participating in confidential discussions with ARIA and other Third Parties participating in ARIA's programme, in order to develop and commercialise the Foreground IP, subject to an appropriate agreement being in place with the Third Party. The foregoing shall not require you to enter into any agreement with, or license the Foreground IP to, any Third Party.

15.4 Where you assign or grant an exclusive or sole license the Foreground IP to a Third Party, you must impose on that Third Party all of the obligations set out in clause 15 and 16.

15.5 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.6 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and Publication

15.7 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.8 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.9 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to request the assignment of the patents to ARIA or its nominee.

16. COMMERCIALISATION OF FOREGROUND IP AND RESULTS

16.1 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of exploitation you should use all reasonable endeavours to exploit the Results. This should be done in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 A royalty of 0.25% of your Net Sales which use or incorporate Foreground IP shall be payable to ARIA if you are incorporated outside of the United Kingdom (the "**ARIA Non-UK Fee**"). For the avoidance of doubt, the ARIA Non-UK Fee shall be calculated solely in respect of the share of the Net Sales which corresponds to the value resulting directly from the Foreground IP.

16.4 The ARIA Non-UK Fee shall be payable within 90 days following the end of each relevant calendar year, for a period of ten (10) years from the First Sale Date, up to an aggregate total equal to 20 times the Approved Cost.

16.5 In the event that:

(a) there is a change of control of the Foreground IP, such that you assign or grant an exclusive licence to the Foreground IP to another person; or

(b) you extend rights to the Foreground IP within your Group, such that you grant another entity within your Group a licence to the Foreground IP,

then,

(c) you must notify ARIA immediately; and

(d) include clauses 16.3 to 16.5 in the relevant instrument and ensure that it expressly provides that the provisions are intended to be enforceable by ARIA by virtue of the Contracts (Rights of Third Parties) Act 1999 (or any equivalent in any jurisdiction) and take any other step required to ensure that the ARIA Non-UK Fee is payable by the transferee or licensee (as applicable).

16.6 For the avoidance of doubt, in respect of:

(a) clause 16.5(a), provided that you have complied with clause 16.5(d), your obligation to pay the ARIA Non-UK Fee shall cease and pass to the transferee or licensee (until, in the case of an exclusive licence, the termination or expiry of such licence); and

(b) clause 16.5(d) the transferee or licensee shall only be liable to pay the ARIA Non-UK Fee to ARIA for the remainder of the aggregated total amount and the ten (10) year period specified in clause 16.4 prorated from the date of the relevant instrument.

Assignment of IP

16.7 You must, on written request by ARIA, promptly assign any Foreground IP to ARIA (or to a Third Party nominated by ARIA) if you do not:

(a) undertake further research and development work in respect of that Foreground IP; or
(b) commercially exploit (and you are not using reasonable endeavours to commercially exploit) that Foreground IP,

within eight years of its creation, and each party shall bear its own costs in relation to any such assignment.

Pricing for Crown Body customers

16.8 You must ensure that any Crown Body is able to procure, in a reasonable timeframe and in suitable quantities for its requirements, any products and services that are covered by, use or incorporate the relevant Foreground IP:

(a) at the Crown Discount price until the total Crown Discount given to all Crown Bodies equals two times the Approved Cost; and
(b) thereafter at the Most Favoured Nation Price; and

you must provide details of the yearly amount of Crown Discount being provided to ARIA within 90 days after the end of each calendar year. You must use reasonable endeavours to reach the total set out in clause 16.9(a) within 10 years after the first sale to a Crown Body.

17. ASSETS

17.1 You must take all practical steps to purchase all materials and equipment at a fair and reasonable price and provide invoices issued to you for assets purchased in connection with the Project as part of the Approved Cost.

17.2 At the end of the Project Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUB-CONTRACTING

19.1 You may not, transfer, assign, novate or otherwise dispose of the whole or any part of the Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You may only subcontract any of the Services or Project Activities except to the extent permitted, and to the Sub-Contractors identified, in Schedule 2, Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractors as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Agreement.

20. NOT USED

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Project and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Project or publicise details of the Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events (**Events of Default**) occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13 or 25, or commit a material breach of any other term of this Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;
(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA under clause 6.2;
(d) you provide ARIA with any materially misleading or inaccurate information in the specification for the Project as detailed in Schedule 2 or in subsequent related correspondence;
(e) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Sub-Contractor, immediately upon becoming aware of it;
(f) you are subject to an Insolvency Event;
(g) you undergo a Change of Control which will, in the reasonable opinion of ARIA:
  (i) be materially detrimental to, or result in fundamental changes to, the Project;
  (ii) result in your being unable to undertake the Project; and/or
  (iii) raise national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:
(a) suspend the Project and the payment of the whole or any part of Milestone Payments for such period as ARIA may determine, acting reasonably;
(b) reduce the Approved Cost, in which case the Milestone Payments will thereafter be made in accordance with the reduction and notified to you; and/or
(c) subject to clause 22.4, terminate this Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Agreement is terminated for an Event of Default that is or includes a Prohibited Act, ARIA may require you to repay the entire amount of the Milestone Payments previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and
(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Agreement, you may terminate the Agreement on written notice to ARIA if ARIA commits a material breach of the Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so. Notwithstanding anything to the contrary in the Agreement, termination of the Agreement under this Clause 22.5 also results in the automatic termination of the licence granted to ARIA under Clause 15.3(a).

General Termination Rights

22.6 Without prejudice to any other provision of the Agreement, either party may terminate the Agreement at any time by giving at least 60 days' prior written notice to the other party.

22.7 Pursuant to clause 2.5, if ARIA is unwilling to accept a nominated successor(s) to Key Staff on it may terminate the Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 Termination of this Agreement, however caused, shall not:

(a) release either party from any duty or obligation of confidence which falls on such party or its servants, agents, employees or former employees under this Agreement or under the general law governing confidential information;

(b) prejudice or affect any rights, action or remedy which shall have accrued before termination or shall accrue thereafter to any party; or

(c) affect the continuing obligations of the parties under this Agreement.

22.9 If the Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.10 Where ARIA terminates the Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and
(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA; and
(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you.
(v) costs that would not have been incurred had this Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period);

22.11 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.12 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Agreement in

the event that the Agreement was terminated (calculated on the basis described in clause 22.10).

22.13 ARIA's total liability under clause 22.10 shall be limited to the Maximum Approved Cost under the Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.14 If the Agreement is terminated or expires ARIA will not be liable to pay any of your costs (or those of any of your contractors or suppliers) related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Offer Letter, and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Agreement.

23.2 All disputes and complaints must be referred in the first instance to the ARIA Representative and the Contractor's Representative.

23.3 If the dispute cannot be resolved between the ARIA Representative and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to senior officers of the parties for resolution.

23.4 If within a further 10 Working Days after such meeting the dispute has not been resolved, the dispute may be referred, by either party, to mediation. The parties shall agree the mediator within 10 Working Days. The fee for the appointed mediator shall be shared equally between the parties.

23.5 Nothing in this Clause 23 shall preclude either party from commencing proceedings.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;
(b) payment of sums properly due and owing to the other in the normal course of performance of this Agreement;
(c) a breach of clause 13;
(d) liability arising under any indemnity in this Agreement; or
(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Agreement or for ARIA's breach of this Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;
(b) any reduction, suspension, withdrawal or request for repayment of the Approved Cost in accordance with this Agreement; or
(c) termination of the Agreement in accordance with this Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;
(b) loss of contracts or business opportunities;
(c) loss of anticipated savings;
(d) loss of goodwill or damage to reputation; or
(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to this Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to this Agreement or its subject matter or anything which it has done or not done in connection with this Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the Approved Cost.

24.5 You shall indemnify and defend ARIA against all Losses (including but not limited to any direct, indirect or consequential losses, loss of profit, loss of reputation and all interest, penalties and reasonable legal costs (calculated on a full indemnity basis) and all other reasonable professional costs and expenses) suffered or incurred by ARIA arising out of or in connection with:

(a) any claim brought against ARIA for actual or alleged infringement of a Third Party's intellectual property rights arising out of, or in connection with, the receipt, use or supply of the Services; and
(b) any claim made against ARIA by a Third Party arising out of, or in connection with, the supply of the Services,

provided that the foregoing shall not apply to the extent that a claim arises as a result of ARIA's negligence or breach of this Agreement.

24.6 If ARIA receives a claim which falls within the scope of the indemnity at clause 24.5 (**Claim**), ARIA shall:

(a) notify you without unreasonable delay in writing of the Claim;

(b) allow you, at your own cost, to conduct all negotiations and proceedings and to settle the Claim, always provided that you shall obtain ARIA's prior approval of any settlement terms, such approval not to be unreasonably withheld;

(c) provide you with such reasonable assistance regarding the Claim as is required by you, subject to reimbursement by you of ARIA's costs so incurred; and

(d) not, without prior consultation with you, make any admission relating to the Claim or attempt to settle it, provided that you consider and defend the Claim diligently, using competent counsel and in such a way so as not to bring the reputation of ARIA into disrepute.

24.7 You shall under no circumstances in connection with this Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.8 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Agreement.

25. RESEARCH ETHICS AND INTEGRITY

25.1 Not Used

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Staff undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to this Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

26.2 You may request a variation to the Agreement or the Project at any time giving full details of the justification of the request and ARIA may agree to vary the Agreement or refuse the request and require the continuation of the Project in accordance with the Agreement.

27. GENERAL

27.1 **Force majeure**: Neither party shall be in breach of this Agreement nor liable for delay in performing, or failure to perform, any obligations under this Agreement to the extent such delay or failure result from events, circumstances or causes beyond its reasonable control. In such circumstances the affected party shall be entitled to a reasonable extension of the time for performing such obligations. If the period of delay or non-performance continues for 3 months, the party not affected may terminate this agreement by giving 30 days' written notice to the affected party.

27.2 **Notices**: All notices and other communications in relation to this Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all

such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.3 **Change of control**: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(g) is likely to apply.

27.4 **Severability**: If any provision of this Agreement is held invalid, illegal or unenforceable for any reason by any court of competent jurisdiction, such provision shall be severed and the remainder of the provisions shall continue in full force and effect as if this Agreement had been executed with the invalid provisions eliminated.

27.5 **Waiver**: The waiver by either party of any right or remedy in respect of any breach of any term or condition or requirement of this Agreement shall not prevent the subsequent enforcement and shall not be deemed to be a waiver of any right or remedy in respect of any subsequent breach.

27.6 **Relationships**: Nothing in this Agreement shall be construed as to make any party the employee, agent, partner or legal representative of the other party for any purpose whatsoever. No party is granted any right to assume or create any obligation or responsibility, expressed or implied, on behalf of or in the name of the other party. In fulfilling obligations pursuant to this Agreement, you will be acting as an independent contractor at arm's length from ARIA.

27.7 **Contracts (Rights of Third Parties) Act 1999**: A person who is not a party to this Agreement shall have no right to enforce any terms of it which confer a benefit on him.

28. GOVERNING LAW

This Agreement (including any non-contractual disputes or claims arising in connection with this Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 As used in this Agreement the following terms and expressions shall have the meaning ascribed to them below:

Adequate Insurance means the insurance requirements and amounts set out in the Offer Letter;
Approved Cost means the total cost agreed between the parties for the Project as set out in Offer Letter, inclusive of VAT or other sales tax;
ARIA's Representative means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Project as set out in clause 2.1 of the Offer Letter;
Background IP means IP that is:
(a) owned by or licensed to a party prior to the Commencement Date; or

(b) developed by or on behalf of a party during the Project Period but not in connection with the Project Activities,
and is in either case used in connection with the Project;
Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;
Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;
Code of Conduct means the Code of Conduct for Suppliers published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/media/648c3ab5b32b9e000ca968c3/Supplier_Code_of_Conduct_v3.pdf, including any subsequent updates from time to time;
Commencement Date means the date set out in the Offer Letter;
Commercialisation Hypothesis means the exploitation plan set out in Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Project Period;
Completion Date means the date set out in the Offer Letter;
Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;
Contractor's Representative means a person authorised to represent you in respect of this Agreement and who shall have the authority to bind you in all matters under this Agreement as set out in clause 2.1 of the Offer Letter;
Crown or Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;
Crown Discount means the monetary value of the discount from the Most Favoured Nation Price given to a Crown Body;
Data means information collected and/or used for the purposes of the Project, which can be processed manually, electronically or by other means;
Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by

Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

EA means the Equality Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Offer Letter;

First Sale Date means the date on which you first bill an amount to a customer in respect of the sale of goods or services (or any other transaction) which use or incorporate Foreground IP;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means the Intellectual Property developed during and in connection with the Project;

Future Proofing our Climate and Weather Intellectual Property Pledge means [the pledging system for patents relating to approaches for actively cooling the earth operated by ARIA/a third party in the form at Annex A;

Gross Sales means total invoiced value of sales made during a specific period, including all amounts billed to customers such as from the sale of goods, services, licence income, royalty income, franchise fees, commissions, subscription fees, before any deductions;

Group in relation to a company, that company, any subsidiary or holding company from time to time of that company;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation.

Information Acts means the Data Protection Legislation and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property or IP means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Key Staff means the persons named in Schedule 2 Part 1;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation.

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise.

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

Milestone Payments means the payments made based on progress towards the Milestones as set out in Schedule 2 of this Agreement;

Most Favoured Nation Price means a price that is no higher than that offered to or agreed with any other customer for equivalent quantities of equivalent products or services;

Net Sales means Gross Sales after relevant accounting deductions, such as sales tax, packaging, insurance, carriage and freight, trade discounts and credits, returns and allowances, import taxes and similar applicable government levies;

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning as defined in the Data Protection Act 2018 or successor legislation;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for: (i) doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Services; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Agreement; or

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to this Agreement; and/or defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the scope specified in Schedule 2 Part 1;

Project Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Agreement;

Project Review means the process for reviewing the Project outlined in clause 6;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means any Data, reports or information or other material generated by the Project;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Services means the services being provided by you to enable fulfilment of the Project;

Staff means your Representative and all employees, consultants agents and Sub-Contractors which you engage in relation to the Project;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Services or any part thereof or facilities or services necessary for the provision of the Services or any part thereof or necessary for the management, direction or control of the Services or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity that has or whose ultimate parent company has, its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Project Period because of termination or breach of the Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 The interpretation and construction of the Agreement shall be subject to the following provisions:

(a) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;

(b) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;

(c) the headings to Clauses are for ease of reference only and shall not affect the interpretation or construction of the Clauses;

(d) references to Clauses are references to Clauses in the part of the Agreement (i.e. the Offer Letter or particular Schedule or Annex as the case may be) in which they appear, unless otherwise stated;

(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time; and

(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation".

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

For the world to make evidence-based and equitable decisions about climate intervention, it must accelerate SRM (solar radiation modification) evaluation in the world's most climate vulnerable regions. Access to high-quality and relevant climate data is a prerequisite for the evaluation of SRM and its impacts in the Global South. Data provision is currently underwritten by the goodwill and volunteerism of experts in the Global North, but this approach is reaching its limits. The proposed project would fill this gap by initially performing global statistical downscaling on relevant climate data sets and then creating an accessible data repository housed at the University of Cape Town (UCT). The repository of downscaled data would constitute a public good that would enable much more accessible SRM analysis across the Global South.

The proposed project would then demonstrate the potential of the repository and the downscaled data. It would convene a consortium of SRM experts from Asia, Africa, the Americas and Europe to conduct a global modelling pilot study on key global and regional climate impacts, with particular attention to potential regional tipping elements. Having single, authoritative, global studies on the impacts of SRM on key processes and sectors would be invaluable for developing the necessary evidence base to inform proper debate.

This project is proposed by a coalition that is uniquely capable of delivering such an ambitious programme of work. The Degrees Initiative (UK) has singularly transformed the global SRM research environment, and the Degrees Modelling Fund is the largest SRM research programme in the world, supporting 26 SRM research projects in 22 developing countries and emerging economies. Project data provision and downscaling would be managed by leading SRM scientists from the University of Cape Town (South Africa) and Cornell University (USA), and the data repository would be managed at the University of Cape Town, which is already well set up to do this.

2. Aims and objectives of the Project Activities

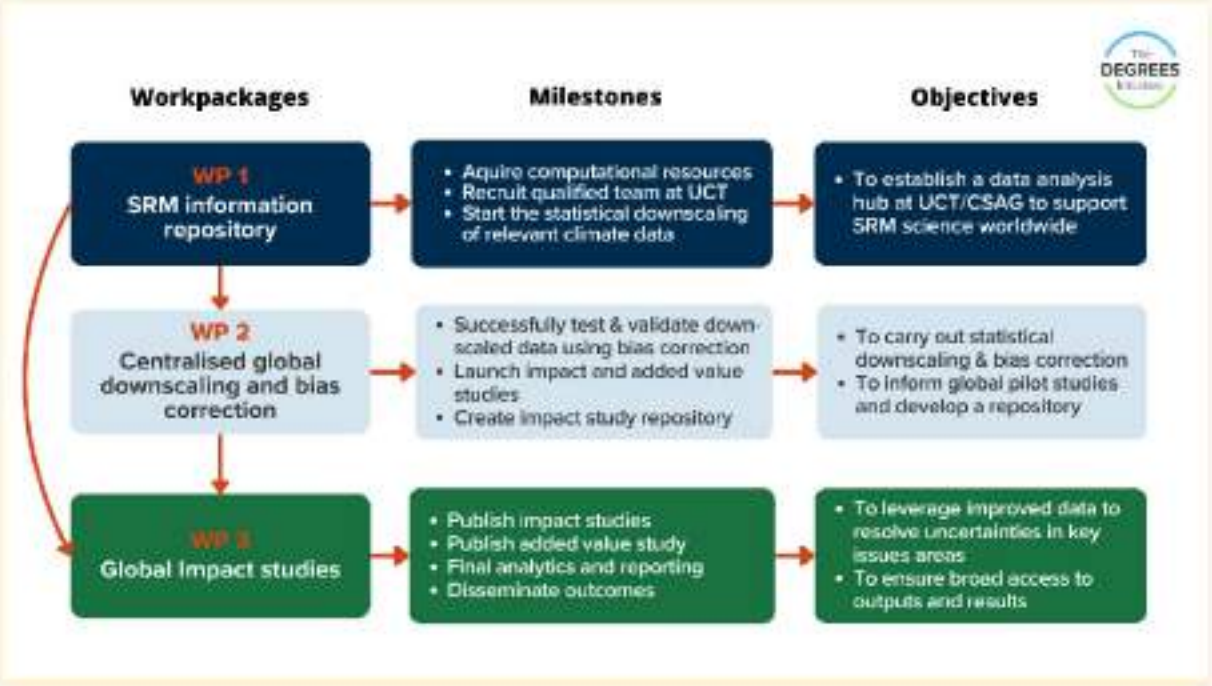
Overall aim:

To advance data accessibility and policy-relevant research on SRM, especially for vulnerable regions in the Global South, by building tools, data infrastructure, and international scientific collaborations necessary to evaluate SRM's potential impacts at regional scales.

Primary objectives:

- Enhance access to downscaled climate data for SRM research, focusing on regions most vulnerable to climate change, via a data analysis hub at UCT/CSAG.
- Establish a publicly accessible SRM data repository at UCT, enabling remote analysis without requiring local downloads.
- Improve global capacity for evaluating SRM impacts through downscaling and bias correction of key climate variables using advanced methodologies.

- Demonstrate the utility of downscaled data by coordinating a global pilot study modelling the regional impacts of SRM on policy-relevant sectors such as health, agriculture, water availability, and/or potential tipping points.
- Produce a structured, peer-reviewed repository of SRM impact studies to inform debate and further scientific research.



3. Project Activities

3.1 Work packages

You propose a project in three related work packages (WPs), all coordinated by the Degrees Initiative with partners from the USA and across the Global South. The first two WPs would conduct statistical downscaling and bias correction of key global SRM modelling datasets and create a repository for SRM research output. Together, these WPs would improve global access to regional-scale data, provide a foundation for modelling SRM impacts and reduce barriers to research, especially in the Global South. Scientists would be empowered to more easily and accurately understand how SRM might impact their regions which would act as an "output multiplier" for more and better SRM research around the world.

The third WP would convene a global consortium of scientists to produce a study modelling the effects of SRM on key policy-relevant climate impacts, such as health, agriculture or water availability, with additional attention to potential tipping elements. These would demonstrate the potential of downscaled data while producing new, policy-relevant science.

WP 1 – SRM information repository

You propose to create a repository of SRM research data and research output housed at the University of Cape Town and managed by a dedicated data technician. This repository will serve as an online, remote data analysis tool that does not require the user to download the data locally, e.g. a Jupyter Hub; a catalogue of all SRM research papers to provide access to a knowledge base often unavailable to researchers at institutions unable to pay article costs; and provide a structured platform to support the

broader SRM community. Establishing the hub would represent a public good that acts as an "output multiplier" for SRM evaluation, enabling better and more accessible SRM research worldwide. One post-doctoral researcher will be employed at UCT over years 2 and 3 to support the creation of a repository of SRM research data, and to carry out the technical work in WP3.

WP 2 - Centralised global downscaling and bias correction

This work package will complete a statistical downscaling and bias correction of global climate data using a range of methodologies that have already been employed for future projections of climate change, and that will make the evaluation of the local impacts of SRM more reliable, robust and accessible in conjunction with WP1. The downscaling and bias correction methodologies may include, depending on feasibility, quality of the products, as well as the team's capacity, Ensemble Generalised Analog Regression Downscaling (En-GARD), bias-correction spatial disaggregation (BCSD, as used in the ISIMIP and NASA-NEX-GDDP-CMIP6 projects) and Multivariate Adapted Constructed Analogs (MACA), as well as new potential machine-learning driven methods of downscaling. Most SD methods downscale only rainfall and temperature. However, this proposal aims to improve existing downscaled products, and you will explore the possibility to downscale also other variables such as wind, humidity, and incoming solar radiation, which are required by many impact models, including those for agriculture, health, and renewable energy.

It will leverage current climate model outputs, including the new GeoMIP simulations, which are part of CMIP7 and the ARISE and GAUSS ensembles. The team will employ two post-doctoral researchers, one at UCT who will assist with the downscaling and the other at Cornell University to perform the downscaling based on GeoMIP data. Additionally, the project will provide funding for workshops to educate scientists about the use and limitations of downscaled outputs. The repository mentioned in WP1 will be used to share these outputs globally. The constant engagement with the Degrees Initiative's community will ensure that the downscaled and bias-corrected data can be validated in the regions that matter most, providing a "reality-check" that will allow for a robust, trustworthy product.

WP 3 - Global impacts studies

Degrees will convene a global scientific consortium, with members from Africa, Asia, and South and Central America to conduct a modelling study on important impacts of global warming. Possible initial impact studies would include agriculture and food security, water security, extreme heat and heat exposure, health (climate-borne diseases and heat exposure) and biodiversity with additional attention to potential tipping elements. Such impact studies are reliant on downscaled and bias-corrected climate data, as opposed to the large-scale direct GCM output, to better capture the regionalised and local impacts of changes in temperature and hydrology that are context-dependent (i.e. they might depend on orography in a way that is not captured at the global scale), and therefore will greatly benefit from the output of WP2, which will provide a communal framework for worldwide impact assessments. These studies would represent a significant advancement in global SRM evaluation, offering an unprecedented level of granularity because of the downscaling and bias correction conducted in this project. The same post-doctoral researcher that was mentioned in WP1 will be employed at UCT to conduct the research for years 2 and 3 of the project, as the downscaled data will be produced during year 1. Having demonstrated what is possible and its impact on SRM evaluation, you would then seek further funding from other sources to continue studies on additional impacts. As such, any ARIA funding would leverage additional external funding.

Year 1 - Laying foundations and establishing infrastructure

1. Establish a data analysis hub at UCT/CSAG (Months 1 - 6)
    a. Procure computational hardware for the Climate Systems Analysis Group at the University of Cape Town.
    b. Install and configure hardware to create a high-performance hub for data analysis, processing and hosting.
    c. Recruit a qualified technician to support the CSAG analysis hub.
    d. Hire one post-doctoral research fellow specialising in statistical downscaling and data accessibility.
    e. Begin the downscaling and secure transfer of relevant datasets to UCT.
2. Begin statistical downscaling (Months 6 - 12):
    a. Complete statistical downscaling of relevant data sets.
    b. Testing and validation of initial results.

Year 2: Data processing and regional output development

1. Complete statistical downscaling (Months 1-4):
    a. Finalise downscaling of datasets and validate outputs for accuracy and reliability using bias-correction.
2. Enhance data accessibility (Months 1-12):
    a. Ensure the centre maintains high quality downscaled data for key regions including Southeast Asia, Latin America and the Caribbean, South Asia, and Africa.
    b. Ensuring the centre's data, including the research repository, is easily accessible.
3. Global pilot study (Months 1-12):
    a. Design and execute a pilot study focusing on a specific climate variable (e.g., precipitation trends or temperature variability) or sector (e.g. agriculture, health, water availability).
4. Create impact study repository (Months 6-12):
    a. Collect and curate 50 impact studies to begin building the SRM research repository.
5. Data access and usage analytics (Months 3-12):
    a. Establish tracking systems to monitor data access and usage.
6. Added value study (Months 6-12):
    a. Begin the analysis to quantify added value the downscaling brings over the raw GCM-scale data. Work closely with CORDEX in this study as they have similar questions.

Year 3: Expansion, validation, and delivery

4. Maintain high-quality regional datasets (Months 1-12):

4.1 Ensure datasets are continually updated, refined, and validated for priority regions.

4.2 Collaborate with international partners to address emerging research needs.

5. Complete impact study repository (Months 1-8):

5.1 Expand the repository to contain 100 rigorously reviewed impact studies, accessible via the research hub.

6. Complete global impact studies (Months 8-12):

6.1 Complete analysis on chosen impact studies for write up in an international journal.

7. Complete added value study (Months 6-12):

7.1 Complete analysis of added value for write up in an international journal.

8. Final analytics and reporting (Months 8-12):

8.1 Analyse and report on data usage, identifying trends and areas for improvement.

8.2 Develop a comprehensive project report summarising achievements, lessons learned, and recommendations for future initiatives.

9. Dissemination and stakeholder engagement (Months 6-12):

9.1 Host workshops and webinars to share project findings and outputs.

9.2 Engage with stakeholders to identify future collaborative opportunities and funding sources

9.3 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the [redacted]

ID	Milestones	Measure	Date
1	**WP1:** Cape Town Hub (x1) fully operational and repository of initial datasets loaded.	Hardware installed at UCT, software tested and operational including Jupyter hub, and datasets loaded e.g. geoMIP data.	Commencement Date + 10 months
2	**WP2:** Workshop run on use and limitations of downscaled outputs.	Workshop educates at least 20 scientists on how to use downscaled outputs. Suggestions and engagement info collated from users and synthesized into action items.	Commencement Date + 12 months
3	**WP3:** Consortium	A consortium of SRM experts from Asia, Africa, the Americas and Europe formed, agrees on a	Commencement Date + 12 months

	research topic chosen	research topic that will use the outputs of WP1 and WP2 to explore an impact of global warming, and delivers a short scoping report outlining rationale for topic selection.	
4	**WP2:** Completion of statistical downscaling for selected global datasets.	*insert measure here* Final validation and bias-correction of datasets completed. Initial draft of paper outlining results, including comparison across different downscaling methods, differences between large scale and downscaled data and outcomes of bias corrections.	Commencement Date + 14 months
5	**WP1:** Impact study of repository completed	Monitoring report on repository usage complete on e.g. number of users, terabytes added, hours spent on system, CPU hours run, where users are located and whether they are a continuing or new entrant to the field. The aim is to have between 4 and 12 user teams in year 2. Feedback on the system will be collected in a Degrees meeting.	Commencement Date + 16 months
6	**WP3:** Commencement of pilot studies	Four separate two year agreements signed between Degrees and institutions of consortium members to work on the research topic chosen in milestone 3.	Commencement Date +16 months
7	**WP2:** Validation that key regions are using the repository.	At least four key Global South regions (Southeast Asia, Latin America, South Asia, Africa) datasets are available and are being used by researchers.	Commencement Date + 24 months
8	**WP2:** Value of downscaled data shown.	Submission of an "added-value" analysis publication to an international, indexed, and peer-reviewed journal demonstrating improvements of downscaled data over raw GCM data.	Commencement Date + 36 months

9	**WP3:** Results from studies using repository are published.	At least four scientific papers accepted in international, indexed, and peer-reviewed journals and a synthesis report published. *Data related to published papers uploaded to open-access ARIA repository.*	Commencement Date + 36 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted]

10. **Project Reporting requirements**

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Planning	• Roles and responsibilities • External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event

Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

11. **Payment**

11.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

11.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

11.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

11.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

12. **Principal investigator/key researchers**

12.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	**Role**	**Organisation**
Andy Parker	Principal Investigator	The Degrees Initiative
Prof. Babatunde Abiodun	WP2 lead	University of Cape Town
Dr Christopher Lennard	WP1 lead	University of Cape Town
Dr Daniele Visioni	Cornell lead	Cornell University

13. **Sub-Contractors**

13.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
University of Cape Town, Climate Systems Analysis Group	This is the location for the setup, installation and future management of the hardware in work package one, with the creation of an accessible data repository that will be housed at the University of Cape Town (UCT)	South Africa
University of Cape Town, Environmental & Geographical Science department	Work package two, global statistical downscaling on relevant climate data sets will be performed by this group at University of Cape Town (UCT)	South Africa
Cornell University	Project data provision and downscaling at UCT would be supported by leading SRM scientists from Cornell University (USA)	USA
TBC scientists	Per work package 3 – a consortium of scientists will be working on the global impact study	Global North countries (including UK) & Global South countries (non-UK)

PART 2: APPLICATION FORM

Application titled 'Global to Local Impacts of SRM Project (GLISP)' submitted 9 December 2024.

SCHEDULE 3: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of

Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an

opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc. Note the definition of processing in the UK GDPR: "any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction"]
Duration of Processing:	Duration of this Agreement (and any post termination processing that is permitted / required).

Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors, clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

The University of Leeds **(Grant Recipient)**

School of Earth and Environment

University of Leeds

Woodhouse Lane

LS2 9JT

24 June 2025

Attention: Thomas Whale

Dear Thomas

FPCW-PR01-P005– Ice Nucleating Particles in the Upper Troposphere: Advancing Cirrus Control and Experimental Science Strength "INPUT:ACCESS**" – Standard Grant Funding Letter**

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to ARIA's Exploring Climate Cooling call and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Ice-Nucleating Particles in the Upper Troposphere: Advancing Cirrus Control and Experimental Science Strength"INPUT:ACCESS" A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£1,305,879 (inclusive of all taxes where applicable)
Commencement Date	24 June 2025

Completion Date	23 June 2028	
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions	
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £5 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Thomas Whale [redacted]	
Grant Manager	Mark Symes, Programme Director, [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted], Interim Head of School of Earth and Environment, [redacted]
Notices	ARIA Contracts [redacted]	Lynne Nelson, SEE Postaward Team, [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

3.3. Not used

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

NOT USED

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 26 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of The University of Leeds to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

6.4 For the avoidance of doubt any decision to terminate the Grant Agreement as a result of a Go/No Go Milestone will be made at ARIA's sole discretion and done so in accordance with clause 22.6.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 Within six months after the end of each Financial Year and after the end of the Funding Period you must provide ARIA with assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement signed by a senior finance individual within your organisation showing that the Grant has been used for carrying out the Project Activities.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or

licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or

commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. Not used

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or

(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,

and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked), (a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,

(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A.

GDPR means Regulation (EU) 2016/679;

Go/No-Go Milestone means a decision point for ARIA to determine whether it wishes to proceed with or terminate the Project Activities (any decision regarding a Go/No-Go Milestone will be made at ARIA's sole discretion, following a Grant Review as outlined in Clause 6);

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;

(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and

(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

Cirrus processes are one of the largest sources of uncertainty in surface temperature response to climate change, and central to several intervention ideas. Hence, in situ measurements are needed to assess specific drivers of ice nucleation in cirrus. You will address this need by combining expertise in 1) balloon-borne measurements, 2) ice nucleating particle (INP) measurements, and 3) cirrus modelling. Your proposed efforts will enable us to advance both the measurement technology and the understanding of ice processes and parameters relevant to cirrus interventions. You will launch small weather balloons with novel instrumentation to collect ice nucleating particles from the cirrus regime, analyse them under laboratory recreations of cirrus conditions, and port your findings to improve model assessment of cirrus intervention impacts. These capabilities, which have never previously been achieved, will dramatically change the landscape of cirrus-relevant research. If large-scale outdoor testing ever occurs in regard to related cirrus climate interventions, then the balloon payload and analysis techniques developed in this proposal will be essential for monitoring. Climate intervention via manipulating upper troposphere cirrus may provide significant surface cooling; this study will allow more accurate evaluation of potential cirrus cloud related interventions.

2. Aims and objectives of the Project Activities

1. Develop ability to collect INP from cirrus regions using weather-balloon borne instruments
2. Develop off-line analyses of INP relevant to cirrus processes
3. Develop in situ measurements of cirrus ice crystals via weather-balloon borne instruments
4. Apply these technological advances to measurements of upper troposphere ice INP concentrations in the mid-latitudes
5. Apply your observations to advance modelling of cirrus-relevant climate cooling strategies.

3. Project Activities

3.1 1) **Develop a balloon-borne electrostatic precipitator (ESP):** (from CD+0 to CD+12, Led by NOAA). Develop the technology necessary to collect INP from cirrus regimes onto substrates for off-line analysis. To do this you will build an electrostatic precipitator (ESP) capable of operating in the low pressures, temperatures and humidities of the upper troposphere with low weight and power requirements

2) **Develop methods for transporting slides carrying collected aerosol particles:** (from CD+6 to CD+12, Led by UoL). This will allow slides containing aerosol collected from the upper troposphere (UT) to be sent from Boulder to Leeds for INP measurements without contamination. This technology will also be vital for prospective large-scale application of offline INP measurements in the UT.

3) **Design and construct an isothermal diffusion chamber (IDC) for offline INP measurements in cirrus conditions:** (from CD+0 to CD+12, Led by UoL). The instrument will be

based on the FRIDGE IDC built by Goethe University Frankfurt, but adapted to work at lower temperatures by using a smaller working substrate and coating materials known to allow cirrus conditions to be accessed. The University of Leeds team will coordinate with the NOAA team on slide geometry and coating to ensure compatibility of the IDC with the ESP.

4) **Develop approach for using scanning electron microscopy and energy dispersive spectroscopy (SEM-EDX) to assess composition of INP collected from the UT** (From CD+9 to CD+15, Led by UoL). UoL will adapt an existing approach for visualisation and compositional analysis of aerosol collected on filters to allow analysis of aerosol collected on slides by the ESP.

5) **Develop the In situ Balloon-borne Ice Spectrometer (IBIS) for in-situ measurement of ice crystal sizes in cirrus clouds.** (From CD+0 to CD+12, Led by NOAA-CSL). A prototype of IBIS exists and has been shown to resolve particles to below 3 μm diameter, a requirement for detecting tropical tropopause layer (TTL) cirrus and more than adequate in the mid-latitudes. This instrument will be developed and finalised to allow it to be used on balloon launches in concert with the ESP. For collection of INP, IBIS will only need to work as a cirrus discriminator.

6) **Conduct balloon launches (location TBC) carrying the ESP, IBIS and appropriate equipment for measuring water vapour concentration**. (From CD+12 to CD+24, Led by NOAA-CSL). You will conduct 10 balloon launches to collect cirrus-regime INP with timings informed by the modelling efforts described in activity 8. Launch timing will be optimized based on transport model forecasting coupled with initialization via GPS-radio occultation temperature measurements. Modeling work from Imperial College London (activity 8) will help with these forecasts.

7) **Measure INP concentrations of balloon-collected samples using the IDC** (From CD+12 to CD+30, Led by UoL). Slides containing aerosol collected from the UT will be sent from NOAA-CSL to UoL, where the IDC will be used to measure INP concentrations. After INP concentrations and spatial locations on slides are determined, SEM-EDX will be used to assess the morphology and composition of the INPs, with a view to identifying the INPs present in the UT.

8) **Data analysis activities** (From CD+24 to CD+36, joint activity between all partners). All project partners will work together to combine the INP concentrations, ice crystal numbers and water vapour (WV) concentrations determined from balloon flights into a data product suitable for use by the research community. This data will be uploaded on http://archive.researchdata.leeds.ac.uk/ and a paper describing it published in an appropriate journal, as well as being uploaded to a central ARIA data repository.

8) **Modelling activities** (From CD+0 to CD+36, led by Imperial College). Global cirrus frequency and properties will be generated using an ensemble of conventional runs of the Community Earth System Model Version 2 (CESM2) climate model (Year 1), which will in turn be used to inform launch timing (Year 2). The output from these runs will be compared to the INPUT:ACCESS observations, with the goal of generating statistical corrections (Year 3). These will in turn be used to assess the degree to which efficacy of different climate cooling approaches might have been historically over- or under-estimated. Results from the "De-risking Cirrus Modification" ARIA proposal will also be incorporated into this effort.

9) **Dissemination activities** (CD+12 to CD+36, joint activity between all partners). You will aim to write up work for publication as soon as possible. Your publication strategy will naturally depend to

a large extent on your findings so is subject to change. This said, you expect to publish one or more papers describing the IDC, ESP, and IBIS and their use for determining cirrus INP concentrations. In addition to public uploads of datasets from balloon flights you intended to write a paper describing the datasets. Finally, you expect to write a paper constituting an updated assessment of cirrus modification climate cooling feasibility in light of your field measurements. This may be a joint publication with the "De-risking Cirrus Modification" team, using data from that project.

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the [redacted]

ID	Milestones	Measure	Date
1	Balloon launch plan agreed	Evidence supplied that launches are compliant with local regulations	Commencement Date
2	First flights to evaluate IBIS performance	IBIS returns housekeeping data on light source stability, air flow rate, swinging and detector stability from one or more balloon experiments.	Commencement Date + 6 months
3	Initial proof of concept for the electrostatic precipitator (or INP collector with similar function) obtained	Particles collected onto slides by collector prototype on a balloon flight. Slides recovered from UT demonstrated to carry aerosol particles by light microscopy.	Commencement Date + 12 months
4	IDC demonstrated to be able to access conditions necessary for assessment of cirrus condition INP concentrations **This is a Go/No go milestone**	Clean slides of type to be used in the ESP shown not to stimulate ice formation in the IDC until a RH_i (relative humidity with respect to ice) of 140% is reached below 240 K. Test aerosols shown to nucleate ice crystals in the IDC.	Commencement Date + 18 months
5	First balloon launches made to UT with all INPUT:ACCESS instruments carried, successful measurements and aerosol collections made	WV and ice crystal number datasets retrieved from balloon flights concurrently with ESP collection of aerosol particles	Commencement date + 18 months
6	Capability to measure cirrus condition INP	INP concentration datasets from UT produced and available to project team	Commencement date +24 months

	concentrations on slides collected from UT demonstrated		
7	First complete, analysed datasets comprising INP concentrations, ice crystal number, WV concentration from balloon launches obtained and placed in publicly accessible database, demonstrating viability of the technology developed for UT INP measurements.	Datasets uploaded to http://archive.researchdata.leeds.ac.uk/ as well as being uploaded to a central ARIA data repository.	Commencement date +30 months
8	Completion of INPUT@ACCESS research program	Descriptions of ESP and IDC either submitted for publication or uploaded to http://archive.researchdata.leeds.ac.uk/ as well as being uploaded to a central ARIA data repository.	Commencement date +36 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted]

3.3 The intended long-term outcomes are summarised below:

The capability to collect INPs from the cirrus regime currently does not exist. Through this project, you will develop the technology required for routine monitoring of UT INP concentrations and to make your collected dataset of INP concentration and character publicly available. This will better constrain the feasibility and potential efficacy + impacts of interventions in cirrus.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement

Planning	• Roles and responsibilities • External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g. Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried

out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Dr Thomas Whale	PI and co-lead researcher	University of Leeds
[redacted]	Co-Investigator	University of Leeds

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
CIRES	Co-lead researcher, coordinator of INPUT-ACCESS research activities at NOAA-CSL	Colorado, USA
Imperial College London	Earth systems modelling support for INPUT:ACCESS	London, UK

PART 2 - GRANT APPLICATION

Application titled "Ice-Nucleating Particles in the Upper Troposphere: Advancing Cirrus Control and Experimental Science Strength "INPUT:ACCESS" submitted 8 December 2024

Commercialisation Hypothesis submitted as part of the above referenced application 8 December 2024.

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it,

	storing it, retrieving it, consulting it, disseminating it or destroying it, etc. Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]

Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors, clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

University of Bristol **(Grant Recipient)**

Wills Memorial Building

Queens Road

Clifton

Bristol, BS8 1RJ

30 May 2025

Attention: Professor Matthew Watson

Dear Matthew,

FPCW-PR01-P006- Monitoring Aerosol Climate Engineering (MACE) **– Standard Grant Funding Letter**

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Monitoring Aerosol Climate Engineering (MACE). A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£4,257,144 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 1 June 2025
Completion Date	The completion is 31 May 2029

Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions	
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £10 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Professor Matthew Watson [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	Senior Contract Manager [redacted]
Notices	ARIA Contracts [redacted]	Professor Matthew Watson [redacted] Senior Contract Manager (2025-1006), Research Contracts Team Division of Research, Enterprise and Innovation University of Bristol

		[redacted] [redacted] Copy to: [redacted] [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not used.

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date

the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 01 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of the University of Bristol to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

6.4 to be removed when not used - For the avoidance of doubt any decision to terminate the Grant Agreement as a result of a Go/No Go Milestone will be made at ARIA's sole discretion and done so in accordance with clause 22.6.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 Annually, and on each anniversary of the Commencement Date and at the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose

concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you

assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such Foreground IP (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge]. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge] if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], where they are capable of commercial exploitation you should seek to

exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the [Future Proofing our Climate and Weather Intellectual Property Pledge], to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and
(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A.

GDPR means Regulation (EU) 2016/679;

Go/No-Go Milestone means a decision point for ARIA to determine whether it wishes to proceed with or terminate the Project Activities (any decision regarding a Go/No-Go Milestone will be made at ARIA's sole discretion, following a Grant Review as outlined in Clause 6);

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

Climate Engineering can be defined as deliberate intervention into the Earth's climate system in order to reduce the risks from anthropogenic climate change. Technologies that might achieve that aim fall broadly into two categories, those that focus on removing warming gases from the atmosphere, and those that focus on altering the Earth's radiation budget, typically by increasing scattering of incoming solar radiation. Known as Greenhouse Gas Removal (GGR) and Solar Radiation Management (SRM) respectively, the two categories have different challenges around efficacy, speed, scalability and, critically for this proposal, risk. SRM technologies focus mostly upon either injection of aerosols into the stratosphere or brightening of clouds in marine environments in the troposphere, and are generally considered to be effective, fast, scalable and risky opposite GGR technologies. One important pathway to quantify and reduce risk, particularly for SRM technologies, is through the study of natural analogues.

Large episodic volcanic eruptions regularly inject millions of tons of sulfur-bearing species into the stratosphere which form sulfate aerosols and subsequently reflect sunlight back into space, cooling the Earth's surface. Persistent passive degassing of volcanoes into the troposphere has been observed to alter cloud microphysics, brightening clouds and also altering the Earth's radiation balance. Active volcanoes can be used as an analogue to develop and test the systems required to observe and monitor the injection, evolution and impacts of SRM technologies whilst also providing vital observations of how aerosols and clouds form and evolve.

2. Aims and objectives of the Project Activities

The overall aim of this project is to develop and test aerial robotics (Uncrewed Air Vehicles, UAS / Drones) carrying a suite of sensors that will quantify droplet and aerosol behaviour at injection altitudes from the lower troposphere to the lower stratosphere. Specifically, this system will be developed to meet the following three objectives:

1. investigate natural analogues for both MCB and SAI and learn from frequent, smaller scale eruptions (injection altitudes up to 10 km above mean sea level (AMSL)) and passive volcanism, with a focus on aerosol and cloud formation and associated changes in radiative forcing,
2. standby aerial systems and expertise in UAS based volcanic monitoring ready for response during the next significant global volcanic eruption and
3. monitor and measure outdoor SRM experiments within this programme and beyond.

We will develop the capability to monitor subsequent testing of both SAI and MCB technologies, whilst also investigating the natural processes that make active volcanism important analogues for SAI and MCB. The outcomes of this research project will be a system ready to be employed quickly in the event of a significant volcanic eruption, a framework for monitoring, a capability demonstrator for higher altitude sampling and more complete understanding of volcanoes as analogues for SAI and MCB, with a particular focus on the relationship between aerosol size and composition and radiative transfer.

3. Project Activities

3.1 **WP1 Development of a platform capable of operating in the troposphere and lower stratosphere.** WP1 is made up of three sub-tasks. (T1.1) MCB typically operates in the boundary layer whereas SAI efficacy broadly increases, per delivered volume of material, as a function of altitude. The aircraft will be modular in terms of the onboard sensor systems, and capable of undertaking measurements that pertain to both target technologies. The nominal design brief is to have an electric fixed-wing aircraft, capable of lifting the required sensor payload from WP2, plus the associated avionics for autonomous operation, to 10 km AMSL. The team has extensive experience with both modifying existing COTS airframes and original new designs to meet stringent mission requirements. (T1.2) Software development will deliver an integrated simulation environment for the aircraft system and its controlling AI in digital representations of the target environments, including plume models. Autonomous guidance will permit dynamic re-sampling in 4D to measure evolution of the same air 'parcel' over time, exploiting machine learning and dynamic replanning to track and revisit the plume. On-ground, in-air and remote automation will support pilot and science situational awareness with manageable workloads. (T1.3) Initial flight tests of the MACE aircraft will be carried out at the university field site in Bristol, moving to alternative UK sites as the required airspace increases. An agile approach will be used for UAS development with regular flight tests throughout the project. The data collected during these UK tests will lead to rapid airframe iteration and code development, as well as performance analysis for AI based mission optimization and preparation for field testing. **Supporting Milestones 1, 2 and 6. Responsible for Deliverables D1.1, D2.1 and D6.1.**

3.2 **WP2 Payload selection, integration and field testing.** With a functional prototype aircraft, the aircraft systems and operations will also be developed iteratively during the payload integration phase. WP2 is made up of three subsections. (T2.1) We will down-select from a larger suite of instrumentation capable of quantifying two critical types of coupled observations. Firstly, we will consider in-situ measurement of gas, aerosol and droplet properties such as concentration, shape, number density and particle size distribution. There are a wide variety of lightweight electrochemical gas sensors (e.g. H_2O, SO_2) and laser-based optical particle counters designed to measure CCN at submicron scale, coarse mode sulphate aerosols (0.5-10 μm) and cloud droplets at a range of 5-50 μm that will be reviewed according to scientific and engineering requirements. Radiative transfer observations constitute the second suite of observations from which we will delimit radiative forcing. Pyronometers will measure diffuse and direct upwelling and downwelling SW radiation across the visible and near-infrared spectrum (~0.4-2.7 μm wavelength). This will be coupled with LW radiation (5-100 μm) measurement using pyrgeometers capable of quantifying broad spectrum upwelling and downwelling thermal radiative fluxes. Laboratory and field testing of the onboard sensors will be carried out at selected sites in the UK and at Fuego volcano, Guatemala. During a careful programme of flight tests, we will increase flight altitudes whilst working within regulatory frameworks. Active volcanoes present significant opportunities as airspace above them is often closed to above cruise altitudes, as has been the case at Fuego since 2015. (T2.3) Preparation for rapid response. By the end of year 1 the MACE team will assemble an initial UAS capability for rapid (48hr) response to a large-scale volcanic eruptive event. This will develop annually with the project, incorporating step changes in sensing, processing, aircraft and expertise. **Supporting Milestones 1, 3 and 7. Responsible for Deliverables D3.1 and D7.1.**

3.3 **WP3 Volcanic plume and secondary aerosol sampling across a range of altitudes.** (T3.1) We will conduct a two-phase campaign at reliable producers of SO_2. Our first target is Fuego, Guatemala (3,780 m AMSL) where the team have flown UAS extensively to > 5,000 m AMSL. We have a longstanding relationship with both the national institute for atmospheric, geophysical and hydrological hazards (INSIVUMEH) and the Guatemalan civil aviation authority (DGAC) and have hundreds of hours of experience flying beyond visual line of sight (BVLOS). Here we will fly within established flight envelopes, and gather preliminary data from within, above and below the plume. We will use machine learning to train the system to repeatedly intersect the same section of the plume at Fuego and investigate SO_2 loss, aerosol formation and radiative transfer across the vertical profile of the plume. (T3.2) Following two Fuego campaigns, two other sites, the Soufriere Hills Volcano, Montserrat (1,050 m AMSL and British Overseas Territory) and Lascar in Chile, will become the focus of the project. The Soufriere Hills Volcano, Montserrat, is an MCB analogue, where SO_2 is rapidly converted into sulphate aerosol, an effective source of cloud condensation nuclei observed at volcanoes during passive degassing. Lower plume altitudes mean potential heavier payloads and/or longer flight times and, given the rapid conversion of SO_2, allows us to investigate a series of physico-chemical reactions from heterogeneous nucleation of aerosols through to cloud formation and brightening. We will observe radiative transfer processes as a function of time, potentially through coordinated multi-aircraft campaigns. In contrast, Lascar is one of the highest persistent emitters in the world at ~5,600 m AMSL, which emits into the dry free troposphere of the Atacama Desert. Here we will undertake plume characterisation experiments in conditions as close to those of the stratosphere as is possible from a passive degasser, again looking at aerosol microphysics and radiative transfer through the plume. **Supporting Milestones 3, 4, 5 and 7. Responsible for Deliverables D4.1 and D5.1.**

3.4 **WP4 Readiness planning, monitoring strategies and targets of opportunity.** This WP is dedicated to putting in place the processes, protocols, software and paperwork required to operate at short notice internationally. Due to technological and regulatory challenges, relatively few in-situ measurements of sulfur-bearing species have been made, particularly in the stratosphere. The next volcanic eruption and/or small-scale experiment will require monitoring, and small scale SRM experiments are highly likely to operate at scales below those easily detected from orbital platforms. In addition to the hardware preparations for rapid response identified in WP2, we will prepare for targets of opportunity, including, but not limited to volcanic eruptions, noting that kgs of SO_2 are already being released by companies, such as Make Sunsets, in the US. The MACE team at Bristol have extensive experience operating UAS internationally including Papua New Guinea, Cameroon, Chile, Italy and Kenya. (T4.1) We will develop the capacity for rapid response to targets of opportunity such as a significant volcanic eruption, leveraging simulation capability and automated planning from WP1 to design, train and verify missions in advance, as far as possible, and during the 48-hour response window. (T4.2) The required permissions can often be just as challenging as the hardware and software. The team will be building on previous research in the automation of UAS safety cases and in-flight operations around regulation planning. Selected potential operational vignettes will be used as test cases. (T4.3) A 20 km altitude safety case will be developed to facilitate further development of UAS monitoring at likely SAI injection altitudes. **Supporting Milestones 3 and 7. Responsible for Deliverables D3.2 and D8.1.**

3.5 **WP5. Project Management, Impact and Outreach.** (T5.1) We will have regular project meetings involving team members on at least a weekly basis and (T5.2) in person, all hands

quarterly review meetings (T5.3) Outreach materials and publications (T5.4). We will develop outreach videos, as part of a broader suite of materials to inform stakeholders, academics and the public of our work and our findings. **Supporting Milestones 2, 4 and 6. Responsible for Deliverables D2.2, 4.2 and D6.2.**

3.6 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted]

ID	Milestones	Measure (Deliverables = DX.X)	Date
1	Engagement plan available	● Draft communication and engagement plan agreed with ARIA and oversight committee	Commencement Date + 6 months
2	Report: MACE Sensor and Uncrewed Aircraft System (UAS) Requirements.	Objectives and Requirements Defined. Supporting material will be a single Document (D1.1) to include: ● Scientific Objectives and Methodology ● MACE Sensor Requirements ● MACE UAS Requirements ● Submission of permits for flights, such that these are available before field tests	Commencement Date + 6 months
3	Test: Successful experimental MACE UAS flight test at UK airfield. **This is a go/no go milestone**	Successful Experimental Test Flight. Supporting material will be a single Document (D2.1) to include: ● CAA Safety Case submitted for Beyond Visual Line of Sight (BVLOS) flight test operations. ● Flight Test Report on successful experimental MACE UAS flight test. Success is defined as a minimum of four BVLOS flights of over one hour each, collecting flight performance data. Stretch target is sensor validation and in-flight sensor data acquisition. and Video (D2.2): ● 3-minute promotional video of MACE flight test.	Commencement Date + 12 months

4	Report: Detailed mission and data acquisition plan for each target site. Document: Draft documentation for international UAS rapid response.	Detailed Mission Design and Simulation. Supporting material will be Document (D3.1): ● Mission definition and detailed data acquisition plan for each target field site to meet the Science Objectives. ● Submission of permits for flights, such that these are available before field tests and Document (D3.2): ● Draft documentation for international UAS rapid response for review. To include two sample vignettes covering safety case, legal requirements and mission design.	Commencement Date + 18 months
5	Test: Successful MACE UAS field tests and flight demonstrations. **This is a go/no go milestone**	Successful Field Tests. Supporting material will be Document (D4.1): ● Flight Test Report on MACE UAS field test at one of the three identified target sites: Volcán de Fuego, Soufrière Hills or Lascar. Success is defined as a minimum of four BVLOS flights of over one hour each, collecting flight performance data. Stretch target is sensor validation and science data acquisition. and Video (D4.2): ● 3-minute promotional video of MACE UAS field test	Commencement Date + 24 months
6	Test: First science data capture research flights in the field.	First Field Dataset Capture. Supporting material will be Document (D5.1): ● Report on science findings using MACE aircraft for one target science data capture campaign. ● Data submitted to publicly available ARIA repository.	Commencement Date + 30 months

7	Test: MACE flight test. Fully automated flights with onboard AI and on-the-fly route planning for multiple intercepts.	Successful Flight Test with Onboard Automated Real-time Route Planning. Supporting material will be a single Document (D6.1): ● Flight Test Report on successful onboard AI and real-time route planning tests for multiple plume intercepts. and Video (D6.2): ● 3-minute promotional video of MACE updated aircraft UK flight test.	Commencement Date + 36 months
8	Test: All target volcanoes successfully sampled.	In-flight Data Capture at all Three Target Sites. Supporting material will be a single Document (D7.1): ● Scientific report on successful data capture campaigns at Soufrière Hills, Fuego and Lascar volcanoes. To include details on the time-dependent relationships between aerosol formation rate, size, and radiative transfer through the plume as a function of environmental conditions. Success is defined as capture of representative science data, for publication, at each of the three sites. ● Data submitted to publicly available ARIA repository.	Commencement Date + 42 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted].

3.7 The intended long-term outcomes are summarised below:

● To design and build a state-of-the-art aircraft capable of sampling aerosols at 10 km amsl that can be deployed quickly after a volcanic eruption or during a climate engineering experiment that will outlast the project lifetime. For example, the likelihood of another ash crisis in the next ten years is non-zero and there is limited current capability in the UK for ash sampling (an extension that could easily be made to this aircraft).

● Use this project as a first step towards developing an aircraft that could monitor full-scale SAI at 20 km amsl.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Planning	• Roles and responsibilities • External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant

payments quarterly in arrears.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principal investigators or key researchers have been identified:

Name	Role	Organisation
Professor Matt Watson	Principal Investigator	University of Bristol
Professor Tom Richardson	Co-Investigator	University of Bristol
Professor Arthur Richards	Co-Investigator	University of Bristol
[redacted]	Key researcher	University of Bristol

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
N/A	N/A	N/A

PART 2 - GRANT APPLICATION

Application titled "Monitoring Aerosol Climate Engineering (MACE)" submitted 9 December 2024

Commercialisation Hypothesis submitted as part of the above referenced application, 9 December 2024

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SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

The Chancellor, Masters, and Scholars of the University of Cambridge **(Grant Recipient)**

The Old Schools, Trinity Lane, Cambridge, CB2 1TN

9th June 2025

Attention: Hugh Hunt

Dear Hugh,

FPCW-PR01-P018 Novel Materials for Stratospheric Aerosol Injection– Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Novel Materials for Stratospheric Aerosol Injection. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£5,525,150 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 11 June 2025
Completion Date	The completion is 10 June 2028
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions

Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £10 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Hugh Hunt, Project Lead, [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] Research Support Manager, School of Technology University of Cambridge, Research Operations Office, [redacted] Email: [redacted]
Notices	ARIA Contracts [redacted]	Assistant Director, School of Technology University of Cambridge, Research Operations Office, [redacted] Email: [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

3.3. Not used

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

***5.* Amendments to the Grant Conditions**

5.1 Not used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 11 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of The Chancellor, Masters, and Scholars of the University of Cambridge to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

6.4 For the avoidance of doubt any decision to terminate the Grant Agreement as a result of a Go/No Go Milestone will be made at ARIA's sole discretion and done so in accordance with clause 22.6.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1

For Grants over £500k: Annually, and on each anniversary of the Commencement Date and at the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate

mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the

Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the [Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no

higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Go/No-Go Milestone means a decision point for ARIA to determine whether it wishes to proceed with or terminate the Project Activities (any decision regarding a Go/No-Go Milestone will be made at ARIA's sole discretion, following a Grant Review as outlined in Clause 6);

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

SAI is one of the most-studied forms of climate engineering, but research has virtually exclusively been limited to numerical simulations. Most of the studies investigating different strategies look at the effects of introducing sulphur dioxide (SO_2) into the stratosphere, which reacts to become sulphuric acid aerosol (H_2SO_4) and which reflects some of the radiation from the sun back into space increasing the planetary albedo (**α** in equation for T_{surf} in Programme Thesis). This has in part been inspired by observations from volcanic eruptions, especially the 1991 Mount Pinatubo eruption which lofted ~20 million tonnes of SO_2 into the stratosphere resulting in global cooling by approximately 0.5 ℃ for around a year. Injection of aerosols into the stratosphere rather than the troposphere reduces the required mass injection rate in part due to longer residence times. Depending on the latitude of injection, the aerosol cloud would be dispersed across the globe within a period of weeks. SAI is considered by a number of scientists as a potential way of actively cooling the earth.

2. Aims and objectives of the Project Activities

The aim of this project is to improve our understanding of Stratospheric Aerosol Injection (SAI) as a potential climate intervention improve our understanding.

The objectives are to expand our knowledge of different candidate particles by combining outdoor experiments, laboratory work and modelling to determine which materials could be effective at radiative forcing, while assessing what their effects could be on stratospheric composition and dynamics compared to SO_2.

3. Project Activities

3.1

3.1.1 **WP1 - Stratospheric evolution of chemical and physical properties of Alternative SAI Materials (ASAIMs)**: This Work Package will address the evolution of chemical and optical properties of ASAIMs through the preparation and conducting of stratospheric balloon flights and short duration science flights (~4 hour duration). No materials will be released to the stratosphere in these flights

3.1.2 **WP2 - Dispersal and deliverability of aerosols**: This WP will conduct laboratory (indoor) tests on potential dispersal systems, measuring particle size distribution using methods including optical and scanning mobility particle sizers.

3.1.3 **WP3 - Climate impact of non-sulphate aerosols**: The necessary context for WP1 and WP2 is provided by evaluating how findings change the overall efficacy of SAI using ASAIMs. Plume dynamics, efficient plume representation, ambient condition estimation and simulating plume effects at global scale are all investigated, analysed and modelled computationally.

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted]

ID	Milestones	Measure	Date	Notes
1	Flight plan submitted and agreed for balloon launch with no materials attached. **This is a go/no go milestone**	Evidence supplied that short duration, small balloon launches are compliant with applicable and required regulations/legislation. Draft communication and engagement plan agreed with ARIA and oversight committee. Small balloon launches likely to take place in locations TBC as part of the launch plan, . Launches must not commence until the communication and engagement plan has been agreed by ARIA, and until any required engagement activities have been undertaken.	Commencement Date + 3 months	
2	Short duration science flight plan submitted and agreed for balloon launch with materials attached. This is a go/no go milestone	Evidence supplied that short duration science flights are compliant with applicable and required regulations/legislation. Updated communication and engagement plan agreed with ARIA and oversight committee. Launches must not commence until the communication and engagement plan has been agreed by ARIA, and until any required engagement	Commencement Date + 6 months	

		activities have been undertaken.		
3	Design briefing for high-pressure slurry pump delivery system and for aerosol dispersion system complete (WP2)	Select the preferred options for pumping and dispersal for indoor tests based on initial findings from literature, patents, commercial products and calculations. Includes safety audit and risk assessment owing to high-pressure pumping.	Commencement Date + 6 months	
42	Vessel ready for science flights (WP1) with materials attached.	Select and mount ASAIM materials on grids; complete prototype vessel design, fabrication and thermal vacuum tests followed by short duration balloon engineering flight (first flight ~1 h in stratosphere; subsequently up to 4 h); all data for publication of vessel design collected. (First flights expected to take about 10 h total)	Commencement Date + 9 months	
5	Interim report on comms and engagement	Summary of the nature of comms and engagement undertaken to date supplied to ARIA and oversight committee. A description of these activities to date should be provided, as well as a discussion of how these activities have shaped experimental	Commencement Date + 12 months	

		work. A plan for ongoing comms and engagement should be included in the report.		
6	Flight plan submitted and agreed for long durations balloon launch with materials attached **This is a go/no go milestone**	Evidence supplied that these launches are compliant with applicable and required regulations/legislation Updated communication and engagement plan agreed with ARIA and oversight committee as appropriate. Readiness of system and science approach for longer duration flights (weeks, months, heavier launches) established.	Commencement Date + 18 months	Key considerations include: 1) Whether a consecutive sequence of 3 day flights can substitute for one long duration flight and achieve science goals and whether this is cost saving. If answer is yes, this approach will be taken and revised approach and budget presented to ARIA 2) Whether another funded Creator has developed a longer duration balloon system suitable for our payload and whether this is cost saving. If the answer is yes, the trade-offs with this approach will be evaluated with respect to science and budget, and presented to ARIA.
7	Batch prototype	System that can deliver a dispersed plume of	Commencement Date	

	dispersion and pumping systems available	aerosol in indoor tests is functioning; agglomeration and effects of electrostatics can be investigated. Order of few hundred grams of aerosol dispersed indoors in batch over a period of minutes is suggested as a target. Slurry pumping system can run indoors for a few seconds using a suitable medium (e.g. liquid nitrogen).	+ 24 months	
8	Mid term report on Project Progress (WP-All)	Series of flights completed and first detailed characterization of aging of ASAIMs in real environment over longer time representing key parameters for radiative and chemical impacts of ASAIMs (WP1); Design & Outcome of an indoor prototype dispersal system to deliver particles with narrow size distribution and without clumping together with experimental design to test pumping mechanisms (WP2); results from annual simulation (WP3). Concepts for potential follow on activities are presented to ARIA.	Commenc ement Date + 24 months	
98	Continuous indoor prototype pumping	Steady and continuous flow of slurry can be maintained indoors at high pressure (20+ bar)	Commenc ement Date	

	system available	using suitable medium (e.g. liquid nitrogen). Demonstrated indoors over multiple canisters of aerosol over several minutes of operation.	+ 36 months	
10	Final Report on Project completion (WP2&3)	Design and evaluation of a multi-phase (slurry) high-pressure pumping system and the indoor dispersal system (WP2); Results of annual simulation (WP3).	Commencement Date + 36 months Report delivery expected month 38	

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted]

3.3 The intended long-term outcomes are summarised below:

- Detailed understanding of the effects and potential impacts of ASAIMs on and in the stratosphere
- Using indoor tests to understand the technological challenges and opportunities for high pressure aerosol delivery systems
- Identification of materials that offer safer alternatives for SAI, whilst still maintaining key properties for effectiveness for extended periods in the stratosphere.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Planning	• Roles and responsibilities • External communications • Vision • Project details

	• Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end

of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Frank Keutsch	WP1 Lead	Harvard University
Hugh Hunt	Overall Project Lead and WP2 Lead	University of Cambridge
Shaun Fitzgerald	Key Researcher of WP2	University of Cambridge
Sebastian Eastham	WP3 Lead	Imperial College London
[redacted]	Key Researcher of WP3	University of Cambridge
[redacted]	Key Researcher of WP3	University of Cambridge

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been ~~agreed~~ identified:

Name	Description of activity	Location of organisation
Aerostar	Conducting a 3 week stratospheric balloon flight with Aerostar's Thunderhead Balloon Systems.	South Dakota, USA

PART 2 - GRANT APPLICATION

Application titled "Novel Materials for Stratospheric Aerosol Injection" submitted 6 December 2025

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

University of the Philippines Los Baños Foundation, Inc. **(Grant Recipient)**
567R+CPF, UPLBFI Bldg., Andres P. Aglibut Ave,
University of the Philippines Los Baños,
Los Baños, 4031, Laguna, Philippines

29 May 2025

Attention: Dr. Lorena L. Sabino

Dear Dr. Sabino,

FPCW-PR01-P011 - PULSE Project: Public Understanding, Leadership, and Social Ethics in the Governance of Earth Cooling Technologies in Communities Impacted by Volcanic Activity in the Philippine Context.– Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	PULSE Project: Public Understanding, Leadership, and Social Ethics in the Governance of Earth Cooling Technologies in Communities Impacted by Volcanic Activity in the Philippine Context. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£147,954 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 1 June 2025
Completion Date	The completion is 31 May 2027

Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions	
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £5 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Lorena L. Sabino Project Principal Investigator [redacted]	
Grant Manager	Mark Symes, Programme Director, [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted]
Notices	ARIA Contracts [redacted]	Lorena L. Sabino Project Principal Investigator [redacted] [redacted] Research Associate [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

3.3. Not used

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 01 June 2025.

Yours sincerely,

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of University of the Philippines Los Baños Foundation, Inc. (UPLBFI) to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period

about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 For Grants between £100k and £500k: At the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and

Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially

within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;

(b) where you become a Non-UK Entity;

(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or

(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;
(b) loss of contracts or business opportunities;
(c) loss of anticipated savings;
(d) loss of goodwill or damage to reputation; or
(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or

(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,

and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked), (a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,

(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

The PULSE Project, titled "Public Understanding, Leadership, and Social Ethics in the Governance of Earth Cooling Technologies," focuses on the governance of Stratospheric Aerosol Injection (SAI). It explicitly targets communities within danger zones affected by volcanic activities, referred to as Volcanically Affected Communities in the Philippine context. This project aims to explore public opinion, ethical considerations, and the governance of SAI.

Communities impacted by volcanic activity are ideal sites for studies on Solar Radiation Management (SRM) because they offer natural analogs to SAI. For example, volcanic eruptions like the 1991 Mount Pinatubo event release materials into the stratosphere that cool the Earth by reflecting solar radiation, similar to proposed SAI methods. These communities are also inherently vulnerable to climate impacts, highlighting the need to understand how they perceive SRM in already at-risk populations, from both climate and natural calamities. Their historical experiences with volcanic activities also provide valuable insights into resilience and response strategies that could inform SRM governance. Local perceptions and ethical considerations in these communities are crucial. Their past experiences with natural calamities may significantly contribute to the development of the governance framework, ensuring that any future use of SRM technologies is managed ethically and inclusively.

The project will yield necessary insights through surveys and community group discussions situated around areas where volcanic eruptions have occurred in the Philippines, with an emphasis on Mt. Mayon (Albay), Mt. Kanlaon (Negros Island), Mt. Pinatubo (Pampanga, Tarlac, Zambales), Taal Volcano (Batangas), and Mt. Hibok-Hibok (Camiguin). The survey aims to determine the communities' stand on SAI, their awareness, knowledge, and concerns, and how this relates to their past experiences concerning volcanic eruptions, changing climate, and aspects of their environment. Focus group discussions and workshops on national-level engagement, including the youth sector, will also be conducted to complement policy analysis and governance frameworks and ensure that any SRM technologies are characterized by transparency and accountability concerning the welfare of vulnerable populations. The project aims to "gauge society's pulse" and ensure future climate interventions are grounded in ethical leadership, inclusive governance, and public accountability.

Study Objectives

The main focuses of the PULSE projects are
Study 1: Investigate the awareness, understanding, and perceptions of communities in the volcanic regions concerning Earth cooling technologies and the associated impacts and risks,
Study 2: Examine ethical issues and intergenerational perspectives of SRM, including equity, justice, and protection in communities prone to volcanic eruptions;
Study 3: Analyze leadership roles and governance frameworks for assuring transparency, accountability, and inclusivity in decision-making for Earth cooling approaches and
Study 4: Recommend structures of governance and other methods for making decision-making inclusive and ethical.

2. Aims and Objectives of the Project Activities

Project activities	Project Activity aim/objectives	Target
Work package 1: Project kick-off coordination, preparation, and procurement of supplies and materials.	• Establish a shared understanding of the project goals and deliverables among stakeholders • Introduce team members, roles, and responsibilities • Outline project work, milestones, and success indicators	2nd Quarter- April to June 2025
Work package 2: Project reconnaissance, survey, and focus group discussion (FGD) in Project sites: **Taal Volcano** (Batangas) **and Mt. Pinatubo (**Pampanga, Tarlac, Zambales. **Work package 3:** Project reconnaissance, survey, and FGD in Project sites: **Mt. Mayon** (Albay). **Work package 4:** Project reconnaissance, survey, and FGD in Project sites: **Mt. Kanlaon** (Negros Island). **Work package 5:** Project reconnaissance, survey, and FGD in Project sites: **Mt. Hibok-hibok** (Camiguin).	**Visit 1: Reconnaissance** • Conduct an on-site coordination and orientation about the project • Initial secondary data gathering (baseline data) (e.g., climate data, socio-economic and environmental-related profiles • Analyze possible barriers and safety conditions, as well as establish rapport among local government units **Visit 2: Survey and Focus Group Discussion** • Conduct structured surveys to gather quantitative data • Facilitate focus group discussion • Analyze emerging trends from FGD themes and initial data processing **Visit 3 - Workshop and Validation** • Present preliminary findings from reconnaissance, survey, and FGDs • Facilitate participatory discussions to refine insights	3rd Quarter - July to September 2025: **(Taal Volcano and Mt. Pinatubo)** 4th Quarter - October to December 2025: **(Mt. Mayon)** 1st Quarter: January to March 2026 **(Mt. Kanlaon)** 2nd Quarter: April to June 2026 **(Mt. Hibok-hibok)**
Work Package 6. National-level leaders/policymakers and youth engagement	Key Informant Interview and Policymaker engagement Workshops	3rd Quarter: July to September 2026
Work Package 7. Data processing, management integration, and analyses	• Develop a structured workflow for data collection, cleaning, coding, and storage to ensure accuracy, consistency, and security • Establish a data management system	4th Quarter: October to December 2026

	that allows an efficient data organization, retrieval, and tracking of data from the surveys, key informant interviews (KII), and FGDs • Harmonize data from multiple sources • Apply appropriate statistical and qualitative analyses	
Work Package 8: Writeshop, Report Writing, Report Submission and Drafting of Publishable articles	• Organize write shop among team members • Prepare a comprehensive project report • Transform research findings into high-impact academic and more widely-oriented publications for journals, conferences, and other dissemination platforms	1st Quarter (January 2027 to April 2027)

3. Project Activities

3.1 The PULSE Project is structured into a series of coordinated work packages (WPs) that align closely with its goals, targets, and objectives. These work packages are designed to progress systematically from initial project setup and data collection to in-depth analysis and dissemination of findings.

WP1: Initiation and Planning

- **Objective:** Launch the project with planning, coordination, and preparations.
- **Activities:**
    - Conduct a project kick-off meeting to introduce team members and assign roles and responsibilities.
    - Prepare research protocols, including informed consent forms, survey instruments, key informant interview guides, and focus group discussion (FGD) guide questions.
    - Procure all necessary supplies and materials for the project.
- **Expected Outcome:**
    - Successful project initiation with clear guidelines and prepared team.
    - Submission of a quarterly progress report

WP2 to WP5: Data Collection at Mt. Mayon (Albay), Mt. Kanlaon (Negros Island), Mt. Pinatubo (Pampanga, Tarlac, Zambales), Taal Volcano (Batangas), and Mt. Hibok-Hibok (Camiguin).

- **Objective:** Complete site-specific reconnaissance, surveys, and FGDs
- **Activities:**
    - Conduct site-specific reconnaissance, surveys, and initial FGDs.
    - Data processing and initial analysis are needed to identify emerging trends.
- **Expected Outcome:**
    - Completion of data collection and initial analysis.
    - Submission of a quarterly progress report

WP6: National and Youth Engagement

- **Objective:** Engage national-level stakeholders and the youth in in-depth interviews and discussions to gauge perceptions of Solar Radiation Management (SRM).
- **Activities:**
    - Conduct in-depth interviews and discussions/workshops with policymakers, scientists, environmental activists, and industry leaders, as well as the youth sector
- **Expected Outcome:**
    - Comprehensive understanding of national perspectives on SRM.

WP7: Data Management and Analysis

- **Objective:** Systematically manage and analyze collected data.
- **Activities:**
    - Establish a robust data management system.
    - Harmonize data and apply statistical analyses to interpret findings.
- **Expected Outcome:**

- Integrated and analyzed data ready for reporting.

WP8: Reporting and Dissemination

- **Objective:** Draft and submit comprehensive project reports and scholarly articles.
- **Activities:**
  - Conduct a write shop to draft the final project report and prepare at least two publishable articles.
- **Expected Outcome:**
  - High-quality reports and articles that contribute to the academic and practical understanding of SRM.

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet: [redacted]

ID	Milestones	Measure	Date
1	Project kick-off, planning, site coordination, preparation, and procurement of supplies and materials complete	• Project Kick-off meeting held • Successful introduction of team members, roles, responsibilities, • Completion of research project protocol such as informed consent, survey instrument, key informant interview guide, and focus group discussion guide questions. •	Commencement date + 3 months
2	Project reconnaissance, Survey, and FGD in The sites of **Taal Volcano and Mt. Pinatubo** complete	Completion of surveys, initial FGD themes analyzed, and emerging trends identified in these regions •	Commencement date + 6 months

3	Project reconnaissance, Survey, and FGD in Project site: **Mt. Mayon** complete	Completion of Reconnaissance, Survey, and FGD for Mt. Mayon	Commencement date + 9 months
4	Project reconnaissance, Survey, and FGD in Project sites: **Mt. Kanlaon** complete	Completion of Reconnaissance, Survey, and FGD for Mt. Kanlaon	Commencement date + 12 months
5	Project reconnaissance, Survey, and FGD in Project sites: **Mt. Hibok-Hibok** complete	Completion of Reconnaissance, Survey, and FGD for Mt. Hibok-Hibok	Commencement date + 15 months
6	Interviews and workshops complete	National-level and Youth engagement: In-depth interviews and discussions/workshops with policymakers, scientists, environmental activists, and industry leaders concerning perceptions of SRM's feasibility, safety, and potential role in global climate strategies. All planned in-depth interviews and policymakers/stakeholder discussions/workshops complete	Commencement date + 18 months
7	Data processing, management integration, and analyses complete	Data Management and Analysis Completed. Establishment of a data management system, data harmonization, and application of statistical analyses	Commencement date + 21 months

8	Writeshop, Report Writing, Report Submission, and Drafting of Publishable articles.	Submission of the comprehensive project report and draft articles for publication (At least two articles) ● Comprehensive report submission and draft publishable articles (at least two) Make data available on ARIA open-access repository.	Commencement date + 24 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time:

[redacted]

3.3 The intended long-term outcomes are summarised below:

1. Increased Awareness and Understanding

- Study 1 may lead to a comprehensive report detailing the current awareness, understanding, perception, and acceptance of SRM as an earth-cooling approach among communities in volcanic regions. This report could include data on the perceived benefits, risks, and impacts, which could inform educational and communication strategies. Through systematic reconnaissance, surveys, key informant interviews, and focus group discussions/workshops conducted across various volcanic sites, Taal Volcano, Mt. Pinatubo, Mt. Mayon, Mt. Kanlaon, and Mt. Hibok-Hibok, the project aims to gather and analyze data concerning the perception/awareness, ethical issues, leaders, and governance issues of these areas. Additionally, the project activities are set to enhance the capacity of both project staff and local stakeholders, such as government officials, community leaders, and civil society organizations, enabling them to engage more effectively in discussions about SRM. This capacity-building component is crucial for fostering informed and active participation in governance processes related to earth-cooling technologies.

2. Ethical Framework Development

- Study 2 is expected to result in ethical guidelines or a framework addressing issues such as equity, justice, and protecting vulnerable communities. This framework could help ensure that any future use of SRM considers intergenerational impacts and ethical considerations.

3. Leadership and Governance Insights

- Study 3 could result in a detailed analysis of existing leadership roles and governance frameworks. This might include recommendations for improving transparency, accountability, and inclusivity in the decision-making processes associated with Earth

cooling technologies. Additionally, it could identify key leadership qualities or training needs for effective governance.

4. **Governance Structures**

- Study 4 will likely produce a set of proposed governance structures that prioritize ethical, inclusive decision-making. These could guide policymakers and local governments to reflect on what responsible governance of earth-cooling approaches in the future could look like.
- The engagement processes, including key informant interviews and stakeholder workshops, are designed to integrate the perspectives of policymakers, government representatives, youth, and local communities.

5. **Knowledge dissemination**

- The outcomes will be shared through conferences, widely-oriented publications, and academic journals.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Kick off	● Roles and responsibilities ● External communications ● Project details
Quarterly	Reporting: ● Technical status - Red/Amber/Green ● Delivery status - Red/Amber/Green ● The latest progress against milestone(s) from last quarter ● Invoicing and cost reporting Optional: ● Key Learning, discoveries and decisions ● Stories to highlight ● Priorities for the next quarter ● Challenges ● Changes to team and new collaborations ● technical evidence saved to drive e.g. report or presentation as requested by PD ● review meeting slide deck saved to drive as requested by PD

	Review meeting with ARIA Programme Team
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments monthly in arrears. Monthly payments will align with the calendar month

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Lorena L. Sabino	Project Leader- Sets the overall strategic direction of the project and leadership	University of the Philippines
[redacted]	Full-time research assistant for the following role:	To be hired

	• Operational Support, data management, logistical support, stakeholder interaction, and report writing.	
Research Assistant 2 (to be hired)	Full-time research assistant for the following role: • Operational Support, data management, logistical support, stakeholder interaction, and report writing.	To be hired
[redacted]	Assist in the planning and implementation of the project activities	University researcher, University of the Philippines
[redacted] (Project adviser)	Adviser/Mentor	Faculty, University of the Philippines
[redacted]	Provides guidance and mentorship to research assistants Join the team to conduct activities if available.	Faculty, University of the Philippines
[redacted]	Provides guidance and mentorship to research assistants Join the team to conduct activities if available.	Faculty, University of the Philippines
[redacted]	Provides guidance and mentorship to research assistants Join the team to conduct	Faculty, University of the Philippines

	activities if available.	
[redacted]	Provides guidance and mentorship to research assistants Join the team to conduct activities if available.	Faculty, University of the Philippines
[redacted]	Provides guidance and mentorship to research assistants Join the team to conduct activities if available.	Faculty, University of the Philippines
[redacted]	Provides guidance and mentorship to research assistants Join the team to conduct activities if available. Guide in the data analysis of the research project	Faculty, University of the Philippines

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location

PART 2 - GRANT APPLICATION

Application titled “Lorena L. Sabino” submitted 9 December 2024.

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

The Chancellor, Masters, and Scholars of the University of Cambridge **(Grant Recipient)**

The Old Schools, Trinity Lane, Cambridge, CB2 1TN

29th May 2025

Attention: Shaun Fitzgerald

Dear Shaun,

FPCW-PR01-P015 - Re-thickening Arctic Sea Ice– Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Re-thickening Arctic Sea Ice. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£9,907,841 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 2 June 2025
Completion Date	The completion is 1 December 2028
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969))

	Public liability: £10 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Shaun Fitzgerald, Project Lead, [redacted]	
Grant Manager	Mark Symes, Programme Director, [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] Research Support Manager, School of Technology University of Cambridge, [redacted]
Notices	ARIA Contracts [redacted]	Assistant Director, School of Technology University of Cambridge, Research Operations Office, [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

3.3. Not used.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

***5.* Amendments to the Grant Conditions**

5.1. Not used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 02 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of The Chancellor, Masters, and Scholars of the University of Cambridge to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

6.4 For the avoidance of doubt any decision to terminate the Grant Agreement as a result of a Go/No Go Milestone will be made at ARIA's sole discretion and done so in accordance with clause 22.6.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 For Grants over £500k: Annually, and on each anniversary of the Commencement Date and at the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate

mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the

Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge] if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no

higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Go/No-Go Milestone means a decision point for ARIA to determine whether it wishes to proceed with or terminate the Project Activities (any decision regarding a Go/No-Go Milestone will be made at ARIA's sole discretion, following a Grant Review as outlined in Clause 6);

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

The Arctic is currently warming 3-4 times faster than the global average. While rapidly decarbonizing the global economy is crucial, implementing methods to specifically cool the Arctic region could significantly extend the time needed to avoid temperature-induced climate tipping points. To explore the feasibility of purposefully cooling the Arctic, we propose investigating whether sea ice re-thickening could offer a viable solution. Ice re-thickening is primarily achieved by drawing seawater onto existing sea ice to increase its thickness. By enhancing ice thickness, sea ice can endure longer during warmer seasons, thereby enhancing the reflectivity of a geographic area compared to seawater. This would reduce not only solar warming of the region but also global temperatures. Alongside direct re-thickening, our project aims to explore how thickening key portions of sea ice can be used to help limit sea ice export out of the Arctic Ocean.

2. Aims and objectives of the Project Activities

The aim of this project is to develop the essential knowledge, technology and impact assessments required for sea ice thickening to mitigate the significant loss of sea ice coverage in the Arctic Ocean.

This will be done by integrating large-scale climate and sea ice modelling validated by field and laboratory tests to assess:

a) The feasibility of large-scale Regional Application of Arctic Ice Thickening.

b) The feasibility of a targeted approach involving Ice Arch Strengthening, so as to limit the export of Arctic sea ice.

Alongside each of these approaches, we will also address the scalability of developed technologies.

3. Project Activities

3.1

3.1.1 **WP1 - Satellite Analysis**: This WP aims to identify the most vulnerable areas of ice thinning that would benefit from ice thickening, providing crucial input for the modelling work. We will use high-resolution satellite imagery to monitor the timing and location of ice arch formation and disintegration. Additionally, we will review data to identify areas in the Arctic, away from the ice arches, that are experiencing annual ice loss. This will help determine regions that could benefit most from winter sea ice thickening.

3.1.2 **WP2 - Ice modelling**: A suite of analytical and numerical models will be used to enhance our understanding of how sea ice grows and strengthens when seawater is pumped onto its surface. This work will provide crucial input for the larger-scale modelling efforts of WP3. Models for water flow through snow will help establish the areal extent of water coverage required based on snow depth, temperature, flow rate, and ice surface morphology. By developing end-member models of channel and radial flow, we aim to

better predict the physical characteristics of sea ice that grows faster through seawater pumping.

3.1.3 **WP3 - Regional and Arctic basin scale modelling**: The outputs of the detailed ice modelling undertaken in WP2 will be utilised in conjunction with the results from the small-scale laboratory experiments (WP5), and field tests (WP6) to inform the regional and Arctic basin model parameters. The impact of re-icing will be modelled using two fully-coupled climate models: the Community Earth System Model version 2 (CESM2) and the UK Earth Systems Model (UKESM).

3.1.4 **WP4 - Impact upon Arctic Albedo**: Using the results of WP2, WP3 and observations planned in WP6, we will calculate the potential change in Arctic albedo (and therefore global warming contribution) for a range of climate scenarios. The different levels of albedo of normal sea ice, flooded sea ice, and snow covered sea ice will be assessed.

3.1.5 **WP5 - Laboratory Experiments**: Laboratory tests will be conducted to validate the models developed in WP2, which will be critical for building our understanding of the evolution of the ice. A series of non-flow experiments to investigate the freezing of saltwater on top of fresh ice and the subsequent migration of brine will be conducted and the evolving ice thickness and temperature profiles will be compared with theoretical predictions.

3.1.6 **WP6 - Field Experiments:** Two field test programs running in parallel will be undertaken, each lasting at most three winters (2025/26 to 2027/28), operating in different locations in the Arctic. These experiments will be informed by and inform our modelling work on ice growth (WP2). They will also help inform our larger scale modelling (WP3), our assessment of the impact on albedo (WP4), and our work on scalability (WP7).

3.1.7 **WP7 - Engineering Development**: There will be an investigation into two different technological approaches to ice thickening and the potential for scaling up to areas of approximately 1 million square kilometers.

3.1.8 **WP8 - Project Management, Coordination and Synthesis**: This project involves a number of teams in different locations. Regular project controls meetings will take place on the project and field experiments as well as an annual all-team in-person workshop.

3.2 The following Milestones will be used to monitor delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted]

ID	Milestones	Measure	Date	Notes
1	Update on preparations for outdoor experiments	Engagement and permitting plans and progress to date shared with ARIA and the oversight committee for feedback. Framework for agreeing process for approval for outdoor experiment agreed between team, ARIA and oversight committee.	Commencement Date + 4 months	
2	Permits & local support obtained in each location for 2025/26 winter (WP6) **This is a Go/No Go Milestone**	Permits (including EIA) will be obtained for Real Ice and Arctic Reflections ice thickening field tests (locations TBC). Evidence supplied to ARIA and oversight committee of ongoing community engagement activities in proposed regions	Commencement Date + 8 months	(i.e. by 1st Feb) (Real Ice expect permit by 6 months)
3a	Initial report on sea ice characteristics for input to regional model in WP3 (WP1)	Report detailing sea ice thickness data analysis from airborne and satellite measurements with sea ice drift data to calculate ice fluxes in both area extent and ice volume	Commencement Date + 12 months	
3b	Initial report on modelling of Regional and	Report synthesising the initial modelling output of WP2, small-scale lab experiment	Commencement Date + 12 months	

	Basin-scale ice thickening (WP3)	(WP5) and field tests (WP6) to inform model parameters.		
4	Engagement documentation reviewed, lessons learned	Development of community and stakeholder engagement strategy submitted to ARIA programme team and Oversight Committee. Evidence of community engagement and codesign provided to ARIA team and oversight committee ahead of second season of outdoor experiments	Commencement Date + 16 months	
5a	Completion of design, delivery and testing/operation of first underwater drone before funding for manufacture of subsequent test drones (WP7a) **This is a Go/No Go Milestone**	Development of individual drone functions: Drones will be capable of completing a pre-programmed automated mission, consisting of navigating to a target location at least 1 km away from the base, pumping sea water for at least 1 hour at a flow rate of at least 10 m^3 per hour, and then returning to base. These capabilities will be tested in temperate climate sea locations, with no sea ice. Drones will also be capable of drilling a hole through ice at least 50 cm thick. Testing of this capability will be undertaken in a laboratory environment.	Commencement Date + 18 months	

5b	Completion of design, delivery and testing of first autonomous-ready icemaker (WP7b) **This is a Go/No Go Milestone**	Developed and tested fully mechanical functioning icemaker (automation-ready) with the ability to move 5km over the ice per day, and the ability to drill holes through ice of up to 1m thick, and pump for at least 2 hours per day with a pump flow rate of at least 500 m3/hour (Arctic Reflections)	Commencement Date + 18 months	
6	Confirmation of permits & local support obtained in each location for 2026/27 winter (WP6) **This is a Go/No Go Milestone**	Permits (including EIA) will be obtained for Real Ice and Arctic Reflections' field tests on ice thickening and ice arch strengthening (locations TBD). Evidence supplied to ARIA and oversight committee of ongoing community engagement activities in proposed regions	Commencement Date + 20 months	
7	Interim report on sea ice mechanics from discrete/continuous FDEM model (WP2) and Lab experiments (WP5)	Report detailing FDEM model findings using water flow through snow modelling output and results from laboratory experiments in WP5	Commencement Date + 24 months	
8	Interim report on the evaluation of modelling ice flow through Nares Strait (WP3)	Report detailing the initial observations of the impact and risks on the Arctic ocean of extended ice coverage in the Nares Strait.	Commencement Date + 24 months	

9	Engagement documentation reviewed, lessons learned	Development of community and stakeholder engagement strategy submitted to ARIA programme team and Oversight Committee. Evidence of ongoing community engagement and codesign provided to ARIA team and oversight committee ahead of third season of outdoor experiments	Commencement Date + 28 months	
10	Permits & local support obtained in each location for 2027/28 winter (WP6) **This is a Go/No Go Milestone**	Permits (including EIA) will be obtained for the ice thickening field test locations. Evidence supplied to ARIA and oversight committee of ongoing community engagement activities in proposed regions	Commencement Date + 32 months	
11	Report highlighting target areas for Ice Thickening (Ice Arches and Regional) (WP1)	Following data analysis, a report detailing identified areas experiencing ice loss for field experiments.	Commencement Date + 36 months	
12	Final report on modelling of Regional- and Basin-scale ice thickening (WP3)	Report synthesising the final modelling output of WP2, small-scale lab experiment (WP5) and field tests (WP6) to inform model parameters.	Commencement Date + 36 months	
13a	Successful design, manufacturing and operational test in Arctic conditions of the hub & spoke model, and a full	Testing of up to four drones in the Arctic to test scalability and robustness in real-world conditions. System wide automation will be demonstrated, consisting in	Commencement Date + 36 months	

	feasibility study detailing a realistic pathway to scaleup, including the relevant operational parameters and required number of units for the ultimate ambition (WP7a)	orchestrating 4 drones in a coherent ice thickening strategy to cover a sea ice area of at least 100,000 m^2 over the duration of a field test. The drones would independently and autonomously complete missions as instructed by a central system, and regularly return to base to recharge their batteries. An underwater communication and positioning system would allow drones to regularly share their status (location, depth, remaining energy, pumping time and rate, ice thickness, obstacles identified, etc.) and acquire updated plans from the base. The drones will also implement safety features such as obstacle avoidance and natural buoyancy to support recoverability. The system will be tested in Arctic conditions with temperatures of -30C or below and sea ice up to 1 meter thick.		
13b	Successful design, manufacturing and operational test in Arctic conditions of the hub & spoke model, and a full feasibility study detailing a realistic pathway to scaleup, including the	Tested in Arctic conditions (-30 C) an automatically functioning icemaker with ability to move 10km over the ice per day, and ability of thickening 50 hectares during a field test, and designed a system with a central hub enabling autonomous deployment of	Commencement Date + 36 months	

	relevant operational parameters and required number of units for the ultimate ambition (WP7b)	several of these large icemakers		
14	Final project report (WP2-5)	Final report detailing modelling output for Ice Thickening and structural integrity of ice arches (WP2); the concluded overall impact and risks on the Arctic ocean of extended ice coverage in the Nares Strait (WP3); potential changes in Arctic albedo under differing climate conditions (WP4); laboratory results of the flow of water through a snow layer on top of ice (WP5) Experimental and modelling data gathered throughout the project submitted to ARIA open access repository.	Commencement Date + 42 months	

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted]

3.3 The intended long-term outcomes are summarised below:

- For both regional and targeted ice thickening, feasibility or otherwise of ice thickening as an effective climate intervention to preserve and restore Arctic sea ice is known
- For any ice thickening approach which is shown to be feasible, pathways for scalability are identified
- The integrated approach with multiple disciplines working together across large scale modeling, lab testing, field testing and prototyping with short feedback loops and

frequent interactions has served as a crucial accelerator in determining the feasibility or otherwise of ice thickening in the Arctic

- Community and Stakeholder involvement was conducted in such a way that co-design and co-execution of activities was possible, and the approach was documented so that it could be used as a blueprint for similar future endeavours.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Planning	• Roles and responsibilities • External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops

Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Dr Shaun Fitzgerald	Lead	University of Cambridge
Dr Geoff Evatt	Deputy Lead	University of Manchester
Dr Michel Tsamados	Key Researcher	University College London
[redacted]	Key Researcher	University of Washington
Prof Steven Desch	Key Researcher	Arizona State University
Dr Einar Ólason	Key Researcher	Nansen Environmental and Remote Sensing Center
Andrea Ceccolini	Key Researcher	Real Ice
Fonger Ypma	Key Researcher	Arctic Reflections

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
The Interdisciplinary Center on Sustainability and Climate - Sant'Anna School of Advanced Studies	Design and development of autonomous underwater vehicle prototypes for ice thickening operations	Pisa, Italy

PART 2 - GRANT APPLICATION

Application titled “Re-thickening Arctic Sea Ice” submitted 6 December 2024.

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

The Energy and Resources Institute **(Grant Recipient)**

Darbari Seth Block, IHC Complex, Lodhi Road, New Delhi-110003,India

17 June 2025

Attention: Mr K Venkatramana

Dear Mr K Venkatramana,

FPCW-PR01-P017 - Simulating the Effects of Earth Cooling Approaches on the Dynamics and Thermodynamics of Monsoon and Precipitation Extremes– Basic Research Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Basic Research Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

This Basic Research Funding Letter is offered to you on the basis the activity being funded is considered experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Simulating the Effects of Earth Cooling Approaches on the Dynamics and Thermodynamics of Monsoon and Precipitation Extremes. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Amount of the Grant	£142,024 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 17 June 2025
Completion Date	The completion is 16 June 2027
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (compulsory Insurance Act 1969) Public liability: £5 million (per year in aggregate)
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall

	be provided by you at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Mr K Venkatramana, Associate Fellow & AC, TERI. [redacted]	
Grant Manager	Mark Symes, Programme Director, [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted], Senior Fellow and Director, TERI. [redacted]
Notices	ARIA Contracts [redacted]	[redacted] Senior Manager-PMU, TERI. [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;
3.1.2. the **Project Activities, Milestones** and **Grant Application** in Schedule 2;
3.1.3. the **Commercial Exploitation Terms** (including annexes) in Schedule 3 - Although the parties do not envisage any commercial application of the Results, this schedule sets out your obligations if commercial exploitation of the Results does occur, and
3.1.4. the terms relating to **Data Protection** in Schedule 4.

3.2. Not used.

3.3. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not used.

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 19 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of The Energy and Resources Institute to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;

(b) these Conditions;

(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);

(d) Schedule 2 Part 2 (the Grant Application); and

(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 29.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4 ARIA will pay the Grant to you:

(a) up to the Maximum Sum;

(b) in pounds sterling (GBP) by wire transfer into your bank account details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and

(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on your use of the Maximum Sum, with details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 For Grants between £100k and £500k: At the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act

reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft, or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other

party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities constitute basic research and have no commercial application in view, notwithstanding that they may be carried out with the intention of contributing to a knowledge base which may form the basis of a solution to a recognised or expected problem. If during the Funding Period you plan to take any concrete action regarding any current or future commercial application of the Results, you must promptly inform ARIA. You must assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and where applicable, the terms of Schedule 3, and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required to carry out the Project Activities.

Foreground IP ownership and dissemination

15.3 You will own all Foreground IP and, subject to clauses 15.5 and 15.7, you must publish or report publicly on the outcomes of the Project Activities within 18 months after the end of the Funding Period unless:

(a) a delay in publication is reasonably necessary to protect any Confidential Information or Foreground IP; or

(b) there is some other substantial reason to delay or suspend publication and you have obtained ARIA's written consent to do so.

15.4 Where you assign any Foreground IP to a Third Party you must impose on the assignee the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.5 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.6 You must ensure that whenever any Results are used with or communicated to Third Parties, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.7 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.8 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.9 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

16. COMMERCIALISATION

16.1 As stated at 14.1 above, the Project Activities will consist of basic research with no commercial application in view. However, if commercial exploitation of the Results does arise, such commercial exploitation shall be carried out in accordance with Schedule 3.

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;
(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;
(c) you fail to improve the performance of the Project Activities, notwithstanding you having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);
(d) you obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;
(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;
(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;
(g) you are subject to an Insolvency Event;
(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;
(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:
    (i) be materially detrimental to, or result in fundamental changes to, the Project Activities;
    (ii) result in your being unable to receive the Grant; and/or
    (iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;
(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or
(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and
(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement immediately on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or
(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer.

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and
(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;
(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you; and
(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Project Activities, over £250,000 will terminate automatically and immediately upon termination of this Grant Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;
(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;
(c) a breach of clause 13;
(d) liability arising under any indemnity in this Grant Agreement; or
(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;
(b) the use of the Grant by any person;
(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or
(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;
(b) loss of contracts or business opportunities;
(c) loss of anticipated savings;
(d) loss of goodwill or damage to reputation; or
(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 Recipients who are research institutions must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;
(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and
(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such

communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or

(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities;

and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant

Agreement that ought reasonably to be considered to be confidential (whether or not it is so marked), including:

(a) any information relating to:
    (i) the business, affairs, customers, clients, suppliers or plans of the disclosing party; or
    (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party;
(b) any information developed by the parties in the course of carrying out the Project Activities;
(c) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and
(d) any information derived from any of the above,

but not including:

(e) information which:
    (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11);
    (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party;
    (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or
    (iv) is independently developed without access to the Confidential Information; and
(f) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period for which the Grant is awarded as set out in the Grant Funding Letter;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for actively cooling the earth operated by ARIA/a third party in the form at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for:
   (i) doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or
   (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence:
   (i) under the Bribery Act;
   (ii) under legislation creating offences in respect of fraudulent acts; and/or
   (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination;

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;

(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;

(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and

(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

The ongoing warming of the planet significantly influences precipitation patterns and extremes, which is a critical consideration when evaluating SRM strategies aimed at cooling the Earth. Climate change could exacerbate these patterns, leading to a scenario where wet regions could become wetter and dry areas could experience increased aridity. Specifically, numerical models suggest that under the Shared Socioeconomic Pathway (SSP) 5-8.5 scenario (high-emission), many regions will experience more intense monsoon precipitation compared to the SSP2-4.5 scenario (middle of the road). This trend is attributed to an increase in the frequency and intensity of extreme daily events associated with climate change.

A critical factor in these extreme precipitation events is the enhanced vertical moisture ascent, often referred to as the dynamic component. This vertical motion, linked to local convection and low-level convergence, elevates atmospheric moisture, triggering latent heating and subsequent heavy rainfall. While thermodynamic factors contribute to overall precipitation increases, dynamic processes play a pivotal role in local-scale intensification, particularly in monsoon regions. Similar findings have emerged from studies in the UK, where an extreme winter event in 2014 was linked to stronger vertical motions that increased atmospheric moisture and promoted convection. Recent research, including your own work (Byju et al., 2024), highlights the dominance of this dynamic component (>70%) in driving extreme precipitation during monsoon seasons. However, projections suggest a potential decline of its contribution (10-35%) under future high-emission scenarios, possibly due to increased tropospheric stability resulting from warming.

In response to the growing impacts of climate change, SRM strategies have been proposed as potential method to mitigate these effects and cool the planet. Current research indicates that while SRM strategies may effectively cool the planet, they could also present significant drawbacks by disrupting the planet's energy balance and potentially affecting the climate system. Additionally, uncontrolled termination of SRM interventions could lead to rapid climatic changes. The nature and magnitude of these drawbacks are contingent upon specific SRM approaches.

Climate modelling studies available in this area are mainly focused on stratospheric aerosol injection (SAI), which is a proposed method to inject reflecting aerosols into the stratosphere, which can lead to a reduction in global and tropical precipitation. Several recent studies indicate that planned simultaneous injections at multiple locations can effectively help maintain large-scale temperature metrics in a nearly stable state. Climate modelling studies such as the Geoengineering Large Ensemble (GLENS) experiment involved injection of sulphur dioxide (SO2) at various latitudes with an adaptive feedback-control algorithm, revealing that such injections suppress tropical precipitation, particularly affecting monsoon regions in India and the Americas. In contrast, Arctic aerosol injection is thought to have a lesser impact on tropical climates due to its shorter aerosol lifespan and smaller coverage area. Studies have also indicated that both tropical and Arctic injections could decrease precipitation over monsoon regions in Asia and Africa. Specifically, research has shown that Arctic SAI and the resulting inter-hemispheric temperature difference can shift the Intertropical Convergence Zone southward, altering precipitation patterns in the Northern and Southern

Hemispheres. However, differences in injection intensities between tropical and Arctic SAI experiments complicate the assessment of their respective contributions to climate changes. While thermodynamic and nonlinear terms contribute to a decrease in global mean precipitation under Arctic SAI, dynamic terms may counteract this effect.

The Indian Summer Monsoon (ISM), a critical system for regional sustenance, is particularly sensitive to SAI. Research indicates that the location and intensity of aerosol injections can significantly impact ISM precipitation, potentially leading to substantial reductions. Even when large-scale temperature metrics are stabilized, factors such as upper tropospheric warming and circulation changes can lead to a weakening of the monsoon precipitation. Given the complexity of the Asian monsoon system and its numerous feedback mechanisms, establishing clear cause-and-effect relationships remains challenging. Nevertheless, considering that a significant portion of the population depends on the ISM for sustenance, these studies carry substantial regional implications—not only for SRM outcomes but also for intermediate climatic conditions during its implementation.

Although proposed SRM methods may lead to planetary cooling, their impacts on the pattern of precipitation will vary. SAI, for instance, has been shown to reduce extreme precipitation in tropical areas, while GeoMIP solar dimming scenario may be more effective in extra-tropical regions. Further, SRM could significantly compensate for the change in seasonality, peak precipitation timing and duration associated with enhanced warming. Several such studies also show that regional variability of precipitation responses to SRM is significant, but it is not uniform. Moreover, at the termination of climate interventions, climatic conditions such as temperature, precipitation, winds, and moisture would abruptly revert to what they would have been under a global warming scenario. This potential shift must also be considered when evaluating methods aimed at cooling the planet.

Overall, while the proposed methods of SRM could cool the planet , SRM carries complex implications for global and regional precipitation and requires careful consideration of the undesirable side effects, even after the termination. The impacts of SRM on extreme precipitation can be multifaceted and can lead to both reductions and increases in precipitation extremes depending on the method used and the regional climatic conditions. Further, the relationship between warming/cooling and extreme precipitation is complex due to the interplay between dynamic and thermodynamic factors.

This project aims to leverage moisture budget decomposition methodologies, building upon your previous research, to explore the impacts of SRM methods on regional precipitation, particularly focusing on the dynamic and thermodynamic drivers of extreme events. The proposed project will offer valuable insights into regional variations and potential climate extremes and thereby provide policymakers, researchers, and stakeholders with meaningful information for decision-making processes on the impacts of SRM.

2. Aims and objectives of the Project Activities

Precipitation is a critical component of the Earth's climate system, essential for sustaining ecosystems and supporting agricultural productivity. However, climate change is projected to significantly alter global precipitation patterns. Additionally, alterations in atmospheric circulation patterns driven by warming will further modulate the intensity and distribution of extreme precipitation events.

SRM has gained attention as a potential approach for mitigating climate change impacts. Although the existing SRM methods, such as Stratospheric Aerosol Injection (SAI), Marine Cloud Brightening (MCB), and Cirrus Cloud Thinning (CCT), may lead to planetary cooling, their impacts on the processes controlling precipitation will vary. People are very much concerned about the changes in precipitation that SRM would bring because of their broader societal implications, particularly concerning agriculture and thus on the economy.

A moisture budget decomposition of precipitation would help you to identify the different factors, such as dynamic, thermodynamic, evaporation and nonlinear processes, that impacts the total rainfall as well as extremes. Warming would alter the contribution of those factors in shaping the precipitation patterns. In this project you aim to explore through modelling how the cooling of the planet with the existing SRM methods could alter the factors that drive precipitation and extreme weather events. You aim to gain valuable insights into regional variations and potential climate extremes in this study, thereby providing policymakers, researchers, and stakeholders with meaningful information for decision-making processes on SRM.

The main objectives of this project are to:

1. Conduct a comprehensive assessment of SRM's impact on monsoon and precipitation extremes across India and the UK—factors directly influencing agricultural practices and food production and economy.
2. Elucidate how the factors influencing precipitation frequency, intensity and seasonality such as atmospheric dynamics, thermodynamics, evaporation processes, and nonlinear physics are altered due to climate interventions.
3. Investigate how these changes manifest in the precipitation and moisture budget terms following the termination of such interventions

3. Project Activities

Your primary objective of this proposal is to understand how the changes in different factors contribute to changes in precipitation patterns. To address this, you will decompose the anomalous precipitation into different moisture budget components into dynamic, thermodynamic and nonlinear components. Analysing the results would provide insights into the physical components that are most sensitive to climate intervention methods resulting in anomalous precipitation. Furthermore, analysing changes across different regions and distinct geographical contexts, while utilising various climate model data for different SRM approaches, will enhance your understanding of the sensitivity of these interventions regionally.

Further, the project also aims to understand whether the warming or cooling of the planet will lead to changes in seasonality, which is crucial, as these changes can significantly influence local ecological and social dynamics. Seasonality changes can be assessed using matrices that include dimensionless relative

entropy, dimensionless seasonality index, timing of the peak rainy season, and duration of the peak rainy season (Feng et al., 2013).

You will use data from models participating in the Coupled Model Intercomparison Project phase-6 (CMIP6) under historical, intermediate (SSP2-4.5), and high-emission (SSP5-8.5) scenarios to investigate characteristic changes in precipitation, extremes and seasonality in global warming scenarios. A comprehensive analysis of the characteristic changes in precipitation under climate interventions to cool the planet is proposed here by analysing existing GeoMIP model simulations. A wide range of climate models, including global climate models and Earth system models, participate in GeoMIP. This diversity helps capture a range of potential climate responses to SRM. It explores a variety of SRM scenarios, such as different implementation strategies, intensities, and durations. This allows for a comprehensive understanding of the potential range of outcomes.

3.1 A detailed timeframe of the project activity is given below as Work Packages (WP).

Work Packages and detailed plan of implementation with month wise timelines and targets time

WP1: Assess precipitation pattern over India and the UK

Objective: Understand the changes in precipitation patterns and moisture budget components over India and the UK.

Month 1-3: WP1.1 Project Setup, Data Acquisition and Quality Analysis

Establish project team and communication protocols.

Plan and acquire available CMIP6 (historical, SSP2-4.5, SSP5-8.5) model data and ERA5 reanalysis data for India and the UK.

Set up data processing and analysis environments. Complete Quality check of the data and understand the biases.

Deliverable: Project setup complete, data acquisition initiated and ready for analysis.

Month 4-9: WP1.2 Historical analysis of precipitation changes over India and United Kingdom

Analyse precipitation patterns and calculate the moisture budget components (dynamic, thermodynamic, nonlinear) using CMIP6 historical data and ERA5 over India and the United Kingdom.

Investigate regional (tropical vs. midlatitude) responses in a planet warming situation.

Focus on extreme precipitation and its moisture budget. How is it changing spatially and temporally?

Deliverable: Completion of historical precipitation and moisture budget analysis for India and the UK. Understand the pattern changes under the current warming phase.

Month 7-12: WP1.3 Changes under different climate change scenarios

Analyse future precipitation patterns and moisture budget components using CMIP6 SSP2-4.5 and SSP5-8.5 scenarios.

Assess sensitivity of extreme precipitation to different emission scenarios.

Compare tropical and midlatitude impacts.

Deliverable: Completion of precipitation analysis under SSP2-4.5 and SSP5-8.5 scenarios, and comparative study to historical data.

Month 11-14: WP1.4 Presentation and Initial Reporting

Prepare and present preliminary findings from WP1.

Draft initial report on historical and future climate change impacts on precipitation. Publish the findings in a peer reviewed journal.

Milestone 1 (Month 11 –14): Achieve a comprehensive understanding of how global warming influences precipitation patterns, moisture budget components (dynamic, thermodynamic, nonlinear), and extremes in India and the UK. Disseminate initial findings through scientific publication.

WP2: Assess the impact of climate interventions on moisture budget

Objective: To quantify the impact of various SRM methods on precipitation and large excess precipitation events. How does the cooling of planet Earth modulate the dynamics and thermodynamics of precipitation? What are the precipitation responses following the termination of different SRM interventions?

Month 1-3: WP2.1 Data Acquisition and Quality Analysis

Acquire available GeoMIP simulation data. Primary focus will be for the variants of G4 simulations. Data of G3, G6sulfur and G7cirrus simulations could also be acquired if available.

Conduct feasibility of the data for analysis and processing it.

A thorough literature review about the impact of SRM on precipitation.

Deliverable: Acquisition of GeoMIP model data for the analysis.

Month 6-18: WP2.2 SRM Impacts

Analyse precipitation changes across various SRM scenarios. Comparative analysis of SRM techniques will pinpoint impact hotspots and inform optimised intervention strategies.

Decompose and analyse anomalies in precipitation and extremes to dynamic, thermodynamic and nonlinear components. This would reveal the sensitivity of each component to different SRM techniques.

Study the changes after the termination of the interventions.

Compare and contrast results from WP1 and WP2 to identify climate response to climate warming and SRM induced cooling of the planet.

Deliverable: A comprehensive understanding of the impacts and sensitivities of various SRM techniques on precipitation, extreme events, and moisture budget components, including a comparative analysis of SRM's effectiveness versus continued warming and an assessment of termination risks.

Month 17–20: WP2.3 Presentation and Publishing the results

Present the findings in a conference or draft it for peer review publication.

Milestone 2 (Month 17 –20): Develop a comprehensive scientific understanding of the mechanisms by which SRM techniques influence precipitation patterns, moisture budget components, and extreme events, including post-termination effects. A comprehensive understanding of the factors contributing to the precipitation changes in global warming and SRM scenarios. Disseminate these findings through scientific publications.

WP3: Analyse the changes in precipitation seasonality

Objective: Analyse the changes in seasonality, timing and duration of precipitation due to SRM interventions and after their termination.

Month 13-22: WP3.1 Seasonality Analysis

Analyse changes in precipitation seasonality using metrics like dimensionless relative entropy, seasonality index, peak rainy season timing, and duration.

Compare seasonality changes under SRM scenarios with historical and warming scenarios.

Analyse seasonality changes at the termination of climate interventions.

Deliverable: Completion of seasonality analysis under climate change and SRM scenarios, including termination effects.

Month 20-24: WP3.2 Publish the findings

Prepare a manuscript detailing the findings of the seasonality analysis for submission to peer-reviewed journal.

Milestone 3 (Month 22 –24): This project will deliver a comprehensive analysis of how SRM impacts precipitation patterns over India and the United Kingdom. By decomposing moisture budgets and analyzing seasonality changes using climate model data, you will quantify the effectiveness and risks of various SRM techniques. The project will produce peer-reviewed publications and inform policy makers, ultimately contributing to a better understanding of SRM's potential and limitations in mitigating climate change impacts on regional climate.

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted]

ID	Milestones	Measure	Date
1	Data Acquisition and Quality Analysis of CMIP and ERA5	Plan and acquire available CMIP6 (historical, SSP2-4.5, SSP5-8.5) model data and ERA5 reanalysis data for India and the UK. Set up data processing and analysis environments. Complete Quality check of the data and understand the biases.	Commencement Date + 3 months
2	Data Acquisition and Quality Analysis of geoMIP data	Acquire available GeoMIP simulation data. Primary focus will be for the variants of G4 simulations. Data of G3, G6sulfur and G7cirrus simulations could also be acquired if available. Conduct feasibility of the data for analysis and processing it.	Commencement Date + 6 months
3	Completion of data analysis for historical precipitation for India and the UK.	Completion of historical precipitation and moisture budget analysis for India and the UK. Understand the pattern changes under the current warming phase.	Commencement Date + 12
4	Submission to scientific journal	Achieve a comprehensive understanding of how global warming influences precipitation patterns, moisture budget components and extremes in India and the UK. Improved understanding of how the warming impacts dynamics and thermodynamics of regional precipitation.	Commencement Date + 15 months

ID	Milestones	Measure	Date
5	Submission to scientific journal	Develop a comprehensive scientific understanding of the mechanisms by which SRM techniques influence precipitation patterns, moisture budget components, and extreme events, including post-termination effects. A comprehensive understanding of the factors contributing to the precipitation changes in global warming and SRMscenarios. An improved understanding of the sensitivity of different moisture budget components to SRM induced cooling using GeoMIP scenarios.	Commencement Date + 21 months
6	Submission to scientific journal	A comprehensive understanding of how SRM affects the seasonality of precipitation and a final report. Output data for publications are made available in ARIA public repository.	Commencement Date + 24 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time:

[redacted]

3.3 The intended long-term outcomes are summarised below:

By pinpointing the sensitivities of moisture budget components and seasonality to SRM techniques, this project will allow for a more nuanced debate on intervention strategies, minimizing disruptions to natural climate processes and ensuring that the benefits of any intervention are realized with minimal adverse impacts on precipitation and regional water cycles. The long-term outcomes aim to translate the project's scientific findings into actionable knowledge that can inform climate debate, enhance climate resilience, and guide responsible research and implementation. In a nutshell, the outcomes stemming from the findings contribute to:

- **Enhanced Understanding of Climate Dynamics:** A deeper understanding of the complex interactions between dynamic and thermodynamic processes in the climate system, particularly in

relation to precipitation extremes and seasonality, under both global warming and intervention scenarios.

- **Refined Theoretical Frameworks:** Contribution to the development of refined theoretical frameworks for understanding the impacts of SRM on the hydrological cycle, incorporating dynamic, thermodynamic, and seasonality considerations.
- **Evidence-Based Information for Policy Makers:** Provision of critical scientific evidence to inform policy makers regarding climate change mitigation and potential intervention strategies, minimizing unintended consequences.
- **Optimized intervention Strategies:** Development of optimized strategies that minimize negative impacts on regional precipitation and seasonality, while maximizing climate cooling benefits.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Kick off	Roles and responsibilities External communications Project details
Quarterly	Reporting: Technical status - Red/Amber/Green Delivery status - Red/Amber/Green The latest progress against milestone(s) from last quarter Invoicing and cost reporting Optional: Key Learning, discoveries and decisions Stories to highlight Priorities for the next quarter Challenges Changes to team and new collaborations technical evidence saved to drive e.g. report or presentation as requested by PD review meeting slide deck saved to drive as requested by PD Review meeting with ARIA Programme Team
Annual	ARIA impact metrics Attendance at annual ARIA event

Frequency	Requirement
Ad hoc	As required, Programme Director/ Programme Team may request additional information and evidence Workshops - potential to be invited to ARIA workshops
Project closure	Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears based on actual costs incurred.

For quarterly payments, the cadence of payments will align with ARIA's financial year beginning 1st April e.g. Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principle investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Dr. Byju Pookkandy	• Principal Investigator • Oversee the overall coordination and execution of the project. • Lead WP1 (Assess precipitation patterns over India and the UK) and WP3 (Analyse changes in precipitation seasonality). • Contribute significantly to WP2 (Assess the impact of geoengineering methods).	The Energy and Resources Institute, New Delhi, India
[redacted]	• SRM Expert • Lead/Supervise WP2 (Assess the impact of SRM SRM methods). • Contribute to WP1 and WP3 interpretation and discussions.	The Energy and Resources Institute, New Delhi, India

Name	Role	Organisation
Mr.Kaagita Venkatramana	• Co-Principal Investigator • Contribute to all three research work packages (WP1, WP2, and WP3). • Support the PI in project coordination and execution.	The Energy and Resources Institute, New Delhi, India
[redacted]	• Provide strategic guidance on climate change impacts and risks. • Contribute to the interpretation of results in the context of global climate change.	The Energy and Resources Institute, New Delhi, India
[redacted]	• Provide expertise on SRM policies and implementation. • Contribute to the interpretation of results in the context of environmental policy and governance.	The Energy and Resources Institute, New Delhi, India

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location

PART 2 - GRANT APPLICATION

Application titled "The Energy and Resources Institute" submitted 9 December 2024.

SCHEDULE 3: Commercial Exploitation

Although the parties do not envisage any commercial application of the Results, this schedule sets out your obligations if commercial exploitation of the Results does occur.

1. LICENCES and ROYALTIES

1.1. In this Schedule:

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

First Sale Date means the date on which you (or your affiliate or sublicensee) first bill an amount to a customer in respect of the sale of goods or services (or any other transaction) which use or incorporate Foreground IP;

Gross Sales means total invoiced value of sales made during a specific period, including all amounts billed to customers such as from the sale of goods, services, licence income, royalty income, franchise fees, commissions, subscription fees, before any deductions;

Group means in relation to a company, that company, any subsidiary or holding company from time to time of that company;

Net Sales means Gross Sales after relevant accounting deductions, such as sales tax, packaging, insurance, carriage and freight, trade discounts and credits, returns and allowances, import taxes and similar applicable government levies;

Non-UK Entity means a legal entity that is not a UK Entity; and

UK Entity means a legal entity or group of legal entities that has its headquarters and principal establishment in the United Kingdom.

1.2. If you consider that commercial exploitation of any of the Results has become or may become viable, you are encouraged to discuss the position with ARIA. Under clause 14.1 of the Conditions you are required to inform ARIA if during the Funding Period you plan to take any concrete action regarding any current or future commercial application of the Results.

1.3. You may request that ARIA exploit the Results or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Crown Body customers

1.4. You must ensure under any agreement for Commercial Licensing or assignment of Foreground IP, that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period, at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Non-UK Commercialisation

1.5. A royalty of 0.25% of your Net Sales which use or incorporate Foreground IP shall be payable to ARIA if you are incorporated outside of the United Kingdom (the "ARIA Non-UK Fee"). For the avoidance of doubt, the ARIA Non-UK Fee shall be calculated solely in respect of the share of the Net Sales which corresponds to the value resulting directly from the Foreground IP.

1.6. The ARIA Non-UK Fee shall be payable within 90 days following the end of each relevant calendar year, for a period of ten (10) years from the First Sale Date, up to an aggregate total equal to 20 times the Maximum Sum.

1.7. In the event that:

(a) there is a change of control of the Foreground IP, such that you assign or grant an exclusive licence to the Foreground IP to another person; or

(b) you extend rights to the Foreground IP within your Group, such that you grant another entity within your Group a licence to the Foreground IP,

then,

(c) you must notify ARIA immediately; and

(d) include clauses 1.5 and 1.6 in the relevant instrument and ensure that it expressly provides that the provisions are intended to be enforceable by ARIA by virtue of the Contracts (Rights of Third Parties) Act 1999 (or any equivalent in any jurisdiction) and take any other step required to ensure that the ARIA Non-UK Fee is payable by the transferee or licensee (as applicable).

1.8 For the avoidance of doubt, in respect of:

(a) clause 1.7(a), provided that you have complied with clause 1.7(d), your obligation to pay the ARIA Non-UK Fee shall cease and pass to the transferee or licensee (until, in the case of an exclusive licence, the termination or expiry of such licence); and

(b) clause 1.7(d) the transferee or licensee shall only be liable to pay the ARIA Non-UK Fee to ARIA for the remainder of the aggregated total amount and the ten (10) year period specified in clause 1.7 prorated from the date of the relevant instrument.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are relying on Domestic Law as the basis for processing Personal Data,

you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated

auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc. Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration,*

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
	retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors, clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in

connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

Planetary Sunshade Foundation **(Grant Recipient)**

5730 Vineland Ave Unit 110,

North Hollywood, CA 91601

30 May 2025

Attention: Morgan Goodwin

Dear Morgan,

FPCW-PR01-P003 - Planetary Sunshade Baseline Survey – Basic Research Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Basic Research Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

This Basic Research Funding Letter is offered to you on the basis the activity being funded is considered experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Planetary Sunshade Baseline Survey. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Amount of the Grant	£395,427(inclusive of all taxes where applicable)
Commencement Date	The commencement date is 1 June 2025
Completion Date	The completion is 31 July 2026
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions
Adequate Insurance	General Liability $2,000,000 aggregate / $1,000,000 per occurrence Professional Liability (E&O) $2,000,000 aggregate / $1,000,000 per

	occurrence Directors & Officers (D&O) $1,000,000	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided by you at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Morgan Goodwin Executive Director, Planetary Sunshade Foundation [redacted] [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] Chair of Planetary Sunshade Foundation [redacted] [redacted]
Notices	ARIA Contracts [redacted]	Morgan Goodwin, Executive Director, [redacted] [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;
3.1.2. the **Project Activities, Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Commercial Exploitation Terms** (including annexes) in Schedule 3 - Although the parties do not envisage any commercial application of the Results, this schedule sets out your obligations if commercial exploitation of the Results does occur, and

3.1.4. the terms relating to **Data Protection** in Schedule 4.

3.2. Not used

3.3. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 01 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of the Planetary Sunshade Foundation to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;

(b) these Conditions;

(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);

(d) Schedule 2 Part 2 (the Grant Application); and

(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 29.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4 ARIA will pay the Grant to you:

(a) up to the Maximum Sum;

(b) in pounds sterling (GBP) by wire transfer into your bank account details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and

(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same

form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on your use of the Maximum Sum, with details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 At the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must

provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft, or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your

Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA

must notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities constitute basic research and have no commercial application in view, notwithstanding that they may be carried out with the intention of contributing to a knowledge base which may form the basis of a solution to a recognised or expected problem. If during the Funding Period you plan to take any concrete action regarding any current or future commercial application of the Results, you must promptly inform ARIA. You must assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and where applicable, the terms of Schedule 3, and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required to carry out the Project Activities.

Foreground IP ownership and dissemination

15.3 You will own all Foreground IP and, subject to clauses 15.5 and 15.7, you must publish or report publicly on the outcomes of the Project Activities within 18 months after the end of the Funding Period unless:

(a) a delay in publication is reasonably necessary to protect any Confidential Information or Foreground IP; or

(b) there is some other substantial reason to delay or suspend publication and you have obtained ARIA's written consent to do so.

15.4 Where you assign any Foreground IP to a Third Party you must impose on the assignee the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.5 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.6 You must ensure that whenever any Results are used with or communicated to Third Parties, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.7 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.8 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss

with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.9 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

16. COMMERCIALISATION

16.1 As stated at 14.1 above, the Project Activities will consist of basic research with no commercial application in view. However, if commercial exploitation of the Results does arise, such commercial exploitation shall be carried out in accordance with Schedule 3.

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;
(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;
(c) you fail to improve the performance of the Project Activities, notwithstanding you having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);
(d) you obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;
(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;
(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;
(g) you are subject to an Insolvency Event;
(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;
(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:
    (i) be materially detrimental to, or result in fundamental changes to, the Project Activities;
    (ii) result in your being unable to receive the Grant; and/or
    (iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement immediately on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer.

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;
(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you; and
(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Project Activities, over £250,000 will terminate automatically and immediately upon termination of this Grant Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;
(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;
(c) a breach of clause 13;
(d) liability arising under any indemnity in this Grant Agreement; or
(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;
(b) the use of the Grant by any person;
(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or
(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;
(b) loss of contracts or business opportunities;
(c) loss of anticipated savings;
(d) loss of goodwill or damage to reputation; or
(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 Recipients who are research institutions must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or

(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities;

and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement that ought reasonably to be considered to be confidential (whether or not it is so marked), including:

(a) any information relating to:
  (i) the business, affairs, customers, clients, suppliers or plans of the disclosing party; or
  (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party;

(b) any information developed by the parties in the course of carrying out the Project Activities;

(c) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and

(d) any information derived from any of the above,

but not including:

(e) information which:
  (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11);
  (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party;
  (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or
  (iv) is independently developed without access to the Confidential Information; and

(f) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period for which the Grant is awarded as set out in the Grant Funding Letter;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to [approaches for actively cooling the earth operated by ARIA/a third party in the form at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for:
    (i) doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or
    (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence:
    (i) under the Bribery Act;
    (ii) under legislation creating offences in respect of fraudulent acts; and/or
    (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination;

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;

(b) the singular includes the plural and vice versa;

(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;

(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;

(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;

(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and

(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

The Planetary Sunshade Baseline Project aims to advance understanding of space-based Solar Radiation Modification (SRM) architectures. Your work will involve developing and comparing various SRM options, assessing key factors, and conducting climate modeling. While conducting an outdoor experiment—specifically a spacecraft-based test—is beyond the scope of ARIA's funding, there is an urgent need to advance space-based SRM to a level of understanding comparable to existing in-atmosphere SRM interventions. At the conclusion of your project, you will propose a space-based experiment, deliver a rigorously modeled set of potential space interventions, and establish a comprehensive baseline for ARIA and the global community for space based SRM.

2. Aims and objectives of the Project Activities

This project will study the practical feasibility and predicted climate impacts of the set of all plausible space based SRM solutions. To understand a plausible intervention, you need to consider the full range of possible architectures from both engineering and climate modeling perspectives. You will design 6 representative architectures, run climate models on them, and iterate with both the engineering and modeling teams.

By organising the engineering and modeling work in a unified project, you will create a 'baseline' for future discussions of space SRM and for how to compare space SRM to other methods.

3. Project Activities

3.1 You will create two intersecting workstreams for the modeling and engineering teams. Each architecture will be scaled to match the same level of global cooling, and described in terms of latitudes, ramp-up time, wavelengths and other factors relevant to modeling. While the engineering teams continue to develop their concepts at deeper levels of engineering detail, the climate modeling team will run iterative analysis, from simple to intermediate models to the most complex.

Work Package	Description	Deliverables
1. Engineering Architecture Development & Iteration	Conceptual design and tech specs for our 6 architectures, with feedback and iteration	1.1 Literature review of existing work 1.2 Standard set of parameters for a likely version of each architecture 1.3 Shade file for modeling teams to use 1.4 Preliminary feasibility assessment 1.5 Preliminary design review assessment & priority for advanced modeling 1.6 Prototype mission recommendation

2. Climate Modeling	Run Community Earth Systems Model (CESM) for the 6 architectures	2.1 First round - simple model results 2.2 Second round - intermediate model results 2.3 Third round - full earth system model results (for most promising 1 or 2 architectures)
3. Publishing Results	Sharing our findings with both the SRM and aerospace community in a way that is maximally helpful.	3.1 Research paper(s) submitted for publication 3.2 PSF creates a web portal for open access to modeling and engineering work 3.3 Publish policy briefing materials

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the [redacted]

ID	Milestones	Measure	Date
1	Model scoping and first round engineering architectures complete	Commonly formatted report on first round engineering architectures available to share with modelers. Modeling presentation at quarterly check in in the first round of intermediate-complexity results of all the architectures and makes recommendations/suggestions for iterative designs. Outline architecture downselect framework available for review. The team will convene prior to this milestone to review work thus far, investing in cross-discipline education and learnings.	Commencement date + 6 months

2	Second Round modeling & engineering round conclusion.	Commonly formatted report on second-round engineering architectures, including iterations based on the modeling results thus far. Modeling essentially complete and report with analysis of results from overall project and full complexity model runs. Results compiled and start to create PSF interactive web interface.	Commencement date + 12 months
3	Project Complete & results ready for publication	Research Paper(s) fully drafted. Preprint published online. Engineering design review deck available. Defined mission requirements for prototype mission. Published PSF interactive web interface. Data publicly available (as part of open-access paper submission) as well as stored in a central ARIA public repository.	Commencement date + 14 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted].

3.3 The intended long-term outcomes are summarised below:

- The establishment of a baseline study for space based SRM. If successful, this project will be referenced by the upcoming IPCC report, and similar scientific forums, as defining the possibilities for space based SRM. Team members will be called upon as experts in further SRM discussions.
- Briefing to the UN's Committee on the Peaceful Uses of Outer Space and related space governance agencies.
- The project will allow a prototype space mission to be developed that identifies the highest value propositions to test.
- The project could serve as the groundwork for a FRO in this area.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Kick off	• Roles and responsibilities • External communications • Project details
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Invoicing and cost reporting Optional: • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD Review meeting with ARIA Programme Team
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments monthly in arrears.

Monthly payments will align with the calendar month.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Morgan Goodwin	Primary Investigator	Planetary Sunshade Foundation
Jeff Overbeek	Technical Director	Planetary Sunshade Foundation
[redacted]	Project Manager	Planetary Sunshade Foundation

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
Cornell University	Daniele Visioni and [redacted] Climate Modeling	Ithaca, New York
U. of Nottingham	Chantel Capppelletti, [redacted] [redacted] Engineering Design & Review	Nottingham, UK

PART 2 - GRANT APPLICATION

Application titled "Planetary Sunshade Baseline Survey" submitted 9 December 2024

SCHEDULE 3: Commercial Exploitation

Although the parties do not envisage any commercial application of the Results, this schedule sets out your obligations if commercial exploitation of the Results does occur.

1. LICENCES and ROYALTIES

1.1. In this Schedule:

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

First Sale Date means the date on which you (or your affiliate or sublicensee) first bill an amount to a customer in respect of the sale of goods or services (or any other transaction) which use or incorporate Foreground IP;

Gross Sales means total invoiced value of sales made during a specific period, including all amounts billed to customers such as from the sale of goods, services, licence income, royalty income, franchise fees, commissions, subscription fees, before any deductions;

Group means in relation to a company, that company, any subsidiary or holding company from time to time of that company;

Net Sales means Gross Sales after relevant accounting deductions, such as sales tax, packaging, insurance, carriage and freight, trade discounts and credits, returns and allowances, import taxes and similar applicable government levies;

Non-UK Entity means a legal entity that is not a UK Entity; and

UK Entity means a legal entity or group of legal entities that has its headquarters and principal establishment in the United Kingdom.

1.2. If you consider that commercial exploitation of any of the Results has become or may become viable, you are encouraged to discuss the position with ARIA. Under clause 14.1 of the Conditions you are required to inform ARIA if during the Funding Period you plan to take any concrete action regarding any current or future commercial application of the Results.

1.3. You may request that ARIA exploit the Results or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Crown Body customers

1.4. You must ensure under any agreement for Commercial Licensing or assignment of Foreground IP, that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period, at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Non-UK Commercialisation

1.5. A royalty of 0.25% of your Net Sales which use or incorporate Foreground IP shall be payable to ARIA if you are incorporated outside of the United Kingdom (the "ARIA Non-UK Fee"). For the

avoidance of doubt, the ARIA Non-UK Fee shall be calculated solely in respect of the share of the Net Sales which corresponds to the value resulting directly from the Foreground IP.

1.6. The ARIA Non-UK Fee shall be payable within 90 days following the end of each relevant calendar year, for a period of ten (10) years from the First Sale Date, up to an aggregate total equal to 20 times the Maximum Sum.

1.7. In the event that:

(a) there is a change of control of the Foreground IP, such that you assign or grant an exclusive licence to the Foreground IP to another person; or

(b) you extend rights to the Foreground IP within your Group, such that you grant another entity within your Group a licence to the Foreground IP,

then,

(c) you must notify ARIA immediately; and

(d) include clauses 1.5 and 1.6 in the relevant instrument and ensure that it expressly provides that the provisions are intended to be enforceable by ARIA by virtue of the Contracts (Rights of Third Parties) Act 1999 (or any equivalent in any jurisdiction) and take any other step required to ensure that the ARIA Non-UK Fee is payable by the transferee or licensee (as applicable).

1.8 For the avoidance of doubt, in respect of:

(a) clause 1.7(a), provided that you have complied with clause 1.7(d), your obligation to pay the ARIA Non-UK Fee shall cease and pass to the transferee or licensee (until, in the case of an exclusive licence, the termination or expiry of such licence); and

(b) clause 1.7(d) the transferee or licensee shall only be liable to pay the ARIA Non-UK Fee to ARIA for the remainder of the aggregated total amount and the ten (10) year period specified in clause 1.7 prorated from the date of the relevant instrument.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this

Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc. Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).

Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors, clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

   For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

    For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

    This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

Stichting Centre for Future Generations (CFG) **(Grant Recipient)**

Hof van Zevenbergen 1 A

5211HB 's Hertogenbosch

Netherlands

30th May 2025

Attention: [redacted]

Dear [redacted]

FPCW-PR01-P012 - SAFEGEOGOV – Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to **Exploring Climate Cooling** and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	SAFEGEOGOV. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£1,255,090 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 1 June 2025
Completion Date	The completion is 1 November 2026
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions

Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £5 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Matthias Honegger, Program Director [redacted]	
Grant Manager	Mark Symes, Programme Director, [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] Chief Program Officer [redacted]
Notices	ARIA Contracts [redacted]	Matthias Honegger, Program Director [redacted]

[redacted] **Confirmation of Bank Details**

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

3.3. Not used.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf;

4.1.4. in relation to the Project activities, you are not an 'enterprise' within the definition of the Subsidy Control Act 2022; and

4.1.5. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not used.

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 1 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of Stichting Centre for Future Generations to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period

about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 For Grants over £500k: Annually, and on each anniversary of the Commencement Date and at the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the [Future Proofing our Climate and

Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and
(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED.

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

As global temperatures continue to rise beyond 1.5°C, there is increasing concern that interest in solar radiation modification (SRM) could surge without sufficient scientific knowledge, governance frameworks, or informed policymaking. This project examines plausible futures of SRM deployment by 2035, developing a baseline and four geopolitical SRM scenarios and outlines the contours of a global governance framework responding to the governance needs identified in the scenarios. The project is a collaboration between the Centre for Future Generations, the Organisation for Economic Co-operation and Development (OECD), the University of Leeds, and the Australian National University.

2. Aims and objectives of the Project Activities

The project SAFEGEOGOV (Strategic Foresight on Climate and Geopolitics: Toward Governance of Solar Radiation Modification) explores and produces scenarios informed by scientific and policy experts. These scenarios will make the potential risks, benefits, and uncertainties of SRM deployment more tangible. They will also offer insights into how SRM could intersect with geopolitical tensions, security concerns, migration, human rights, and similar issues.

The scenarios will explore various possibilities, from unilateral deployment by major powers to multilateral SRM initiatives led by climate-vulnerable nations. The project will also examine critical governance challenges, such as transparency in SRM research, public engagement, and international coordination and outline the contours of a global governance approach that meets key needs.

Through participatory scenario-building, briefings, and policy engagement, the project bridges the science-policy divide and places SRM governance on the policy agenda. Vice versa, the project strengthens academic work on governance by providing an understanding of real-world political dynamics. Both contributions will help advance concrete governance options grounded in strategic decision-making and institutional feasibility and thus reduce the risks of poorly informed SRM decisions – regardless of whether SRM is pursued or prevented.

3. Project Activities

A note on publication dates, policy engagements and the (sub-)project structure: SAFEGEOGOV is aiming to deliver impact by engaging different stakeholders, including senior officials. To achieve its agenda-setting ambition, it may be important for the project partners to coordinate the timing of publications. This could mean that key documents are not published before the project team brings them jointly to the attention of the OECD's Global Strategy Group (GSG) meeting in October 2026.

For the same reason, it will be important to ensure that sufficient support can be garnered from key members and partner experts before online publication. This could require some flexibility regarding the final publication date. A similar process conducted in 2024 led to the final publication of reports in late February.

The SAFEGEOGOV project partners endeavour to have the key publications ready by June 2026, including having already undertaken some of the necessary consultations by then. However, you cannot rule out the possibility that further consultations may be necessary in the months following the presentation of materials in October until a final publication by January 2027. Since the main body of work will be concluded within 12 months – followed by engagements (see Work Package D), SAFEGEOGOV runs formally for 17 Months. Yet in the case that further consultations are required, all project partners are committed to seeing the work through to final publication, including by contributing to any necessary revisions upon important feedback during that time.

You also would like to reserve flexibility regarding the most suitable branding of individual publications, including to brand some of them as publications merely by the leading project partner or – if suitable for the envisaged impact – jointly by several partners. The approach may be adapted inter alia depending on the level of political buy-in the partners are observing.

3.1 Description of Project Activities

The project activities comprise a) data generation through Delphi interviews, bi- and minilateral stakeholder consultations, and deliberative workshops, b) baseline and scenario development, c) global governance framework development, and d) engagements and dissemination.

Work Package A) Data generation: Interviews, consultations and workshops

Data generation includes Delphi interviews, workshops, and symposia. These will involve relevant practitioners and experts from a range of fields (including game theory, international relations, behavioural economics, and/or risk communications). This data will provide the analytical base for the scenario development and the anticipatory governance framework.

A1: Delphi interviews (led by Trish Lavery)

A1 comprises the design and conduct of a series of Delphi interviews under Trish Lavery's lead. The interviews will include SRM, technology, climate policy, geopolitical, governance, and foresight experts. The interviews will serve the later scenario development by mapping the analytical background and create a long list of factors that are defining aspects of SRM presently and in the future. The interviews will be led mainly by the foresight practitioner Trish Lavery (ANU) in collaboration with the CFG for subject matter expertise and access to international SRM or governance experts and practitioners.

The ANU-led work on A1 will thus result in:

- A 1-page briefing note introducing the project goals and structure to stakeholders and prospective interviewees (to be approved by all partners).
- A series of interviews conducted in the first 6-8 months of the project
- Interview protocols including summaries as data input into (B).

A2: Workshops and (online) symposia (led by Danielle Young)

A2 comprises three in-person workshops and numerous online symposia led by Danielle Young. These discussions will provide rich data input into the scenario development and identification of governance needs. A series of open-ended, research-driven simulation workshops will investigate

decision-making in non-ideal scenarios and shed light on the global geopolitical challenges SRM poses. An international research network of 25 participants will include a mix of scientists, social scientists with policy portfolios relevant to SRM, and policymakers. These workshops will focus specifically on developing and running scenarios that examine the potential geopolitical implications of SRM research and deployment in which its potential as a climate intervention is secondary to its potential as a source of competition. This sub-project work program will complement the broader SAFEGEOGOV project by providing higher-resolution data on competitive or non-cooperative mindsets and approaches that may inform the behaviour of decision-makers. It will also highlight the risks for SAFEGEOGOV project partners of non-ideal research and deployment scenarios in broader socio-political dynamics. This will contribute to forecasting exercises for anticipatory governance frameworks. The discussions will allow us to overlay and compare draft scenarios (B) with the simulation space framework to identify similarities and differences in assumptions and policy/technology implications.

The Leeds-led A2 work will thus result in:

- 3 simulation-based white papers and a report on the outcomes of the project to inform domestic and international SRM governance discussions.
- Inputs into the CFG-led scenario report and the OECD-led governance report.
- 3 presentations in different academic-policy fora to report interim results after each scenario workshop, (i) The Net Zero Regulation and Policy Hub at the Blavatnik School in Oxford, (ii) The Norwegian Institute of International Affairs (NUPI) in Oslo, and (iii) the Mile End Institute, Queen Mary University of London);
- An extensive interdisciplinary research matrix to identify areas for continuing interdisciplinary research and collaboration (led by Colleen Golja in Danielle Young's team).

Work Package B) Scenario Development (ANU and CFG-lead)

The strategic foresight process for scenario development is a structured way to think about the future through the eyes of multiple stakeholders, each of whom can bring distinct insights to broaden or deepen the range of considerations. Its purpose is to equip governments, societies, and researchers with the capacity to explore and prepare for multiple plausible futures, risks, opportunities and challenges to guide decision-making today.

The strategic foresight methodology used in this project is a comprehensive deductive approach that allows for generating evidence-based, defensible and robust SRM future scenarios. It mirrors processes employed by other International Organisations, including the UNIDIR, and is widely considered one of the most rigorous strategic foresight processes. ScMI software will be used for structured data analysis that supports the scenarios.

The scenario development, led by ANU and CFG jointly, will be informed by data input from the prior Delphi interviews and the notes from workshops and consultations. The scenario development follows the following four steps:

1. Prioritising a shortlist of the most impactful factors and assessing possible future projections for each to develop the reference scenario;

2. Assessing the consistency between projections to elucidate groups of factors that are logically most likely to co-occur;
3. Developing four reference scenarios about the future of SRM to explore tensions, trade-offs and potentially fitting (global) governance arrangements;
4. Modelling of the broad geopolitical and socio-economic-environmental implications of SRM future scenarios with an international set of thematic and policy experts.

The ANU and CFG-led work on (B) thus results in:

- A (primarily) CFG and ANU branded **scenario (synthesis) report** – showing and explaining the four 2035 SRM scenarios in a clear and concise format. For each scenario, the governance implications – including opportunities and challenges that might have to be anticipated and managed by policymakers – will be clearly articulated.
- Optional: One or more **research articles** (targeting the research community may complement the report (produced jointly with co-authorship contributions from all partners where appropriate).
- At least 5 customised **briefings** (meetings or phone calls) for specific actors (policymakers, NGOs, the media).
- **1-3 written briefing notes:** These will not initially be published but used to introduce the project in private conversations and upon approaching interviewees. One (or two) will introduce the project (and the University of Leeds-led subproject). More briefing notes may be developed later to support engagement activities (see D) including to introduce specific governance opportunities, including potential multilateral and international measures for anticipating and minimising risks and research funding design options for responsible and transparent SRM research, testing, and monitoring. Used in support of consultation meetings, these may help with inviting feedback to inform the work on the global governance framework (C). All notes will likely only be published at the time of publishing the two major reports to enhance the agenda-setting effect (upon coordination between the project partners).

Work Package C) Global Governance Framework (OECD lead)

The development of a proposed global governance framework runs parallel to and in close exchange with the above project activities. The objective is that the contours outlined match the governance needs that are unearthed through the data generation and scenario development process.

The first step is to identify the "so what" implications of the observations provided by interviewees, experts, workshop participants and other counterparts involved in the data generation (A). The second step is to identify the "so what" implications of observations flowing from the use/non-use scenarios as they are being developed (B). The third step is to compare the two lists of implications derived from data generation (A) and scenarios (B) so as to identify the totality of governance needs or functions, which would need to be met collectively in any successful global governance framework – capable of dealing with ideally all eventualities outlined in the scenarios and all concerns raised by the stakeholders and experts.

Work Package D) Engagements and Dissemination (CFG lead)

The project team will endeavor to clarify the respective roles and responsibilities for coordinated and coherent engagements with specific targets. This may start on selected aspects already from the project beginning (including at the in-person kick-off meeting in June). From the beginning, the project scope and objectives will be communicated coherently in consultation and interview meetings including through the use of the note(s) jointly developed (see A1) to ensure clarity, stakeholder interest and buy-in. The workshop engagements and those facing broader (academic) audiences may utilize a dedicated note that outlines the University of Leeds-led subproject.

The project partners will also regularly exchange information to ensure a targeted media outreach to help create an impact by informing NGO and public discussions especially around the publication date. The aim is to stimulate and broaden balanced (risk-risk) reflections on the future contexts in which SRM might be tested or deployed and the consequences - socio-economic, environmental, geopolitical and social (in)stability of each. This will include the range of climate change-related impacts and the associated governance needs, as well as potential SRM field tests or deployments and the potential geopolitical, socio-economic and environmental consequences thereof.

D1: OECD-led engagements and dissemination will include the internal coordination among OECD directorates and with key OECD stakeholders and member government counterparts as well as the dissemination of the global governance framework, including via a high-level conference (likely in October 2026) and other dedicated meetings. This will be led by the OECD's Strategic Foresight Unit in the Office of the Secretary-General.

D2: CFG-led global engagements and dissemination: global engagements to gather input to the scenario report and disseminate its implications for governance. The synthesis report and its key findings will be presented in research and policy contexts and multiple tailored briefings to senior policymakers and their advisors in the EU and other major economies, as well as with climate-vulnerable countries and civil society networks. Relevant policy fora may include the Climate Vulnerable Forum, G7, G20 and World Bank annual preparatory meetings, Arctic Council's Arctic Monitoring and Assessment Programme (AMAP) working group meetings, and more. Relevant international research conferences may include AGU, DEGREES' Global Forum, and Gordon Research Conferences. Relevant science-policy contexts may include WCRP, IPCC, and IPBES

meetings or those by the Ozone Secretariat's science panels. Relevant multilateral contexts include UN venues such as UNEP, WMO, UNFCCC, UNCBD, or Montreal Protocol.

D3: Leeds-led engagements and dissemination includes engagements with other ARIA-funded groups and broader scientific communities, and takes place in parallel. Where appropriate this may refer to the more limited-scope subproject so as to avoid interfering with the diplomatic engagements led by the OECD (D1) or CFG (D2). Corresponding talking points (and perhaps a (sub-)project description) may be prepared and jointly agreed by the project partners for this purpose. You primarily seek to mobilise experts' feedback on key scientific, technical, geopolitical and governance aspects of the scenarios, including the pace and scale of potential deployment, hardware development bottlenecks and the plausible pace of development under varying assumptions, as well as the pace and scale of earth system responses, including in cases of tipping points.

3.2 The following **Milestones** will be used to monitor delivery of the Project. The costs associated with completing these Milestones are estimated in the [redacted].

ID	Milestones	Measure	Date
1	Collaboration operational, start of interviews, first workshop delivered	Collaboration agreements, interview- and workshop records	01 December 2025
2	Scenario and governance outlines complete and ready for engagements	Two documents complete and available for consultations and engagements	01 January 2026
3	Project completed	Key engagement activities concluded leading to publication of the 2 reports - subject to OECD Member Country approval	01 November 2026

In addition to the above Milestones, the following project [redacted] will be used to track progress throughout the project and may be updated from time to time:

Note: the GANTT Chart linked above follows this list:

- Kick-off meeting in Paris, early June
- The panel of experts and stakeholders for Workshop series established (Leeds) - August
- Data management plan (Leeds) - August
- Annotated outline of scenario report to align on rough structure - Sept
- Monthly online network meetings to facilitate simulation development and design (Leeds) - months 3-12
- Introductory note(s) outlining the project (and sub-project) jointly developed and agreed upon between all partners (not for publication) - October
- Thematic and policy experts identified for Delphi interview series (ANU) - August
- Start of Delphi interviews (ANU) - September
- First in-person intensive simulation workshop on SRM decision-making challenges posed by geopolitical dilemmas (Leeds) - September
- First in-person engagement (in London) to co-create scenarios and identify governance needs (CFG and ANU) - September (back-to-back with and right before or after the above)
- First ARIA project milestone (commencement date plus 6 months - 1. December)
- Simulation space framework (integrating geopolitical, security and social science) (Leeds) - December
- Factors and projections for reference scenario developed (ANU) - November
- Second in-person intensive simulation workshop on SRM decision-making challenges posed by geopolitical dilemmas (Leeds & CFG) - Jan
- Second in-person engagement (in London) to co-create scenarios and identify governance needs (CFG and ANU) - Jan
- Third in-person intensive simulation workshop on SRM decision-making challenges posed by geopolitical dilemmas (Leeds) - April
- Third in-person engagement (in London) to co-create scenarios and identify governance needs (CFG and ANU) - April
- Fourth in-person engagement (in London) to co-create scenarios and identify governance needs (CFG and ANU) - May
- Scenario report drafted – for preparation of launch and dissemination - Sept 2026
- Governance report drafted for publication - Sept 2026
- Publication of scenario report and governance report at OECD high-level policy forum - October 2026
- Briefings and engagements based on published reports - December (CFG would continue dissemination activities as an in-kind contribution beyond the project end date in Oct. 2026)

- (approximately) quarterly project team meetings (in-person where possible, hybrid where necessary to ensure smooth scheduling). The work will be conducted in Brussels, New York, Australia, and Paris, with regular meetings held at CFG's headquarters and the OECD's office in Paris. Additional regular meetings can be arranged with ARIA, ARIA-funded researchers, and other UK-based stakeholders to inform this project and, vice versa, convey insights to other projects.

3.3 Long-term Outcomes

The **intended long-term outcomes** are summarised below:

1. Improved governance capabilities on climate and SRM, enabling informed decisions on SRM research funding and domestic and international policy action
2. Embedding of geopolitical dimensions in governance research
3. Reduced risk of unilateral action on SRM

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Planning	• Roles and responsibilities • External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD

	• review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

4. Payment

4.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears based on actual costs incurred.

The cadence of quarterly payments will align with ARIAs financial year beginning 1st April e.g. Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

4.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

4.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

4.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

5. Principal investigator/key researchers

For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Matthias Honegger	Program Director	CFG
Cynthia Scharf	Senior Fellow	CFG
Giulia Neri	Policy Officer	CFG
Roxane Cordier	Researcher	CFG

TBD	Assistant Project Manager	CFG

6. Sub-Contractors

For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
Trish Lavery (affiliated with ANU)	Lead on interviews and scenario development process	Canberra
Strategic Foresight Unit, Office of the Sec-Gen, OECD	Governance Framework development and associated policy outreach, coordination of inputs from OECD Directorates	Paris
Leeds University	Workshops and (online) symposia, short reports on workshop findings	Leeds, London

PART 2 - GRANT APPLICATION

Application titled "SAFEGEOGOV – Strategic Foresight on Climate and Geopolitics: Toward Governance of Solar Radiation Modification" submitted 8 December 2024.

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

   For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

    For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

    This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and

Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

Voltitude Limited **(Contractor)**
Cody Technology Park,
Old Ively Road,
Farnborough, GU14 0LX
17 June 2025
Attention: [redacted]
Dear [redacted]

FPCW-PR01-P001 StratoGuard - Global Monitoring of Geoengineering using Micro High-Altitude Balloons– Research Contract Agreement - Offer Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling. We are pleased to confirm that ARIA wishes to appoint you to deliver the contract research services as described in the Project for ARIA, subject to the terms and conditions set out in this Offer Letter and its Schedules.

1. Overview of the Agreement

1.1. Any reference in this Offer Letter to you or your means the Contractor and any capitalised terms have the meanings given in Schedule 1 below).

Certain variables of the Agreement are set out in the table below:

Project	The project entitled 'StratoGuard - Global Monitoring of Geoengineering using Micro High-Altitude Balloons' details of which can be found in Schedule 2.
Maximum Approved Cost (inclusive of taxes)	Maximum Approved Cost (inclusive of all taxes where applicable) is: £601,987
Commencement Date	The commencement date is 06 July 2025
Completion Date	The completion is 05 March 2028
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: At least minimum £5 million (per year in aggregate) Balloon Operator Insurance with Public Liability Insurance that is compliant with EC 785/2004.

Monitoring and Reporting	The performance reports referred to in clause 7 of Schedule 1 shall be provided by you at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Contractor's Representative	[redacted] Role: Voltitude Ltd Chief Operating Officer [redacted] [redacted]	
ARIA's Representative	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Contractor**
	Chief Product Officer [redacted]	Mr Paul Stevens Role: Voltitude Ltd CEO [redacted] [redacted] [redacted]
Notices	ARIA Contracts [redacted]	[redacted] Role: Voltitude Ltd Chief Operating Officer [redacted] [redacted] [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Contract and return it to finance@aria.org.uk.

3. Obligations

3.1. You will undertake the Project as a contract research and development project carried out at the direction of and for the benefit of ARIA's programmes.

3.2. ARIA will pay you the Approved Cost as set out in Schedule 2 for undertaking the Project in accordance with Offer Letter and its Schedules.

4. The Agreement

4.1. Once you sign a copy of this Offer Letter in accordance with paragraph 7 (Acceptance) below, it will form a binding **Agreement** between you and ARIA that includes and incorporates the following documents:

4.1.1. the **Conditions** in Schedule 1;

4.1.2. the **Project Activities**, **Milestones** and **Application** in Schedule 2; and

4.1.3. the terms relating to Data Protection in Schedule 3.

4.2. The contract effected by the signing of this Offer Letter constitutes the whole agreement between the parties and supersedes all prior negotiations, agreements, representations or understandings between them relating to the subject matter of this Agreement.

4.3. Each party acknowledges that, in entering into the Agreement, it does not rely on any statement, representation, assurance or warranty (Representation) of any person (whether a party to this Agreement or not) other than as expressly set out in the Agreement. Each party agrees that the only remedies available to it arising out of or in connection with a Representation shall be for breach of contract.

5. Warranties

5.1. By signing this Offer Letter, you warrant and represent that:

5.1.1. your obligations under the Agreement are legal, valid, binding and enforceable;

5.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Agreement have been obtained;

5.1.3. the person signing the Agreement is duly authorised to sign on your behalf;

5.1.4. there are no actions, suits or proceedings pending or, to your knowledge, threatened against or affecting you before any court or administrative body or tribunal that might affect the ability of you to meet and carry out your obligations under this Agreement;

5.1.5. the Project will be carried out by appropriately experienced, qualified and trained personnel with all due skill, care and diligence;

5.1.6. you will discharge your obligations hereunder with all due skill, care and diligence, including, but not limited to, good industry practice and (without limiting the generality of the foregoing) in accordance with your own established internal procedures; and

5.1.7. the provision of the Project and ARIA's use of the Intellectual Property rights in the Foreground IP granted shall not infringe any Intellectual Property rights of any Third Party.

6. Amendments to Schedule 1

Not Used

7. Acceptance

7.1. To confirm your acceptance of the Agreement please arrange for an authorised signatory to sign and date the duplicate copy of this Offer Letter as indicated below and return to ARIA as a complete signed original of the Offer Letter including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Agreement and to bind the Contractor.

7.2. This Offer Letter expires on 20 June 2025 and any acceptance received after this date will not be valid.

Yours sincerely

Signed by the duly authorised signatory of ARIA:

Signature

Name

Position

Date

Signed by the duly authorised signatory of Voltitude Limited

Signature

Name

Position

Date

SCHEDULE 1 - CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up this Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Offer Letter;
(b) these Conditions;
(c) the remaining Schedules to this Agreement with the exception of Schedule 2 Part 2 (the Application);
(d) Schedule 2 Part 2 (the Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, this Agreement.

2. DURATION AND OBLIGATIONS OF THE PARTIES

2.1 The Agreement will subsist for the duration of the Project Period unless extended by agreement or terminated earlier in accordance with its terms. Any provision of the Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Agreement shall remain in full force and effect.

2.2 You shall manage and complete the Project in accordance with the specification as set out in Schedule 2 Part 1 and shall allocate sufficient resources to the Project to enable you to comply with this obligation.

2.3 ARIA may request changes to the Project Activities (including changing the Approved Cost and/or the scope of the Project Activities) by providing at least 30 days written notice to you of such changes and the rationale. ARIA will agree with you the terms of any variation to the Agreement requested by ARIA to implement such changes subject to clause 26 with your agreement to the variation not to be unreasonably withheld, delayed or conditioned.

2.4 You shall use reasonable endeavours to meet any performance dates specified in Schedule 2 Part 1 or elsewhere in the Agreement and the obligations of this clause 2.

2.5 You shall:

(a) reasonably co-operate with ARIA in all matters relating to the Project; and

(b) promptly inform ARIA of the absence of the Contractor's Representative and/or Key Staff and you must provide a suitably qualified replacement approved by ARIA (such approval not to be unreasonably withheld or delayed);

(c) observe, and ensure that all member of your Staff observe, all rules and regulations and any other reasonable requirements of ARIA that ARIA has provided to you; this shall include and not be limited to ensuring that the Approved Cost shall be utilised in accordance with the Project cost breakdown (referred to in Schedule 2) covering all Project materials, equipment and any applicable Sub-Contractor costs;

(d) notify ARIA as soon as you become aware of any issues which arise in relation to the Project; and

(e) before the Commencement Date obtain, and at all times maintain, all necessary licences and consents and comply with all relevant legislation in relation to your obligations under the Agreement.

3. ENVIRONMENTAL REQUIREMENTS

3.1 In performing the Project, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. ACCOUNTING AND PAYMENTS

4.1 The total amount to be paid by ARIA to you shall not exceed the Approved Cost. Invoices raised by you for Milestone Payments shall be paid by ARIA in accordance with the Agreement (including Schedule 2).

4.2 Payments to third parties including Sub-Contractors shall remain your responsibility and you shall ensure that such payments are made promptly within 30 days from the receipt of a valid invoice.

4.3 ARIA may suspend payment at any time if (i) in the view of ARIA, acting reasonably, satisfactory progress on the Project has not been maintained (but suspension shall be limited to the affected portions of the activities), or (ii) reports have not been submitted as required under Clause 7. In the event that ARIA suspends payment under (i), you may suspend performance of the Project Activities (and ARIA's corresponding payment obligations shall also suspend) until the parties have agreed, acting in a good faith, a course of action to progress the Project Activities, in which case you shall reinstate your performance of the Project Activities and ARIA shall resume payment (including, as agreed, in respect of any missed payments) in accordance with the provisions of this Agreement. If the parties are unable to agree a course of action and/or ARIA's payment suspension lasts for two (2) months, this Agreement shall automatically terminate.

4.4 On completion of the Project Period, the final payment in respect of costs properly incurred under the Agreement will be paid by ARIA to you within 30 (thirty) days, provided that:

(a) the Project has been completed in accordance with the Agreement;
(b) the reports required under clause 7 have been submitted by you; and
(c) an agreement has been reached in respect of any items remaining for disposal.

4.5 If at any time an overpayment has been made to you for any reason whatsoever, the amount of such overpayment shall be taken into account in the assessing of any further payments or shall be recoverable from you at ARIA's discretion.

4.6 You shall keep and maintain until seven years after this Agreement has been completed, or as long a period as may be agreed between the Parties, full and accurate records of the Project including:

(a) all aspects of the Project;
(b) all expenditure reimbursed by ARIA; and
(c) all payments made by ARIA;

and you shall on request afford ARIA or ARIA's representatives such access to those records as may be required in connection with the Agreement.

4.7 You shall make any payments due to ARIA without any deduction whether by way of set-off, counterclaim, discount, abatement or otherwise, unless you have a valid court order requiring an amount equal to such deduction to be paid by ARIA to you.

4.8 If any sum of money shall be due from you to ARIA or any other government department, the same may be deducted from any sum due now or in future to you under this Agreement or any other agreement with ARIA or with any other Crown Body.

5. NOT USED

6. PROJECT REVIEW

6.1 ARIA will review the Project at the intervals specified in Schedule 2 Part 1. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Services and the Project continuing in line with existing plans;
(b) increase or decrease the Approved Cost for the remainder of the Project Period, as applicable;
(c) redefine the Milestones;
(d) require you to carry out remedial activity with the aim of improving delivery of the Services; and/or
(e) terminate the Agreement in accordance with clause 22.

6.3 Any change to these Agreement terms, Project Activities, or Approved Cost pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Agreement in accordance with clause 26.

6.4 For the avoidance of doubt any decision to terminate the Agreement as a result of a Go/No Go Milestone will be made at ARIA's sole discretion and done so in accordance with clause 22.6.

7. MONITORING AND REPORTING

7.1 NOT USED

7.2 ARIA will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project against the specifications detailed in Schedule 2 Part 1. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against them at the intervals and for the periods of time specified in Schedule 2 Part 1 and otherwise in compliance with the request of ARIA's Representative and shall detail all Data, methods, Results and provisional conclusions together with management information and any other information relating to the Project;

(b) verbal or written reports and ad hoc meetings or discussions as reasonably required by ARIA on any aspect of the Project; and.

(c) a quarterly report on your use of the Approved Costs, with details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its Project activities and compliance with the terms of the Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Project about any commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Agreement.

8. AUDITING AND ASSURANCE

8.1 You must provide supporting evidence as ARIA may reasonably require to prove that you have used the Approved Costs to carry out the Project and provide the Services in accordance with Schedule 2. The supporting evidence shall clearly identify all Project and associated overhead costs. You shall maintain proper financial records relating to the Project at all times during the Project Period and for a period of seven years after the end of the Project Period.

8.2 Subject to clause 11, ARIA and/or its authorised representative or any statutory or regulatory auditors may, at any time during the Project Period and for up to 7 years after the end of the Project Period, conduct audits in relation to your financial records for the Project and your compliance with this Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Project; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or
(b) suspend the Project and future Milestone Payments to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflict of interest between your and your Representatives obligations under the Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Project Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that they are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you to cease the conflicting activity and if that is not acceptable to you, either party may terminate this Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the Project, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of this Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;
(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information that is necessary for the

purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and to the extent that no exception to disclosure under them is applicable; or

(d) where ARIA (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under this Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable, the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the codes of practice issued and revised from time to time under the Information Acts (other than the FOIA), may disclose information concerning you and this Agreement without consulting you. ARIA must notify you of any request for information to the extent that it is permissible and reasonably practical for it to do so and will give you adequate opportunity to make representations to ARIA before it discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or this Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with this Agreement. Where either party anticipates that the other will process any Personal Data on its behalf under this Agreement it must notify the other party and the parties must agree a variation to this Agreement to incorporate appropriate provisions (such as those set out in Schedule 3) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. NOT USED

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 This Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Term if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership and licensing

15.3 Subject to Clauses 15.4 and 16.2, the Foreground IP shall belong to you and:

(a) you hereby grant to ARIA a royalty-free non-exclusive licence to use the Foreground IP for internal non-commercial purposes in ARIA's programmes; and

(b) you will cooperate with ARIA to facilitate collaborations and future licensing arrangements with Third Parties, including by participating in confidential discussions with ARIA and other Third Parties participating in ARIA's programme, in order to develop and commercialise the Foreground IP, subject to an appropriate agreement being in place with the Third Party. The foregoing shall not require you to enter into any agreement with, or license the Foreground IP to, any Third Party.

15.4 Where you assign or grant an exclusive or sole license the Foreground IP to a Third Party, you must impose on that Third Party all of the obligations set out in clause 15 and 16.

15.5 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.6 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and Publication

15.7 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.8 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.9 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to request the assignment of the patents to ARIA or its nominee.

16. COMMERCIALISATION OF FOREGROUND IP AND RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], where they are capable of exploitation you should use all reasonable endeavours to exploit the Results. This should be done in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], if for any reason you choose not to exploit any such Results within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 A royalty of 0.25% of your Net Sales which use or incorporate Foreground IP shall be payable to ARIA if you are incorporated outside of the United Kingdom (the "**ARIA Non-UK Fee**"). For the avoidance of doubt, the ARIA Non-UK Fee shall be calculated solely in respect of the share of the Net Sales which corresponds to the value resulting directly from the Foreground IP.

16.4 The ARIA Non-UK Fee shall be payable within 90 days following the end of each relevant calendar year, for a period of ten (10) years from the First Sale Date, up to an aggregate total equal to 20 times the Approved Cost.

16.5 In the event that:

(a) there is a change of control of the Foreground IP, such that you assign or grant an exclusive licence to the Foreground IP to another person; or

(b) you extend rights to the Foreground IP within your Group, such that you grant another entity within your Group a licence to the Foreground IP,

then,

(c) you must notify ARIA immediately; and

(d) include clauses 16.3 to 16.5 in the relevant instrument and ensure that it expressly provides that the provisions are intended to be enforceable by ARIA by virtue of the Contracts (Rights of Third Parties) Act 1999 (or any equivalent in any jurisdiction) and take any other step required to ensure that the ARIA Non-UK Fee is payable by the transferee or licensee (as applicable).

16.6 For the avoidance of doubt, in respect of:

(a) clause 16.5(a), provided that you have complied with clause 16.5(d), your obligation to pay the ARIA Non-UK Fee shall cease and pass to the transferee or licensee (until, in the case of an exclusive licence, the termination or expiry of such licence); and

(b) clause 16.5(d) the transferee or licensee shall only be liable to pay the ARIA Non-UK Fee to ARIA for the remainder of the aggregated total amount and the ten (10) year period specified in clause 16.4 prorated from the date of the relevant instrument.

Assignment of IP

16.7 You must, on written request by ARIA, promptly assign any Foreground IP to ARIA (or to a Third Party nominated by ARIA) if you do not:

(a) undertake further research and development work in respect of that Foreground IP; or
(b) commercially exploit (and you are not using reasonable endeavours to commercially exploit) that Foreground IP,

within eight years of its creation, and each party shall bear its own costs in relation to any such assignment.

Pricing for Crown Body customers

16.8 You must ensure that any Crown Body is able to procure, in a reasonable timeframe and in suitable quantities for its requirements, any products and services that are covered by, use or incorporate the relevant Foreground IP:

(a) at the Crown Discount price until the total Crown Discount given to all Crown Bodies equals two times the Approved Cost; and
(b) thereafter at the Most Favoured Nation Price; and

you must provide details of the yearly amount of Crown Discount being provided to ARIA within 90 days after the end of each calendar year. You must use reasonable endeavours to reach the total set out in clause 16.9(a) within 10 years after the first sale to a Crown Body.

17. ASSETS

17.1 You must take all practical steps to purchase all materials and equipment at a fair and reasonable price and provide invoices issued to you for assets purchased in connection with the Project as part of the Approved Cost.

17.2 At the end of the Project Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUB-CONTRACTING

19.1 You may not, transfer, assign, novate or otherwise dispose of the whole or any part of the Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You may only subcontract any of the Services or Project Activities except to the extent permitted, and to the Sub-Contractors identified, in Schedule 2, Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractors as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Agreement.

20. NOT USED

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Project and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Project or publicise details of the Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events (**Events of Default**) occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13 or 25, or commit a material breach of any other term of this Agreement in the reasonable opinion of ARIA;
(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;
(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA under clause 6.2;
(d) you provide ARIA with any materially misleading or inaccurate information in the specification for the Project as detailed in Schedule 2 or in subsequent related correspondence;
(e) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Sub-Contractor, immediately upon becoming aware of it;
(f) you are subject to an Insolvency Event;
(g) you undergo a Change of Control which will, in the reasonable opinion of ARIA:
    (i) be materially detrimental to, or result in fundamental changes to, the Project;
    (ii) result in your being unable to undertake the Project; and/or
    (iii) raise national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:
(a) suspend the Project and the payment of the whole or any part of Milestone Payments for such period as ARIA may determine, acting reasonably;
(b) reduce the Approved Cost, in which case the Milestone Payments will thereafter be made in accordance with the reduction and notified to you; and/or
(c) subject to clause 22.4, terminate this Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Agreement is terminated for an Event of Default that is or includes a Prohibited Act, ARIA may require you to repay the entire amount of the Milestone Payments previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and
(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Agreement, you may terminate the Agreement on written notice to ARIA if ARIA commits a material breach of the Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

Notwithstanding anything to the contrary in the Agreement, termination of the Agreement under this Clause 22.5 also results in the automatic termination of the licence granted to ARIA under Clause 15.3(a).

General Termination Rights

22.6 Without prejudice to any other provision of the Agreement, either party may terminate the Agreement at any time by giving at least 60 days' prior written notice to the other party.

22.7 Pursuant to clause 2.5, if ARIA is unwilling to accept a nominated successor(s) to Key Staff on it may terminate the Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 Termination of this Agreement, however caused, shall not:

(a) release either party from any duty or obligation of confidence which falls on such party or its servants, agents, employees or former employees under this Agreement or under the general law governing confidential information;

(b) prejudice or affect any rights, action or remedy which shall have accrued before termination or shall accrue thereafter to any party; or

(c) affect the continuing obligations of the parties under this Agreement.

22.9 If the Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.10 Where ARIA terminates the Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and
(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA; and
(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you.
(v) costs that would not have been incurred had this Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period);

22.11 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.12 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Agreement in the event that the Agreement was terminated (calculated on the basis described in clause 22.10).

22.13 ARIA's total liability under clause 22.10 shall be limited to the Maximum Approved Cost under the Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.14 If the Agreement is terminated or expires ARIA will not be liable to pay any of your costs (or those of any of your contractors or suppliers) related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Offer Letter, and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Agreement.

23.2 All disputes and complaints must be referred in the first instance to the ARIA Representative and the Contractor's Representative.

23.3 If the dispute cannot be resolved between the ARIA Representative and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to senior officers of the parties for resolution.

23.4 If within a further 10 Working Days after such meeting the dispute has not been resolved, the dispute may be referred, by either party, to mediation. The parties shall agree the mediator within 10 Working Days. The fee for the appointed mediator shall be shared equally between the parties.

23.5 Nothing in this Clause 23 shall preclude either party from commencing proceedings.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;
(b) payment of sums properly due and owing to the other in the normal course of performance of this Agreement;
(c) a breach of clause 13;
(d) liability arising under any indemnity in this Agreement; or
(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Agreement or for ARIA's breach of this Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;
(b) any reduction, suspension, withdrawal or request for repayment of the Approved Cost in accordance with this Agreement; or

(c) termination of the Agreement in accordance with this Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;
(b) loss of contracts or business opportunities;
(c) loss of anticipated savings;
(d) loss of goodwill or damage to reputation; or
(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to this Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to this Agreement or its subject matter or anything which it has done or not done in connection with this Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the Approved Cost.

24.5 You shall indemnify and defend ARIA against all Losses (including but not limited to any direct, indirect or consequential losses, loss of profit, loss of reputation and all interest, penalties and reasonable legal costs (calculated on a full indemnity basis) and all other reasonable professional costs and expenses) suffered or incurred by ARIA arising out of or in connection with:

(a) any claim brought against ARIA for actual or alleged infringement of a Third Party's intellectual property rights arising out of, or in connection with, the receipt, use or supply of the Services; and
(b) any claim made against ARIA by a Third Party arising out of, or in connection with, the supply of the Services,

provided that the foregoing shall not apply to the extent that a claim arises as a result of ARIA's negligence or breach of this Agreement.

24.6 If ARIA receives a claim which falls within the scope of the indemnity at clause 24.5 (**Claim**), ARIA shall:

(a) notify you without unreasonable delay in writing of the Claim;

(b) allow you, at your own cost, to conduct all negotiations and proceedings and to settle the Claim, always provided that you shall obtain ARIA's prior approval of any settlement terms, such approval not to be unreasonably withheld;

(c) provide you with such reasonable assistance regarding the Claim as is required by you, subject to reimbursement by you of ARIA's costs so incurred; and

(d) not, without prior consultation with you, make any admission relating to the Claim or attempt to settle it, provided that you consider and defend the Claim diligently, using competent counsel and in such a way so as not to bring the reputation of ARIA into disrepute.

24.7 You shall under no circumstances in connection with this Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.8 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Agreement.

25. RESEARCH ETHICS AND INTEGRITY

25.1 Not Used

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Staff undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to this Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

26.2 You may request a variation to the Agreement or the Project at any time giving full details of the justification of the request and ARIA may agree to vary the Agreement or refuse the request and require the continuation of the Project in accordance with the Agreement.

27. GENERAL

27.1 **Force majeure**: Neither party shall be in breach of this Agreement nor liable for delay in performing, or failure to perform, any obligations under this Agreement to the extent such delay or failure result from events, circumstances or causes beyond its reasonable control. In such circumstances the affected party shall be entitled to a reasonable extension of the time for performing such obligations. If the period of delay or non-performance continues for 3 months, the party not affected may terminate this agreement by giving 30 days' written notice to the affected party.

27.2 **Notices**: All notices and other communications in relation to this Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer

Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.3 **Change of control**: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(g) is likely to apply.

27.4 **Severability**: If any provision of this Agreement is held invalid, illegal or unenforceable for any reason by any court of competent jurisdiction, such provision shall be severed and the remainder of the provisions shall continue in full force and effect as if this Agreement had been executed with the invalid provisions eliminated.

27.5 **Waiver**: The waiver by either party of any right or remedy in respect of any breach of any term or condition or requirement of this Agreement shall not prevent the subsequent enforcement and shall not be deemed to be a waiver of any right or remedy in respect of any subsequent breach.

27.6 **Relationships**: Nothing in this Agreement shall be construed as to make any party the employee, agent, partner or legal representative of the other party for any purpose whatsoever. No party is granted any right to assume or create any obligation or responsibility, expressed or implied, on behalf of or in the name of the other party. In fulfilling obligations pursuant to this Agreement, you will be acting as an independent contractor at arm's length from ARIA.

27.7 **Contracts (Rights of Third Parties) Act 1999**: A person who is not a party to this Agreement shall have no right to enforce any terms of it which confer a benefit on him.

28. GOVERNING LAW

This Agreement (including any non-contractual disputes or claims arising in connection with this Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. Not Used

30. DEFINITIONS AND INTERPRETATION

30.1 As used in this Agreement the following terms and expressions shall have the meaning ascribed to them below:

Adequate Insurance means the insurance requirements and amounts set out in the Offer Letter;
Approved Cost means the total cost agreed between the parties for the Project as set out in Offer Letter, inclusive of VAT or other sales tax;
ARIA's Representative means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Project as set out in clause 2.1 of the Offer Letter;

Background IP means IP that is:
(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Project Period but not in connection with the Project Activities,
and is in either case used in connection with the Project;
Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;
Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;
Code of Conduct means the Code of Conduct for Suppliers published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/media/648c3ab5b32b9e000ca968c3/Supplier_Code_of_Conduct_v3.pdf, including any subsequent updates from time to time;
Commencement Date means the date set out in the Offer Letter;
Commercialisation Hypothesis means the exploitation plan set out in Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Project Period;
Completion Date means the date set out in the Offer Letter;
Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;
Contractor's Representative means a person authorised to represent you in respect of this Agreement and who shall have the authority to bind you in all matters under this Agreement as set out in clause 2.1 of the Offer Letter;
Crown or Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;
Crown Discount means the monetary value of the discount from the Most Favoured Nation Price given to a Crown Body;
Data means information collected and/or used for the purposes of the Project, which can be processed manually, electronically or by other means;
Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version

of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

EA means the Equality Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Offer Letter;

First Sale Date means the date on which you first bill an amount to a customer in respect of the sale of goods or services (or any other transaction) which use or incorporate Foreground IP;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means the Intellectual Property developed during and in connection with the Project;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for actively cooling the earth operated by ARIA/a third party in the form at Annex A;

Go/No-Go Milestone means a decision point for ARIA to determine whether it wishes to proceed with or terminate the Project Activities (any decision regarding a Go/No-Go Milestone will be made at ARIA's sole discretion, following a Grant Review as outlined in Clause 6

Gross Sales means total invoiced value of sales made during a specific period, including all amounts billed to customers such as from the sale of goods, services, licence income, royalty income, franchise fees, commissions, subscription fees, before any deductions;

Group in relation to a company, that company, any subsidiary or holding company from time to time of that company;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation.

Information Acts means the Data Protection Legislation and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property or IP means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade

secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Key Staff means the persons named in Schedule 2 Part 1;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation.

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise.

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

Milestone Payments means the payments made based on progress towards the Milestones as set out in Schedule 2 of this Agreement;

Most Favoured Nation Price means a price that is no higher than that offered to or agreed with any other customer for equivalent quantities of equivalent products or services;

Net Sales means Gross Sales after relevant accounting deductions, such as sales tax, packaging, insurance, carriage and freight, trade discounts and credits, returns and allowances, import taxes and similar applicable government levies;

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning as defined in the Data Protection Act 2018 or successor legislation;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for: (i) doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Services; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Agreement; or

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to this Agreement; and/or defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the scope specified in Schedule 2 Part 1;

Project Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Agreement;

Project Review means the process for reviewing the Project outlined in clause 6;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means any Data, reports or information or other material generated by the Project;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Services means the services being provided by you to enable fulfilment of the Project;

Staff means your Representative and all employees, consultants agents and Sub-Contractors which you engage in relation to the Project;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Services or any part thereof or facilities or services necessary for the provision of the Services or any part thereof or necessary for the management,

direction or control of the Services or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity that has or whose ultimate parent company has, its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Project Period because of termination or breach of the Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 The interpretation and construction of the Agreement shall be subject to the following provisions:

(a) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;

(b) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;

(c) the headings to Clauses are for ease of reference only and shall not affect the interpretation or construction of the Clauses;

(d) references to Clauses are references to Clauses in the part of the Agreement (i.e. the Offer Letter or particular Schedule or Annex as the case may be) in which they appear, unless otherwise stated;

(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time; and

(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation".

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

The world is striving towards net zero, but current forecasts by the IPCC make for grim reading. A 1.1℃ of global temperature rise has already occurred, with climate effects directly attributed to this change. While limiting global increases to 1.5 ℃ is possible, an overshoot is likely, potentially causing irreversible changes, including the activation of climate tipping points.

As scientists become more adept at predicting these events, mitigation solutions must be approached with caution. If tipping point limits are exceeded and if climate change begins to affect the global order, it is crucial that any response is well-prepared rather than last-minute and 'knee jerk'.

One possible technique, both in terms of technical feasibility, political will, and timely implementation, may be a form of aerosol injection into the tropical tropopause. However, it is vitally important that, were this scenario to arise, robust tools are available for monitoring the effects and measuring the impacts relative to long-term fiducial reference measurements. The primary focus must remain on ensuring that any actions taken are safe, sustainable, and beneficial for the environment.

Ultra-persistent, solar powered, micro-High-Altitude Balloons (mHABs), stationed primarily in the stratosphere, present a scientific and technological breakthrough in monitoring climate cooling mechanisms (and other atmospheric research areas), over large scales, at high resolution and for long durations, whilst offering an extremely low regulatory barrier to world-wide operation and adoption. The low-cost, long endurance mHAB system concept will unlock a 'cube sat' style capability in the stratosphere for the scientific community, using networks of mHABs which can be readily operationalised. Without a better baseline monitoring system, any active cooling interventions would be unethical at large scale, before their effects could even be detected. You believe this could also act as a global warning system to detect and highlight rogue scenarios – hence 'StratoGuard'.

2. Aims and objectives of the Project Activities

Project StratoGuard aims to develop core technologies to enable a global low cost, long endurance sensing system of multiweek endurance mHABs and be able to recover the systems at the end of life for re-use or responsible disposal and allow a payload to be steered during descent through sample areas of interest.

Aim 1: Assess the scientific and technological breakthrough potential of mHABs to provide climate intervention monitoring in the UTLS over remote and inaccessible regions, through the following project objectives.

Objective 1.1: Through trade space analysis, sub-system qualification and ground testing - define and validate the target specification and mission profile of the mHAB system against the StratoGuard role and other potential monitoring use cases from other ARIA projects.

Objective 1.2: Demonstrate an optimised super pressure balloon with a novel netting solution against the target specification and assess effectiveness.

Aim 2: Accelerate the research of other ARIA projects which require stratospheric access through the following objectives.

Objective 2.1: Integrate and demonstrate a micro-optical particle counter dropsonde and develop an in-situ payload controller to manage power, data and thermal requirements relevant to other ARIA payloads to allow in situ payload testing on any type of light category high altitude balloon.

Objective 2.2: Develop and demonstrate a steerable payload recovery system to allow reliable recovery of high value payloads, or atmospheric samples such as Frost Point Hygrometers (FPH), Electrochemical Concentration Cells (ECC), Portable Optical Particle Spectrometers (POPS) and be able to accurately sample areas of interest, such as contrails, volcanic plumes, or cirrus cloud.

Project StratoGuard is an ambitious 32-month project with planned start date 6th May 2025 with completion 31st December 2027. The project will be managed through the following four Work Packages (WP). The project schedule is attached and includes several risk mitigation activities. The project plan has been designed to allow quarterly monitoring and reporting of progress with proposed milestones selected to provide real measures of actual progress versus effort approximately every 6 months.

Work package descriptions:

WP1 – Project Management and Engineering Management: The project manager (PM) will be [redacted], Voltitude COO. This work package is responsible for overall project delivery and will hold weekly project team reviews, manage the schedule, risks and opportunities and is responsible for quarterly reporting and delivery of milestones. The PM will be supported by CEO Paul Stevens as engineering manager with a view to identifying technology exploitation and commercialisation opportunities and ensuring that appropriate engineering review gates are held within the project.

WP2 – Flight tests: Delivery and trials manager [redacted] will lead this work package which is responsible for planning and delivering all flight test activity. This includes flight planning, logistics and approvals. To offer maximum flexibility, 3 flight windows have been selected which covers Voltitude's normal operating seasons, to maximise synergy and offer additional 'slots' for alternative payloads or projects with minimal additional cost. Each window starts in ~July where UK weather allows reasonable station keeping for multiple days over the UK, while being potentially able to recover payloads and is a great opportunity for subsystem testing. If Voltitude are performing our normal operations from Cabo Verde in the Autumn, this offers an additional window for test flying e.g. if the tropical environment is needed for payload validation. M5 and M7 will ultimately lead into a stratospheric demonstration of the balloons system and payload and achieve M8.

WP3 – Platform Development: Voltitude lead systems engineer is Richard Nash who will manage this work package and manage the design life cycle. This work package is responsible for all technical aspects of the project including trade space analysis, performance modelling and monitoring, architectural design process, sub-system requirements and coordination of sub-system detailed design activity, system acceptance testing and flight test analysis and synthetic simulation. This work package contributes significantly into each milestone and is responsible for preparing the project's final report.

Within this work package there are four sub system work packages which are carried out in series:

WP3.1 The power system energy density and solar array performance will dictate the altitude range and navigation performance of a super pressure balloon. This WP will produce a solar array and

max power point tracker linked to a custom high specific energy density rechargeable battery optimised for the discharge rates needed on a stratospheric compressor. A low-pressure test will be carried out on the battery to ensure it operates at altitude, before a multi-day stratospheric test is performed to gather real world energy performance. This is an early de-risking activity as the power available and the mass of this subsystem is so influential in optimising the envelope while still meeting the ICAO light balloon category. This leads to M2.

WP3.2 concerns the super pressure envelope design and netting solution. After an initial architecting phase and optimisation study, which will include exploring the altitude ranges needed to navigate and size the balloon, the practicality of available netting and balloon manufacturing capability, and the likely thermal ranges will produce an overpressure requirement to maintain altitude and give first indications of required mass budgets, alongside the outputs from M2. This WP will then move to procurement of balloons and netting, and integration phase and a full-size ground test which will demonstrate the required overpressure, and aim to measure the effusion rate over multiple days. This may be split into two ground tests, a scaled test first to ensure modelling is correct before proceeding with an optimised net order. This achieves milestone M3 which will be a decision point for whether a super pressure mHAB is possible. If determined not to be possible, this would be a potential pivot point, where the project could move towards higher dynamic range single use latex balloons, but the focus would need to move towards increasing biodegradability in the marine environment, as in remote regions the probability of payload return drastically reduces. This WP will directly answer Aim 1 of the project.

WP3.3 /4 concerns the compressor and ballonet. These subsystems will only be worked on once the proceed criteria has been met for the super pressure envelope. This WP will initially carry out mechanical design of the compressor, and manufacturing ready for a volume flow rate test in a partial vacuum chamber, to simulate the performance in the stratosphere. This will also validate the power consumption. The ballonet design will be scaled based on the output of M3, and the results of the compressor optimisation. For instance, if the compressor can only run for 2 hours per day there would be little point in having a ballonet which takes 4 hours to fill. These WP culminate with integrating them into the super pressure balloon and performing a full ground test leading to M7. If M3 decision point results in a do not proceed with SP balloon decision, this WP, which is essentially mechanical design, will be moved towards biodegradability of a single use system.

WP4 – Payload Development and Integration: Voltitude lead systems engineer is Richard Nash will also manage this work package. This WP is separated from the core super pressure balloon WP as it is the main interface to other ARIA programmes and sub-contractors, and its outputs are applicable to any balloon system. This WP is split into three further sub-WPs: -

WP4.1 Payload controller. This is development of a PCB which will be used to offer an array of power, data and thermal management interfaces to additional payloads. Initially it will be based on supporting the University of Hertfordshire (UoH) Optical Particle Counter (OPC) but will aim to identify additional requirements from other ARIA projects. There will be a small optimisation study covering if it is more efficient to provide power locally with a dedicated solar regenerative system or if power should be provided from the main balloon. This WP will lead to M5 using a pre-existing Voltitude balloon system to test this controller in the stratosphere.

WP4.2 A micro-OPC requires a very specific flow regime to operate optimally. This work package will focus on a mechanical design and aerodynamic analysis to integrate the micro-OPC into a physical package which will be optimal when falling from the stratosphere. This will involve CFD analysis and

consultation with UoH. The antenna design will also need to be redesigned to be more aerodynamic. This WP will directly lead to M4 where a prototype micro-OPC dropsonde will be dropped from the stratosphere to sea level.

WP4.3 This WP concerns developing a steerable form of a recovery parachute to allow the payload to be recovered in a 50 m x 50 m area, subject to wind conditions. This will involve architectural analysis to ensure correct parachute sizing, control design and operation methodology in the stratosphere. This will then lead to flight controller selection and integration with the balloon manager to allow control from the stratosphere. The operation method will be tested at low level repeatedly along with tuning the flight controller to maximise trajectory control. This WP will directly feed into M6 which will attempt to test the parachute, over a remote region in case of technical failure, and demonstrate flight path control relative to an un-steered parachute but with the same safe descent rate. The first use case for this scenario will be to attempt to steer the in situ optical particle counter through a body of interest such as a cirrus cloud.

3. Project Activities

The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet: [redacted]

ID	Milestones	Measure	Date	Notes
1	Balloon launch plan agreed	Evidence supplied to internal ARIA team and Oversight Committee that launches are compliant with local regulations	Commencement Date	
2	Stratospheric Qualification of Solar Regenerative Power System	Test Completed, this informs the mass budgets of the whole system and indicates how many navigation manoeuvres can be made	Commencement date + 6 months	

ID	Milestones	Measure	Date	Notes
3	Ground Test of Optimised Super Pressure (SP) Envelope **This is a Go/No-Go milestone**	Test Completed, this is a SP **go/no-go Milestone** for if the SP concept is valid or a refocus on shorter endurance balloons is needed. Includes demonstrating that the: • **Altitude control over all use cases** validated through testing that the maximum sustained over pressure can be maintained. • **multi-week endurance requirements** can be met with proposed design, validated through effusion tests to verify daily buoyancy reduction rate assumptions. **Objective 1.1**	Commencement date + 12 months	This go/no go is related to the Super Pressure only, in the event of a 'no go' an alternative balloon would be used by agreement with ARIA.

ID	Milestones	Measure	Date	Notes
4	Stratospheric test of Micro-OPC Dropsonde	Testing completed **demonstrating micro OPC dropsonde capability** and specifically validating: • antenna/data link performant through descent to surface. • descent is stable and validates modelling predictions. • thermal and power budgets validated with dropsonde optimally powered to landing/splash down. • particulates spectra detected showing agreement with independent observations e.g. forecast, spacebased, or in situ observations during initial HAB ascent.	Commencement date + 15 months	

ID	Milestones	Measure	Date	Notes
5	Upper Tropospheric Lower Stratospheric (UTLS) in-situ profiling test of OPC	Test completed **demonstrating UTLS in-situ observation profiling capability** and specifically: • OPC sensor support functions from payload controller (PLC) tested and optimal provision of power, thermal control, data transfer from OPC sensor via SATCOM. • Particulates spectra detected showing good agreement with forecasted altitudes and positions. • Multiple day/night targeted UTLS profiling capability demonstrated. **Objective 2.1**	Commencement date + 18 months	
6	Stratospheric Test of Payload Recovery System	Test completed, demonstrating controlled recovery to an area specified in flight. **Objective 2.2**	Commencement date + 18 months	
7	Full System Ground Test of mHAB	Test completed, full inflation and all systems tested.	Commencement date + 24 months	

ID	Milestones	Measure	Date	Notes
8	Stratospheric Flight Test of Super Pressure (SP) Balloon	Test completed **demonstrating SP balloon system capability**: • Successful ascent to level-off at target altitude in the stratosphere. • SP balloon rate of change of pressure agrees with modelling predictions over >3-day period. • Altitude manoeuvres performed and validate min to max altitude modelled prediction and altitude control fidelity. • Power budgets and compressor design validated and agrees with modelled efficiency to confirm altitude range per day for profiling and navigation. **Objective 1.2**	Commencement date + 27 months	In the event of a 'no go' for Milestones ID 3, this Milestone 8 would be revised and agreed with ARIA.
9	Final Report	Report detailing all successes / failures of project Data from tests and campaigns and technical know-how submitted to open-access ARIA data repository.	Commencement date + 32 months	

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted]

3.1 The intended long-term outcomes are summarised below:

Project StratoGuard aims to develop core technologies to enable a global low cost, long endurance sensing system of long duration mHABs and be able to recover the systems at the end of life for re-use or responsible disposal.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Kick off	● Roles and responsibilities ● External communications ● Project details
Quarterly	Reporting: ● Technical status - Red/Amber/Green ● Delivery status - Red/Amber/Green ● The latest progress against milestone(s) from last quarter ● Invoicing and cost reporting Optional: ● Key Learning, discoveries and decisions ● Stories to highlight ● Priorities for the next quarter ● Challenges ● Changes to team and new collaborations ● technical evidence saved to drive e.g. report or presentation as requested by PD ● review meeting slide deck saved to drive as requested by PD Review meeting with ARIA Programme Team
Annual	● ARIA impact metrics ● Attendance at annual ARIA event
Ad hoc	● As required, Programme Director/ Programme Team may request additional information and evidence ● Workshops - potential to be invited to ARIA workshops

Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principle investigator/key researchers

6.1 For the purposes of clause 2.5, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Steven Tate	Principle Investigator	Voltitude
Paul Stevens	Engineering Manager	Voltitude
[redacted]	Project Manager	Voltitude
Richard Nash	Systems Engineer	Voltitude

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
University of Hertfordshire	Provision of Optical Particle Counter sensor and calibration services; consultation on sensing requirements & capability for atmospheric aerosols, optimisation & analysis of combined flight opportunities, ensuring interoperability with satellite-based data, and modelling/data validation activities.	UK

PART 2: APPLICATION FORM

Application titled "StratoGuard - Global Monitoring of Geoengineering using Micro High-Altitude Balloons" submitted 09 December 2024

SCHEDULE 3: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of

Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an

opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc. Note the definition of processing in the UK GDPR: "any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction"]
Duration of Processing:	Duration of this Agreement (and any post termination processing that is permitted / required).

Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors, clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

Institut Teknologi Sepuluh Nopember (ITS) **(Grant Recipient)**

Jl. Teknik Kimia, Keputih, Kec. Sukolilo,

Surabaya, East Java, 60111

Indonesia

28 May 2025

Attention: Prof. Heri Kuswanto

Dear Heri,

FPCW-PR01-P002 Towards Robust and Unbiased Validation of SAI Simulations (TRUSS) – Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to the Exploring Climate Cooling call and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Towards Robust and Unbiased Validation of SAI Simulations (TRUSS). A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£ 345,188 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 02 June 2025
Completion Date	The completion is 01 June 2028
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process

	referred to in clause 6 of the Conditions	
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £5 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Heri Kuswanto, Professor in Statistics Phone: [redacted] Email: [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] Director of Research and Community Service – ITS [redacted] [redacted]
Notices	ARIA Contracts [redacted]	[redacted] Director of Research and Community Service – ITS [redacted] [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 01 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of Institut Teknologi Sepuluh Nopember to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 At the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose

concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you

assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the [Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and
(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. Not used

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

This project, Towards Robust and Unbiased Validation of SAI Simulations (TRUSS): Advancing Ensemble Calibration for Reliable Geoengineering Impact Analysis, is funded under the ARIA Exploring Climate Cooling programme. It addresses a critical gap in the validation of Stratospheric Aerosol Injection (SAI) ensemble simulations by refining climate intervention models. Many existing studies focus on ensemble means while often overlooking variability and uncertainties, which are essential for assessing the robustness of SAI models, particularly at regional scales. By leveraging Bayesian ensemble calibration and machine learning-based corrections, this project aims to enhance the reliability of SAI ensemble outputs and improve climate intervention impact assessments.

2. Aims and objectives of the Project Activities

The primary Research Objectives (ROs) of this project are:

- **(RO1)** To quantify and reduce uncertainty in ensemble outputs from SAI simulations (e.g., ARISE, GLENS).
- **(RO2)** To develop advanced calibration techniques that enhance the predictive power and reliability of ensemble simulations.
- **(RO3)** To validate the calibration techniques using observational data and alternative simulations.
- **(RO4)** To utilize the calibrated ensemble outputs for regional and local SAI impact analysis

3. Project Activities

3.1 The project is structured into three key work packages:

- WP1: Uncertainty Quantification and Calibration
    - Conduct statistical analyses to quantify variability in ensemble outputs.
    - Develop Bayesian calibration and machine learning-based methods to refine ensemble predictions.
    - Deliverable: Calibrated ensemble simulation outputs with quantified uncertainty.

Milestone relevance - This work package lays the foundation for the project. It directly supports:

- Milestone 1 (Month 6): Initial Uncertainty Quantification & Model Selection
    - You will complete data acquisition from ARISE and GLENS, conduct an initial analysis of ensemble variability, and document the selection of statistical and machine learning calibration methods.
- Milestone 2 (Month 18): Development of Prototype Calibration Models

    - This covers the design and testing of both Bayesian ensemble calibration models and adaptive machine learning-based bias correction approaches, using selected datasets
- WP2: Validation
    - Validate calibrated outputs using historical climate data and observational comparisons.
    - Conduct sensitivity tests to assess model robustness.
    - Deliverable: A comprehensive publication detailing the reliability of calibrated ensembles.

Milestone relevance - This focuses on testing the robustness of your calibration techniques and supports:

- Milestone 3 (Month 24): Validation of Calibrated SAI Simulations
    - Involves benchmarking calibrated outputs against historical climate data, completing sensitivity analyses, and submitting findings for peer-reviewed publication.
- WP3: Impact Analysis
    - Utilize calibrated ensemble data to evaluate regional and local SAI impacts.
    - Assess variability within the calibrated ensembles for improved decision-making.
    - Deliverable: Regional impact assessments and reports.

Milestone relevance - This applies validated ensemble outputs to regional SAI impact assessments and supports:

Milestone 4 (Month 33): Regional Climate Impact Analysis & Open-Source Tool Development

This includes generating region-specific impact reports and releasing a reproducible open-source calibration and analysis toolkit.

Milestone 5 (Month 36): Final Project Completion & Submission of Reports & Publications

You will finalize all deliverables, submit additional publications, and deposit outputs in ARIA's open-access repository along with our final project report.Deliverable: Regional impact assessments and reports

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted]

ID	Milestones	Measure	Date

1	Initial Uncertainty Quantification & Model Selection	Data acquisition from ARISE and GLENS completed; Initial uncertainty quantification and method selection documented.	Commencement Date + 6 months
2	Development of Prototype Calibration Models	Bayesian ensemble calibration and machine learning bias correction models developed and tested on initial datasets.	Commencement Date + 18 months
3	Validation of Calibrated SAI Simulations	Calibrated outputs tested against historical climate data; Sensitivity analysis completed. Publication submitted.	Commencement Date + 24 months
4	Regional Climate Impact Analysis & Open-Source Tool Development	Application of calibrated ensembles for regional impact analysis; Finalized calibration methodologies released as an open-source tool.	Commencement Date + 33 months
5	Final Project Completion & Submission of Reports & Publications	Project results submitted to peer-reviewed journals, and output data made available in ARIA open access repository; Final report and brief completed.	Commencement Date + 36 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted]

3.3 The intended long-term outcomes are summarised below:

The long-term outcome of this project is to establish a robust and unbiased framework for validating Stratospheric Aerosol Injection (SAI) simulations, enhancing their reliability for climate impact assessments. By integrating Bayesian ensemble calibration and machine learning techniques, the project aims to significantly improve uncertainty quantification and predictive accuracy in SAI models, ensuring they provide more reliable and actionable insights for decision-makers.

In the long run, this research will:

1. Support Informed Climate debate – By providing validated, uncertainty-aware SAI ensemble outputs, policymakers and climate scientists will be better equipped to assess the feasibility, risks, and benefits of climate interventions.
2. Enable Scalable Validation Methods – The calibration and validation methodologies developed in this project will be applicable to future climate simulations, including smaller ensembles and new scenarios such as those in GeoMIP.
3. Advance Open-Source Climate Modeling Tools – The project's results, including calibration methods and datasets, will be made publicly accessible to support the broader climate science community, enhancing transparency and reproducibility.
4. Strengthen International Collaboration – The research outcomes will foster continued engagement between academia, policymakers, and climate modeling centers, paving the way for further interdisciplinary research on climate intervention strategies.

Ultimately, this project will set a new standard for the validation of SAI models, reduce overconfidence in ensemble-based climate projections, and contribute to responsible and scientifically sound discussions on climate interventions.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Kick off	• Roles and responsibilities • External communications • Project details

Quarterly	Reporting: ● Technical status - Red/Amber/Green ● Delivery status - Red/Amber/Green ● The latest progress against milestone(s) from last quarter ● Invoicing and cost reporting Optional: ● Key Learning, discoveries and decisions ● Stories to highlight ● Priorities for the next quarter ● Challenges ● Changes to team and new collaborations ● technical evidence saved to drive e.g. report or presentation as requested by PD ● review meeting slide deck saved to drive as requested by PD Review meeting with ARIA Programme Team
Annual	● ARIA impact metrics ● Attendance at annual ARIA event
Ad hoc	● As required, Programme Director/ Programme Team may request additional information and evidence ● Workshops - potential to be invited to ARIA workshops
Project closure	● Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments monthly in arrears.Monthly payments will align with the calendar month

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have

been identified:

Name	Role	Organisation
Heri Kuswanto	Principal Investigator (PI)	Institut Teknologi Sepuluh Nopember (ITS)
Kartika Fithriasari	Co-PI	Institut Teknologi Sepuluh Nopember (ITS)
[redacted]	Postdoctoral Researcher	Institut Teknologi Sepuluh Nopember (ITS)
PhD Student (TBA)	Research Assistant (Early Career)	Institut Teknologi Sepuluh Nopember (ITS)
[redacted]	Research Assistant	Institut Teknologi Sepuluh Nopember (ITS)
[redacted]	Researcher Assistant	Institut Teknologi Sepuluh Nopember (ITS)
[redacted]	Research Assistant	Institut Teknologi Sepuluh Nopember (ITS)
[redacted]	Research Assistant	Institut Teknologi Sepuluh Nopember (ITS)
[redacted]	Research Collaborator	Cornell University - USA
[redacted]	Research Collaborator	Exeter University - UK

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location

PART 2 - GRANT APPLICATION

Application titled "Towards Robust and Unbiased Validation of SAI Simulations (TRUSS): Advancing Ensemble Calibration for Reliable Geoengineering Impact Analysis" dated 30 November 2024.

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

   For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

    For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

    This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;

Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

University Court of the University of Glasgow **(Grant Recipient)**

University Avenue, Glasgow,

G12 8QQ

18 June 2025

Attention: Colin McInnes

Dear Colin,

FPCW-PR01-P022 - An assessment of a space-based solar radiation management technology demonstrator – Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	An assessment of a space-based solar radiation management technology demonstrator. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£342,216 inclusive of all taxes where applicable)
Commencement Date	The commencement date is 1 October 2025
Completion Date	The completion is 30 September 2026
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions

Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £5 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Professor Colin McInnes, James Watt Chair, Professor of Engineering Science, [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] Head of Research Contracts, [redacted]
Notices	ARIA Contracts [redacted]	[redacted], Project Coordinator, [redacted]

[redacted] **Confirmation of Bank Details**

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

3.3. Not used.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not used.

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 20 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of University Court of the University of Glasgow to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

6.4 Not used.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make

reasonable requests for information from you from time to time after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 For Grants between £100k and £500k: At the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and

Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation

Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;

(b) where you become a Non-UK Entity;

(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or

(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;
(b) loss of contracts or business opportunities;
(c) loss of anticipated savings;
(d) loss of goodwill or damage to reputation; or
(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or

(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,

and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked), (a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,

(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

Space-based solar radiation management using sunshades is seen as a means of reducing solar insolation to offset the radiative forcing due to increased CO2 concentration. A range of concepts have been proposed, with most centring on the use of multiple sunshades located sunward of the Sun-Earth L_1 Lagrange point on the line connecting the Sun and the Earth. In order to take the first steps towards such a future an end-to-end in-space demonstration is required. For example, a small sunshade could be delivered from a low-cost CubeSat platform in Earth orbit on a day/night orbit passing in front of the solar disk. An array of ground-based telescopes under the orbit ground track could then be used to image the sunshade as it passes in front of the solar disk, while attempting to measure the reduction in solar flux at the observation points.

2. Aims and objectives of the Project Activities

The top-level objective of the project is to deliver a technical assessment, cost estimate and schedule for a space-based solar radiation management technology demonstrator. The project will:

1. Define strategies which can demonstrate a measurable reduction in solar insolation in a minimum viable experiment;
2. Propose a mission concept to make such measurements;
3. Work with our industrial partner to determine technical feasibility and cost;
4. Define a multi-year phased development of the mission.

3. Project Activities

3.1 Work package (WP) summary:

WP1: Science goals for artificial solar occultation

WP1 will define the science goals, assess what occultation measurements could feasibly be made and provide inputs for subsequent WPs. The specific tasks comprise:

Task 1.1 Modelling of shading on Earth

Task 1.2 Measurement strategies

Task 1.3 Data analysis strategies

WP2: In-orbit technology demonstrator mission

WP2 will design the sunshade mission and spacecraft, trading off the different options and providing inputs for subsequent WPs 3 and 4. The specific tasks comprise:

Task 2.1 Mission design

Task 2.2 ADCS (attitude determination and control system)

Task 2.3 Spacecraft design

WP3: Industry assessment

WP3 will integrate the outputs of WP1 and WP2 to conduct an industrial assessment of the mission. This will include evaluating and defining a spacecraft solution, and identifying the necessary engineering modifications to AAC Clyde Space's EPIC spacecraft. Additionally, WP3 will assess the delivery timeline and total costs. WP3 will also provide support to WP1 and WP2 to ensure integration of the project tasks to deliver a feasible mission concept.

Task 3.1 Spacecraft design

Task 3.2 Programmatic assessment

Task 3.3 Commercial assessment

WP4: Mission roadmap, risks and reporting

WP4 will define the future development of the technology demonstration mission with a realistic assessment of the technical challenges, schedule and budget. The final report for ARIA will be delivered at the end of WP4. The specific tasks to be undertaken comprise:

Task 4.1 Mission roadmap planning and cost estimation

Task 4.2 Key technical challenges, programmatic and regulatory risks

Task 4.3 Final reporting to ARIA

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted]

ID	Milestones	Measure	Date
1	Completion of shading model and initial mission design	Completion of Task 1.1 and Task 2.1. Functional code to predict reduction in solar insolation. Feasible initial mission concept developed.	Commencement Date + 3 months
2	Completion of measurement strategy analysis	Completion of Task 1.2. Feasible strategy for solar insolation reduction measurement, and/or alternative scenarios (planetary disk, stellar occultation).	Commencement Date + 6 months
3	Completion of mission and spacecraft design for input to WP 3	Completion of Work package 1 and Work package 2 ready for industrial assessment by AAC Clyde Space.	Commencement Date + 9 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted].

3.3 The intended long-term outcomes are summarised below:

Space-based solar radiation management has long been discussed as a speculative concept for the future. The key motivation for the project is to assess the feasibility of a near-term, low cost end-to-end technology demonstration mission. If the study demonstrates that an end-to-end technology demonstrator is feasible, and falls within ARIA cost envelopes, the long-term outcome would be the first in-orbit demonstration of scaled solar radiation management, which would pave the way for future development of the technology.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Kick off	• Roles and responsibilities • External communications • Project details
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Invoicing and cost reporting Optional: • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD Review meeting with ARIA Programme Team
Annual	• ARIA impact metrics

	• Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Colin McInnes	Principal Investigator	University of Glasgow
Matteo Ceriotti	Co-investigator	University of Glasgow
Onur Çelik	Co-investigator	Delft University of Technology

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
Delft University of Technology	Lead for Work package 1: Science goals for artificial solar occultation Contributor to Work package 4: Mission	Netherlands

	roadmap, risks and reporting	
AAC Clyde Space	Lead for Work package 3: Industry Assessment Contributor to Work package 4: Mission roadmap, risks and reporting	Glasgow

PART 2 - GRANT APPLICATION

Application titled "An assessment of a space-based solar radiation management technology demonstrator" submitted 6 December 2024

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

   For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

    For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

    This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and

Sumission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

University of Reading **(Grant Recipient)**

Whiteknights House, Reading RG6 6UR

03 July 2025

Attention: Giles Harrison

Dear Giles,

FPCW-PR01-P004 BrightSpark: cloud brightening with electric charge– Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	BrightSpark: cloud brightening with electric charge. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£1,970,786 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 1 September 2025
Completion Date	The completion is 31 August 2028
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions

Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £5 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Prof Giles Harrison, Department of Meteorology, University of Reading [redacted] [redacted]	
Grant Manager	Mark Symes, Programme Director, [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	For contractual escalation: SMPCS Contracts Manager, The University of Reading, Research and Enterprise, [redacted] For technical escalation: Giles Harrison, Professor of Atmospheric Physics, Department of Meteorology, The University of Reading, [redacted]

		[redacted]
Notices	ARIA Contracts [redacted]	For contractual notices: SMPCS Contracts Manager, The University of Reading, Research and Enterprise, [redacted] For technical notices: Giles Harrison, Professor of Atmospheric Physics, Department of Meteorology, The University of Reading, [redacted]

[redacted] **Confirmation of Bank Details**

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

3.3. Not used

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

Not Used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 7 July 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of University of Reading to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

6.4 For the avoidance of doubt any decision to terminate the Grant Agreement as a result of a Go/No Go Milestone will be made at ARIA's sole discretion and done so in accordance with clause 22.6.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 Annually, and on each anniversary of the Commencement Date and at the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.]

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose

concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you

assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge] if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge], if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the [Future Proofing our Climate and Weather Intellectual Property Pledge], to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and
(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement or restitution more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. Not used

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Go/No-Go Milestone means a decision point for ARIA to determine whether it wishes to proceed with or terminate the Project Activities (any decision regarding a Go/No-Go Milestone will be made at ARIA's sole discretion, following a Grant Review as outlined in Clause 6);

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

This project – BrightSpark - will investigate electric charge emission as a method for modifying droplet size distributions to increase their reflectivity, to evaluate this as a potential method to achieve marine cloud brightening.

2. Aims and objectives of the Project Activities

The aims of the project are:

- Equipping microdrones with lightweight charge emission technology
- Develop control systems and strategies for coordinating microdrone operation in fogs
- Identify a measuring site and install monitoring equipment and microdrones
- Scope and implement experimental infrastructure for fog experiments
- Model the effects of a charge release experiment in the quantities which can be recorded
- Undertake the charge release experiments in fog
- Use modelling to explore how the technology can be scaled up for marine cloud
- Report results

3. Project Activities

3.1 Workstream descriptions

Workstream	Scope	Purpose
WS1	Charge delivery systems	Optimising size and efficiency of ion emitters for microdrones
WS2	UAV instrumentation integration	Integration and testing of cloud and reflectivity sensors with monitoring drones
WS3	Site identification and engagement	Assessment and prioritising of experimental sites, and engagement with stakeholders
WS4	Swarm technology	Develop control and operation systems for the microdrones. Submissions for field experiment and other permissions
WS5	Charge microphysics modelling	Representing relevant charge microphysics in high resolution models and Met Office NERC Cloud Model (MONC). Model runs with upper bound scenarios on albedo: derive optimal intervention strategies and bounding adverse effects

WS6	Site instrumentation	Constructing surface measurement and monitoring systems
WS7	Field experiments	Range of experiments to test the microdrone swarm in clear and foggy air
WS8	Field experiment modelling	Ensembles of high-resolution model runs to assess natural variability in reflectivity. Evaluate if interventions lie outside the control ensemble
WS9	Marine stratus scoping	Evaluating marine platforms for a microdrone system
WS10	Reporting and data archiving	Ongoing throughout the project, through international conferences and peer-reviewed publications. Data archiving activities also.

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet : [redacted]

ID	Milestones	Measure	Date
1	Preparations for outdoor experiments underway	Suitable field sites identified and initial technical feasibility study conducted. Outline engagement plan complete and presented to internal ARIA team and Oversight Committee. Reports on both of the above submitted to the programme team and oversight committee for review.	Commencement date + 3 months
2	Functioning charge delivery systems for microdrones demonstrated **This is a Go/No Go Milestone**	Drones can stay airborne whilst carrying charge delivery system. Threshold voltage to achieve charge emission met.	Commencement date + 12 months

3	Engagement for outdoor experiments underway	Initial mapping of stakeholders complete. Appropriate first community engagement/codesign/education event held.	Commencement Date + 9 months
4	Atmospheric monitoring capability on UAV1 and UAV2 demonstrated	Measurement of solar radiation, temperature, humidity, droplet properties at suitable resolution and accuracy demonstrated (although all of these sensors need not be carried by a single drone)	Commencement date + 15 months
5	Independent risk/impact assessment	Risk and impact assessment by independent environmental consultant complete Risk assessment shared with stakeholders for further codesign as appropriate	Commencement Date + 15 months
6	Demonstrate charge microphysics modelling capability for layer cloud properties	Maximum physics based upper bound effect that could be expected from charge-induced cloud brightening is quantified	Commencement date + 21 months
7	Final submission for funding for outdoor perturbative experiment **This is a Go/No Go Milestone**	Full experimental and engagement details submitted to ARIA, with evidence that the field trials can be conducted in a safe manner, compliant with regulation, with effective control measures and that key stakeholders, the local population and the wider public have been effectively consulted in keeping with the size and scale of the experiments Outdoor experiments (if approved) are then expected run M27 to M30 (wintertime)	Commencement Date + 21 months

8	Model options to scale up technology to marine stratus defined	Expansion of models to regional/global scale complete, allowing answers to questions such as "What scale of effect could be produced?"	Commencement date + 27 months
9	Outdoor experiment completed	Effects on scale of around 100 metres are identified over timescales of ~minutes, as and when fog is available Duration of effects on a local scale after charge emission has ceased will be quantified. Does the effect dissipate, or are effects longer lasting?	Commencement date + 30 months
10	Project complete	Simulate scientific results from field experiments, complete data archiving and make this data available on open-access ARIA repository	Commencement date + 36 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted].

3.3 The intended long-term outcomes are summarised below:

- If successful, a new method of cloud perturbation using electric charge will be demonstrated
- Effective use of a swarm to provide charge modification
- Development of models to include charge interactions
- Modelling and technology development will allow the scalability of the technique to be tested subsequently

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Planning	• Roles and responsibilities • External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principal investigators or key researchers have been identified:

Name	Role	Organisation
Prof Giles Harrison	PI	University of Reading
Dr Keri Nicoll	Co-I (experiments)	University of Reading
Prof Maarten Ambaum	Co-I (modelling)	University of Reading

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Headquarters Location
Menapia	Provision of scientific services with UAVs, including atmospheric profiling	Leeds, UK
Celestial	Coordinated operation of multiple microdrones for field experiments	Norton St Philip, UK
TBC	Provision of environmental law expertise and ethical expertise	TBC

PART 2 - GRANT APPLICATION

Application titled "BrightSpark: cloud brightening with electric charge" submitted 9 December 2024

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection NOT USED

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

Cornell University (Grant Recipient)

373 Pine Tree Road, Cornell University, Ithaca, New York 14850-2820 USA

25/06/2025

Attention: Douglas MacMartin

Dear Douglas ,

FPCW-PR01-P020 - Defining the minimum scale of an SAI test: a fundamental first step towards an outdoor large scale experiment– Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Defining the minimum scale of an SAI test: a fundamental first step towards an outdoor large scale experiment. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£444,970 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 15 July 2025
Completion Date	The completion is 14 July 2027
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions

Adequate Insurance	Commercial General Liability- $1,000,000 million per occurrence Automobile Liability- Combined Single Limit Each Accident $1,000,000 Million Umbrella Liability- $1,000,000 per occurrence Educators Liability- $1,000,000 per claim Workers Compensation- Self-Insured Retention $1,500,000 per claim.	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Douglas MacMartin, Associate Professor Sibley School of Mechanical and Aerospace Engineering [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] Sr. Grant & Contract Officer [redacted]
Notices	ARIA Contracts [redacted]	[redacted] Sr. Grant & Contract Officer [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to finance@aria.org.uk

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and

incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. **Amendments to the Grant Conditions**

5.1. Not Used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 4 July 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of Cornell University to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.. The Grant Recipient will use reasonable, good faith, diligent efforts in performance of the Project Activities. However, ARIA and you acknowledge that research, developments, and outcomes may be somewhat uncertain, unanticipated, or unpredictable, and the Project Activities will be pursued without guarantee regarding the achievement of any specific results.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes.

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 Within six months after the end of each Financial Year and after the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant which is signed by a senior finance individual.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time upon thirty (30) days written notice during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or

potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by ARIA, You must treat all Confidential Information belonging to or disclosed by ARIA as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the ARIA, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality similar to those herein.

11.2 Both parties may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, Both parties may publish a copy of the Milestones (in whole or in part) in any medium.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of ARIA:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by any applicable Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.3.2 Confidential Information shall not include the following:

(a) Information that was previously known to you free of an obligation to keep it confidential (otherwise than by breach of clause 13);

(b) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure;

(c) is already in the possession of or is independently developed by you;

(d) is released with ARIA's written consent; or

(e) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Not Used.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create. Where your individual researchers will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the [Future Proofing our Climate and Weather Intellectual Property Pledge] promptly following creation or filing (as applicable) of such Foreground IP (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the [Future Proofing our Climate

and Weather Intellectual Property Pledge]. You hereby agree to comply and uphold the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge].

15.5 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the [Future Proofing our Climate and Weather Intellectual Property Pledge] promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge]. You hereby agree to comply and uphold the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge].

Attribution to ARIA

15.6 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.7 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.8 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.9 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.10 Subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge] if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Where they are capable of commercial exploitation you should seek to exploit the Results commercially.

16.2 If for any reason you choose not to exploit any such Results commercially within a reasonable timeframe you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the [Future Proofing our Climate and Weather Intellectual Property Pledge], o avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost

of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to negotiate for consideration consistent with your institution's pracitces.

16.10 Not Used.

16.11 Not Used.

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 Neither party may transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's the non-assigning party's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) not used.

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses, whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or

(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities.

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by ARIA to the other party whether after the date of the Grant Agreement, which may include any information that ought reasonably to be considered to be confidential (whether or not it is so marked) relating to: (i) the business, affairs, customers, clients, suppliers or plans of the disclosing party; or (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities which has not been published or otherwise publicly disclosed; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; notwithstanding the foregoing, neither party anticipates or plans disclosure to the other of any Personal Data in connection with this Grant Agreement and the activities conducted

hereunder;**Crown Body** means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force which apply to the party relating to the use of Persoanl Data, and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, and materials generated in the course of the Project Activities;
Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;
Third Party means any person or organisation other than you or ARIA;
UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;
Unavoidable Costs means the amounts paid to you in respect of the termination as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;
Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and
Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

Stratospheric aerosol injection (SAI) could be used to reflect a small amount of sunlight back to space, cooling the planet. We know with certainty that this would cool, and if it were started at high latitudes where the tropopause is lower, it could potentially be conducted using existing (but modified) aircraft, making this the most near-term option for radically reducing the risks of climate change. Nonetheless, there are still critical uncertainties that would need to be narrowed before informed decisions about using SAI could be considered robust.

You will start from the assumption that the nearest-term use of SAI is highly likely to be with sulfate aerosols, with gaseous dispersal of a precursor (SO2 being the obvious candidate), and released from aircraft. The expectation that sulfate is the nearest-term option is due to the close similarity with natural analogues, and due to your knowledge of the environmental impacts of sulfate compared to novel materials; releasing as a gaseous precursor is expected to be more straightforward, and is again consistent with natural analogues. (And analyses consistently show that aircraft are likely the cheapest means of lofting material). This makes reducing the remaining uncertainties associated with SO2 release a high priority for near-term research.

With SO2, the biggest source of testable uncertainty that could be reduced at a scale relevant for an outdoor experiment is associated with aerosol microphysics, leading to uncertainty in the aerosol size distribution, and hence both lifetime and radiative efficacy; this ultimately affects the overall amount one needs to inject to achieve a given amount of cooling. This uncertainty comes from the potential competition between nucleation (new particle formation) and condensation/coagulation (particle growth) of H2SO4 vapors and already nucleated sulfate aerosols, which in turn is strongly dependent on spatial inhomogeneity, as well as on initial conditions (such as ion-induced nucleation within the plume of an aircraft). In a climate model, these small-scale processes are represented by simplified parametrizations, based on a small amount of existing observations after volcanic eruptions, pyrocumulus etc. However, these representations have already been demonstrated to be highly model dependent (roughly a factor of two range across models), including even dependent on the physical timescale of the calculations, due to competition between different simultaneous processes (nucleation versus coagulation) that need to be resolved at a high temporal scale. Even more critically, the existing observations that lead to current parameterizations are from analogues that are not fully representative of the conditions that would happen during SAI, and there is little basis to guess how large an effect this might have on predictions without direct experimentation.

An outdoor experiment could be designed specifically aimed at reducing this uncertainty, but it is unclear what scale this experiment would need to be. This is the primary question you will address here - not the detailed experiment design, but rather a robust scientific definition of the scale that such an experiment would need to be conducted at in order for it to meaningfully constrain some of the key microphysical uncertainties. This would not just be a critical first step in the design of the experiment, but would provide critical information for supporting evidence-based conversations on research governance.

There are two key observations that guide your thinking in the potential design of such an experiment:

It would be essential to conduct the putative experiment in as close a way as possible to the way SO2 would be released in practice, in order to ensure that the conclusions were applicable to a realistic scenario. This would require release from an aircraft, and at release rates (kg/s or kg/km of travel) similar to rates expected in an actual SAI event. This would ensure both that the initial plume concentrations were relevant, and also that the test did not over- or under-represent effects from exhaust ions or aircraft wake turbulence for example.

It would be essential to be able to track the resulting plume until oxidation and aerosol formation were mostly complete, so 2-4 weeks. This would require a sufficiently large initial injection of material to ensure that after several weeks of mixing, the aerosol concentrations remained locally high enough that the plume could be found.

The initial plume of SO2 from the aircraft would gradually spread, advecting with the local winds, and diffusing, but even after a few weeks would lead to a broad plume or tube of higher aerosol concentrations that would not necessarily be close to uniformly mixed throughout the scale of a climate model grid cell.

2. Aims and objectives of the Project Activities

Your goal is to determine the minimum size of an experiment that would allow for a substantial reduction in this uncertainty.

The two main questions that need to be answered to address this goal are (i) understand the range of plausible plume spreading rates, and (ii) assess the ability to forecast future plume location (to reduce the search space). In addition it is important to understand instrument detection thresholds, and to assess potential transboundary implications of such a test.

3. Project Activities

3.1 The first task is to quantify the range of plausible rates of plume diffusion over the first month following a hypothetical experimental release of material. To help constrain this, you will use satellite observations from TROPOMI after volcanic eruptions, which have been demonstrated to be capable of tracking plumes of SO2 at a scale relevant to a large-scale SAI experiment. While this can only be used to determine spreading rates for spatial scales larger than the spatial resolution of TROPOMI (about 25 km horizontally), that can be extrapolated to bound spreading rates at smaller spatial scales as well. Analysis after different volcanic eruptions will provide information about how variable these rates might be under different stratospheric conditions. In addition, you will also explore the use of other potential analogs as well (e.g., pyrocumulus plumes), as described in your first milestone. This effort will allow you to determine, as a function of the initial SO2 mass release rate, estimates for how broad the resulting plume would be as a function of time and the estimated peak aerosol concentration within the plume.

3.2 A related second task is to clarify the potential sensitivity of observational capability for remotely detecting SO2 and detecting sulfate aerosols. The aerosols can be detected through upwards-facing LIDAR on aircraft; these instruments are already in use (on the NOAA SABRE

missions, for example), but you will engage in conversations about the potential for modifications for this particular mission.

3.3 The third task aims to provide statistical information about the movement of air plumes at different geographical locations and altitudes based on reanalyses and trajectory models. This provides a starting point for the final task below to understand the range of possible future plume locations if there is no forecast capability, and can clarify whether there are altitudes or locations that an experiment could be conducted at that would lead to more or less predictability. Furthermore, understanding the ultimate tropospheric deposition distribution will help inform future discussions around potential transboundary issues with outdoor SAI experiments. This will allow you to clarify under which conditions and injection amounts there might be foreseeable chances of some of the plume material falling into the troposphere within a country's airspace and hence the potential for deposition. This will provide information for the modality of "safe" outdoor experiments that do not significantly infringe on other countries' airspaces. This will allow you to address the potential relevance of the experiment in light of current, established protocols around environmental pollutants, such as the Convention on Long-Range Transboundary Air Pollution, by communicating at which scales, and from which locations, detectable transboundary effects could be relevant.

3.4 Finally, task 4 addresses the ability to forecast the future location of the center of the plume if the current location is known. Here you will use the Whole Atmosphere Community Climate Model (WACCM) in forecast mode, where it is initialized with stratospheric winds (based on re-analysis). By comparing short-term WACCM forecasts of volcanic aerosols against observations, initialized at different times in the evolution of the volcanic plume, this tool will allow you to quantify the likely predictive accuracy with lead time, better constraining the search region that would need to be explored to find the aerosol plume (assuming that it is not always continuously tracked). You will also explore the use of other potential analogs (e.g., pyrocumulus plumes) for which data may be available.

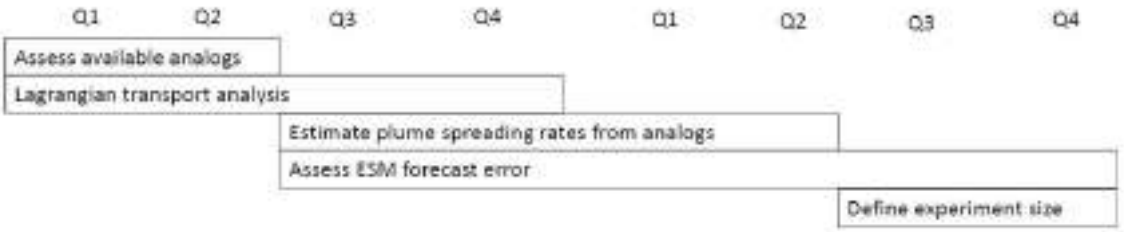
3.5 Collectively, these tasks will be integrated to determine what spatial scale of experiment would be needed to allow reliably finding the plume if it is not continuously observed. Once the plume location is known, existing observational assets could be used for in-situ sampling to determine aerosol concentrations, size distribution, etc. Knowing the required mass release is an essential precursor to designing details of aircraft release systems as well.

3.6 The tasks above are separated out in terms of the goals, whereas the milestones below are defined temporally. The first milestone ensures that you are evaluating all of the observational data available primarily for task 1, but potentially task 4 as well. The second milestone addresses task 3, and is a starting point for task 4. The third and fourth milestones complete tasks 1 and 4. (You do not include a milestone for the smaller task 2.)

3.7 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted]

ID	Milestones	Measure	Date
1	Identify key eruptions and other relevant analogs that can help constrain plume forecast and spreading, and download observational datasets	Compile a list of available analogs to study, provide an initial internal report providing an overview of which analogs are more useful and usable for future analyses	Commencement date + 6 months
2	Conduct Lagrangian analysis (based on reanalysis) to simulate transport and assess both variance of stratospheric transport and ultimate tropospheric deposition	Analyse simulations results in order to assess model's skills, highlighting differences with observations	Commencement date + 12 months
3	Estimate plume spreading rates (or equivalently mixing or diffusivity) from eruption and other analogs	Determine aerosol peak concentration over time relative to initial concentration and determine initial concentration needed for detectability with LIDAR	Commencement date + 18 months
4	Assess forecast error as a function of lead-time and location for initialized climate model simulations	Draft paper written that integrates information across project to define minimum size limit for a hypothetical experiment	Commencement date + 24 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time:



3.8 The intended long-term outcomes are summarised below:

- Provide the basis for more detailed experimental design once size requirements are better understood.
- Much clearer understanding of the roadmap towards supporting informed decisions in this space, supporting research investment decisions to enable necessary experimentation
- Your findings can be used during future community engagements and attempts to co-design outdoor experiments, by providing a best estimate of impacts and scales at play, potentially facilitating the role of other ARIA R&D Creators.
- The first, scientifically backed, grounded estimate of minimal size for the detection of an experiment across different scales will have allowed for more informed conversations, helping policymakers understand at what scale of an experiment do concerns about transboundary effects and potential interactions with international treaties merit strengthened governance regimes, as well as guiding potential actors aiming to design such experiments towards safe, responsible and useful experimental protocols. This will also inform countries' strategies towards better integrated observational systems to detect and attribute changes due to potential SAI scenarios, for instance by improving precision and accuracy of future orbital observational systems, strengthen on-the-ground observations and improve modeling practices towards more relevant identification strategies.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Kick off	• Roles and responsibilities • External communications • Project details
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Invoicing and cost reporting Optional: • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD Review meeting with ARIA Programme Team
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments monthly in arrears based on actual costs incurred.

Monthly payments will align with the calendar month.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for

Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Douglas MacMartin	PI	Cornell University
Daniele Visioni	Co-PI	Cornell University

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location

PART 2 - GRANT APPLICATION

Application titled: Defining the minimum scale of an SAI test: A fundamental first step towards an outdoor large scale experiment dated 07 December 2024

SCHEDULE 3

Not Used

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4

NOT USED

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and

Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

Southern Cross University **(Grant Recipient)**

Military Road Lismore, NSW 2480, Australia

22 August 2025

Attention: Daniel Harrison

Dear Daniel,

FPCW-PR01-P014 Marine Cloud Brightening in a complex world – moving beyond the Twomey effect **– Standard Grant Funding Letter**

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Cooling Climate and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Marine Cloud Brightening in a complex world – moving beyond the Twomey effect A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£1,035,718 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 25 August 2025
Completion Date	The completion is 24 March 2027
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions

Adequate Insurance	Employers' liability - as required by the relevant legislation Public liability: AUD$20 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Associate Professor Daniel Harrison [redacted] [redacted] National Marine Science Centre Southern Cross University [redacted] [redacted] [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted]
Notices	ARIA Contracts [redacted]	[redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to [redacted]

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

Not Used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 25 August 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of Southern Cross University to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name: Professor Mary Spongberg

Position: Senior Deputy Vice Chancellor

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

6.4 For the avoidance of doubt any decision to terminate the Grant Agreement as a result of a Go/No Go Milestone will be made at ARIA's sole discretion and done so in accordance with clause 22.6.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you,from time to time for a period of 10 years after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 For Grants over £500k: Annually, and on each anniversary of the Commencement Date and at the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an appropriately qualified auditor or accountant within your organisation.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate

mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers, including students, to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own

all, or parts of, the Foreground IP. Where your Sub-Contractor, students or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16. The Parties acknowledge that copyright in a student's thesis will be owned by the student who has authored that work. Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA, where practicable, at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the [Future Proofing our Climate and Weather Intellectual Property Pledge] if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no

higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities, or as agreed between the Parties.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a the UK Government which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Go/No-Go Milestone means a decision point for ARIA to determine whether it wishes to proceed with or terminate the Project Activities (any decision regarding a Go/No-Go Milestone will be made at ARIA's sole discretion, following a Grant Review as outlined in Clause 6);]

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

Building on over 30+ years of theoretical study, Southern Cross University (SCU) and partners have advanced MCB research from theory and laboratory studies to outdoor experiments measuring in-situ with aircraft the cloud microphysical response to perturbation (Fig. 1 B&E). In your nozzle laboratory you refined the effervescent atomisation technique to create sea spray aerosols at MCB relevant sizes with number production rates and energy efficiency which enable outdoor field testing to occur. From 2020 to 2024 you successfully scaled up outdoor field-testing prototypes from 100 to 640 nozzles and developed the Aerosol, Radiation, and their Interactions Experimental Laboratory (ARIEL) spraying system. ARIEL can produce up to 10^{15} s^{-1} sea spray aerosol (SSA) in three distinctly different aerosol size spectra to tease out the influence of competing cloud processes and direct radiative responses (Fig. 1A).

A series of 'point source' perturbation experiments over the Great Barrier Reef (GBR) have been completed to evaluate the sensitivity of trade wind cumulus clouds to the artificially generated SSA. You have demonstrated a key underpinning hypothesis of the MCB concept, that supplying additional cloud condensation nuclei (CCN) can, for a given cloud liquid water content, decrease the cloud drop effective radius (Fig. 1D) and increase the droplet number concentration (Fig. 1E). These initial shifts in cloud microphysical properties are those proposed by Twomey (Fig. 1A) and are expected to result in a predictable initial albedo increase for the cloud (1st aerosol indirect effect). While the resulting albedo increase can be calculated, it has not yet been measured explicitly during your field experiments due to their limited scale. Beyond the initial Twomey effect, MCB is expected to result in a series of adjustments to cloud properties (2^{nd} aerosol indirect effects; Fig. 1A) which may further increase, or conversely reduce, the net radiative forcing. Both the sign and magnitude of these interacting effects are influenced by the concentration, composition, and size distribution of the artificially generated aerosol as well as that of the background aerosol, the prevailing atmospheric conditions, and the nature of clouds present. Understanding these interlinked processes sufficiently well to estimate their respective importance and cumulative impact on radiative forcing is key to accurately predicting the efficacy and risks of MCB for a given atmospheric and meteorological situation.

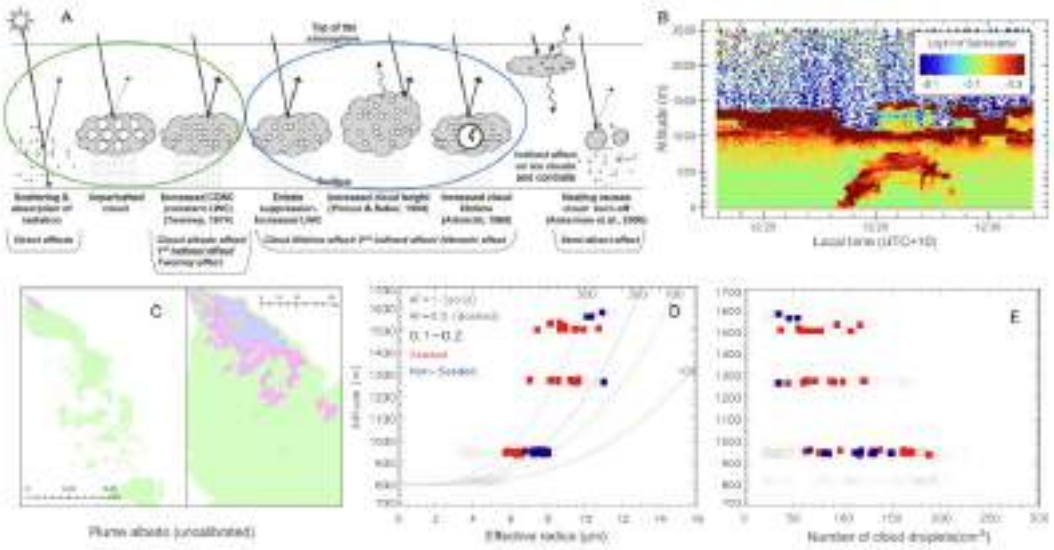


Figure 1: (A) Aerosol-cloud-radiative processes, green circle represents MCB effects measured in past campaigns (C-E), blue indicates effects targeted in this proposal. (B) LiDAR measurement from a sampling vessel of the ARIEL produced MCB plume lifting into a cloud layer at ~ 1000m cloud base altitude. (C) uncalibrated albedo of MSB (direct effect) from the aircraft mounted hyperspectral camera (still in processing), vessel is in upper left corner. (D&E) Within-cloud results demonstrating the Twomey effect.

Why the GBR? Low cloud over the GBR consists of stratocumulus, shallow trade wind cumulus, and cumulus of greater vertical development, with the latter two classifications being more common during your field campaign periods in summertime. Your work has shown that meteorology and clouds in the GBR region play an important role in coral bleaching events. Corals experience bleaching due to a combination of both heat and light stress. Modelling, field observations, and your previous MCB experiments (Fig. 1B-E) demonstrate that both sky and cloud albedo over the GBR are sensitive to aerosol perturbation. Hydrodynamic modelling indicates that the unique, shallow, semi-enclosed bathymetry of the GBR lagoon provides an ideal case study, where application of MCB at a regional scale could lead to significant sea surface temperature reductions. Implementation over as little as 10% of the GBR would be effective in reducing ocean temperature and mitigating coral bleaching. Evidence that MCB could meaningfully alter the trajectory of live coral cover on the GBR over the coming decades makes this a promising application of technology to actively cool the earth. Your work on the GBR has proceeded under federal regulatory approval and with effective governance mechanisms in place. The Australian public supports further research, and is 'accepting' of cloud brightening on the GBR with 63% supporting (69% within region), and 14% rejecting this intervention in a national survey.

Advancing the state of the science. A challenge of measuring albedo change in cumulus cloud fields is that the perturbation does not necessarily affect the entire cloud at once and can progress in individually impacted clouds at different rates and locations (Fig. 2). You propose to address this challenge by employing an upscaled experimental approach. By including 2-3 MCB spraying vessels and increasing the output of the next generation of ARIEL, you will aim to achieve a degree of homogenisation of the enhanced CCN concentration within an area of approximately 10 x 10 km. By utilising two sampling aircraft you will measure the albedo change in a more uniformly perturbed region of cloud and begin to examine experimentally the microphysics induced changes to whole-of-cloud structure with time (1-2 hours) that result in the 2nd aerosol indirect effects (Fig. 1A). You will apply a state-of-the-art lagrangian cloud model (LCM) coupled to a large-eddy simulation

model for high resolution MCB simulations. The LCM relies on individually simulated computational particles, each representing an ensemble of identical hydrometeors (aerosols, cloud droplets, rain drops), where process rates are determined from first principles. The use of individually simulated particles allows the physicochemical properties of the sprayed and natural aerosol to be directly described, a prerequisite to investigating the effects of MCB on clouds in the required detail. Within the two-way coupled LES-LCM framework, you can investigate the interactions of dynamics, aerosol, and cloud microphysics essential to quantifying aerosol indirect effects on clouds and radiation, e.g., the turbulent transport of sprayed aerosol to the cloud base (see. Fig. 1B), their subsequent activation determined by the cloud's updraft, as well as the turbulent mixing of the cloud with its environment and the subsequent effects on the number and size of cloud droplets and evolution of the cloud properties over time.

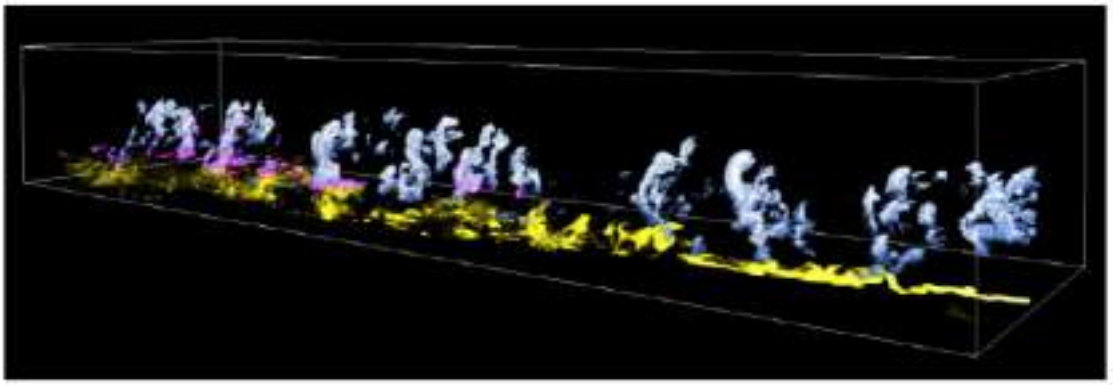


Figure 2: LES-LCM model results of a single MCB spraying vessel (at far right) in a shallow cumulus cloud field with wind right to left. White = cloud, Yellow = MCB aerosol, Magenta = aerosol impacted cloud.

ACCESS-EMS-GBR is a convection-permitting, coupled atmosphere-ocean model of the GBR that has been configured to undertake assessments of MCB using simulations at local to global scales. The model consists of a regional atmosphere configuration of the Australian Community Climate and Earth System Simulator (ACCESS), coupled for this project to the CSIRO Environmental Modelling Suite (EMS) hydrodynamic and biogeochemical model of the GBR. The resulting coupled model represents aerosol cloud-radiation interactions, atmosphere-ocean heat feedbacks and subsequent impacts on the underlying coral reef, making it ideal for assessing the impacts and risks associated with MCB applied to the GBR and wider region. Higher resolution convection-resolving simulations are also achievable, and wider insights into potential benefits and pitfalls of MCB beyond the GBR application can be derived.

2. Aims and objectives of the Project Activities

Advance the technical feasibility, social license and scientific understanding of efficacy and risks of Marine Cloud Brightening (MCB). By undertaking the next generation of outdoor experimentation enabled through the development of technology, methodology, numerical modelling, governance, and engagement.

3. Project Activities

Work detail. You propose activity across five work streams (WS A-E) each consisting of work packages.

WS.A Proposed technology development. To support the next phase of MCB research it is necessary to increase the total output of ARIEL and construct additional units. The most important improvement

is to increase the number CCN produced per unit energy required. It is also desirable to decrease the total footprint of the system to allow operation on smaller and less costly vessels. Two shipping containers of ARIEL are each fully occupied by 3 sizable air compressors (total 6) that supply the large quantity of compressed air required (Fig. 3C). The requirement for compressed air is responsible for most of the energy, space, and weight of the overall system. The current technique achieves ~66% of the SSA within the target size range (Fig. 3A). You aim to improve the current system by targeting a reduction in the gas to liquid ratio (and hence energy) while improving output. In parallel you will investigate alternate technologies which may remove the need for compressed air entirely while also improving the size distribution (Fig. 3B).

Figure 3: (A) Field measured size distributions for the 3 sprays currently produced by ARIEL. (B) Alternate spray technologies showing improved fraction in the target range (green shading). (C) ARIEL components.

WS.B Fieldwork. Ahead of the proposed outdoor field experiments you will refine and test your methodologies for tracing the generated aerosol plume in the atmosphere and for quantifying the cloud microphysical and albedo response. In later stages, preliminary outdoor experiments on land and at sea will provide opportunity for real-world testing and refinement of the improved ARIEL prototypes prior to design finalisation and multiple unit manufacture. The major MCB perturbation experiment will consist of a multispraying-source field campaign in which you aim to validate model predictions and explicitly measure the response of cloud albedo, and the extended series of cloud physics impacts illustrated in Fig 1A.

WP.B1. Methodology development (SCU & UNSW, yr 1-2). All but two methodologies required for the proposed fieldwork are now well refined to practice including; logistics, vessel fit out and operation, ARIEL reliability, methods to manipulate the size and salt composition of the spray, use of drones, aircraft sampling operations, ground based remote sensing, and satellite observation of the perturbations. Methodology for tracking the plume without the addition of any chemical tracer has been developed and allows apportionment of the relative contributions of diesel exhaust and sea salt aerosol. There is, however, no independent validation as yet. The hyperspectral camera is mounted to the aircraft and acquiring data (Fig.1C) but the methodologies for retrieving cloud microphysical properties, calibrating albedo, and altitude for each pixel requires further development. You propose to further refine these two techniques in a low-cost manner during test flights with the aircraft, targeting aerosol plumes resulting from container ship exhaust.

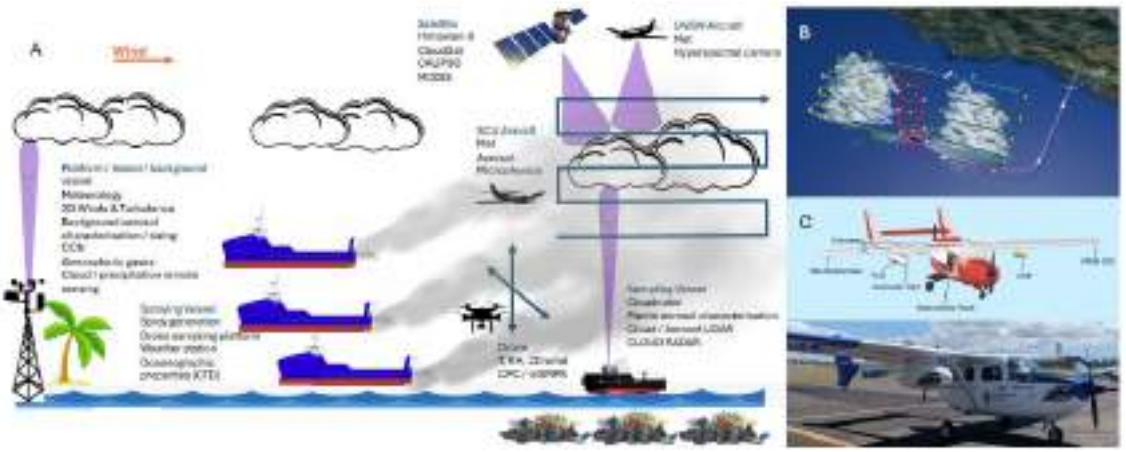


Figure 4: (A) The proposed major field campaign strategy. (B) Flight sampling strategy for aerosol and cloud physics sampling of upwind (background) and downwind (perturbed) cloud. (C) The SCU aircraft6.

WP.B3 Prototype sea testing (SCU, QUT, UNSW, late yr 3). Following the land-based testing, an iteration of engineering improvements is allowed for, prior to the Australian sea trials. These trials (stage gated) will serve as a smaller precursor to the major field campaign. It will consist of a single spraying vessel and a sampling vessel to operate downwind for characterising the SSA plume and remote sensing of cloud properties (a simplified version of the strategy illustrated in Fig. 4A). SCU has developed a small portable 8' x 8' containerised laboratory "CloudCube" that can be loaded aboard a vessel for this purpose. This fieldwork will offer the opportunity to compare and contrast the impacts of up to three different MCB technologies on cloud (ARIEL + prototypes developed in WP.A2). It will provide proof of concept demonstration for methodologies developed in WP.B1 prior to the major field campaign in yr 4 (WP.B4).

WP.B4 Next generation MCB field experiment (SCU, QUT, UNSW, late yr 4). This (stage gated) package delivers the major advancement in MCB research that your proposal is focused around. The field campaign strategy is illustrated in Fig. 4. It involves multiple spraying vessels (target of 3) operating in the optimum configuration informed by the outcomes of the high-resolution modelling in WP.C2. By operating multiple higher output systems together, you will have advanced the engineering aspects of MCB one step closer to potential implementation. The comprehensive measurement campaign will improve your process understanding of the multiple interconnected atmospheric and cloud microphysical implications of MCB.

WS.C High resolution modelling of aerosol and cloud processes. You will undertake high-resolution, large-eddy numerical simulations with Lagrangian cloud microphysics (LES-LCM). This computational tool will assimilate data from previous outdoor experiments into a numerical modelling framework, aid in the interpretation of results from past and future campaigns, and allow you to plan and predict outcomes of multi-vessel spraying scenarios and optimise sampling methodologies for the planned field campaign.

WP.C1 Model validation and hindcasts (LMU & SCU, yr 1-2). Your team is unique in that you have collected a wealth of field data on MCB which is yet to be incorporated into a numerical modelling framework, the LES-LCM is the most appropriate state of the art tool for this purpose. To validate the model and interpret past results a major objective is to conduct simulations of selected days during

past field campaigns (hindcasts). For this, reanalysis data, and/or the modelling output from WP.D1 will provide the synoptic conditions that determine the development of the boundary layer and its clouds. The measurement campaigns will provide detailed information on the background aerosol, while sprayers will be added using the specifications from past lab studies and measured in WP.A1 (e.g., the size and number of sprayed sea spray aerosols). You expect that the large-scale conditions vary during the field campaigns (e.g., wind direction, background aerosol), therefore you plan to produce at least one simulation for each condition.

WP.C2 Informing fieldwork planning and interpreting results (LMU & SCU, yr 2-5). A primary purpose of the modelling will be to guide and augment observations. Your simulations will identify regions of cloud most susceptible to the MCB aerosols e.g. where to target observations for the Twomey effect and for cloud water adjustments (Albrecht effect), cloud lifetime, and cloud fraction effects (Fig. 1A). Your simulations will give a baseline on how strong these effects are expected to be in relation to background variability and indicate under what atmospheric, meteorological and spraying conditions they will be statistically discernible. The simulations will augment the field collected data by providing process-level insights that will support the interpretation of the observations. The modelling will also allow you to gain insight into (a) the impacts of negative buoyancy due to the evaporation of sprayed seawater droplets, which may limit the vertical transport of the sprayed particles, and will vary for different spraying technologies and atmospheric stability (b) the potential collisions of sprayed particles close to the sprayer where concentrations can be very high (Brownian coagulation), which reduces the number of sprayed particles reaching the cloud base, (c) the potential losses of very large sprayed particles to the ocean due to sedimentation, and (d) how the sprayed sea salt aerosol is distributed within the boundary layer.

WP.C3 Alternate scenarios (LMU & SCU, yr 5). Financial, technical, and meteorological constraints will limit what you can test in the field. Therefore, you will use your simulations to test how clouds would respond to increased or lowered spraying rates, alternative distributions of sprayed sea salt aerosols, spaying geometries and strategies, different conditions of background aerosols, and multiple meteorological situations. This will inform the design and assessment of future MCB implementation strategies and scenarios for WP.D1&2.

WS.D Understanding efficacy and risks of implementation. This workstream is focused on gaining insight into potential implications of MCB operated at a sufficient scale to derive regional benefit. Since LES-LCM is limited to geographical domains of ~20 x 20 km, and it is infeasible to directly test MCB under all variations of atmospheric condition, the broader evaluation of benefit and risk will use a larger domain model in which some processes are parameterised. You limit your focus in this work stream to address the key questions of scalability, efficacy, and risks of the most apparent concern, being those to regional weather, precipitation patterns, the marine and terrestrial environment, and atmospheric chemistry.

WP.D1 Simulating MCB impacts and efficacy (CSIRO & SCU, Yr 1-3). You will use observations from field studies (WS.B) and insights from the high-resolution cloud microphysics modelling (WP.C1-2) to better represent aerosol indirect effects on cloud. A key consideration in determining the efficacy of MCB is the importance of the aerosol direct and indirect effects on the radiation budget. ACCESS-EMS-GBR includes detailed aerosol and cloud microphysics schemes that explicitly represent aerosol-cloud interactions and radiative effects. The model also includes a mechanism to represent sea spray aerosol emissions for MCB and can therefore be used to quantify the direct and indirect impacts on cloud, precipitation and radiation at implementation scales which are

unachievable in the high-resolution modelling. Various sea spray application MCB scenarios will be modelled to identify the optimal scenario in terms of emissions parameters, timing and location, to maximise the cooling response while minimising resources and costs. Model performance will be benchmarked against the LES-LCM.

WP.D2 Quantifying risks of MCB (QUT, CSIRO & SCU, yr1-3). The coupled ACCESS-EMS-GBR model will also be used to assess the risks associated with MCB, including the potential for precipitation changes. An increase in cloud droplet number concentration can suppress rainfall in low-level cumulus clouds and enhance precipitation in deep convective clouds, highlighting the complexity in aerosol-cloud-precipitation interactions. While the scale of any future sea spray applications for the GBR are not currently expected to seriously impact precipitation, long-term changes could influence flooding and/or drought in north-eastern Australia and therefore stakeholder concern and diligence require a detailed risk assessment. A series of control and perturbed simulations will be conducted at convection-permitting resolution to explore the impacts of sea spray applications on precipitation over the north-east Australia region. Impacts on atmospheric composition via altered aerosol pH, altered heterogeneous and aqueous-phase reactions and altered oxidative capacity, will also be assessed.

Supplementary chemical transport modelling will be conducted, supported by experiments to be undertaken in the QUT atmospheric chamber using nozzles developed in package WP.A1 with seawater samples collected from representative ocean regions and types. These experiments, combined with the modelling, aim to assess whether the addition of sea spray aerosol at levels necessary for effective MCB, will significantly impact secondary atmospheric chemistry in pristine regions.

WS.E / WP.E1 Governance and social license. Working with federal regulators from the outset, SCU and partners have conducted a total of five MCB field campaigns. Each incremental improvement in technology, scale and scientific ambition has been subject to permitting approval by the Great Barrier Reef Marine Park Authority, following review of the outcomes of the previous iteration. In this manner your research is progressed in responsible steps with appropriate monitoring, risk minimisation, regulatory oversight, indigenous consent and involvement, and societal support. Critically, this progress has occurred and would continue under ARIA within a fully transparent, federally legislated regulatory framework which includes public and indigenous community consultation. You have supplemented this external oversight through multiple levels of internal governance arrangements, including an independent risk review group, and your own community and traditional indigenous owner engagement, including community reference panels. You propose to continue similar arrangements to be determined in consultation with ARIA. This WP allocates time of the leadership team to comply with ARIA principles for outdoor experiments by continuing the aforementioned engagement and governance activities, with the goal of continuing to build societal support to explore MCB as a potential intervention to mitigate coral mass bleaching events in the GBR41 (yr 1-5). You are not requesting direct funding for social science or governance research, but rather will continue to collaborate with your now established network of social, legal, ethics, and regulatory scientists.

Dependencies

The following work packages will be delivered jointly by the University of Cambridge, the University of Cambridge's activity will however be delivered under a separate ARIA grant.

WP.A1 Nozzle tech development (UoC & SCU, yr 1-3). Five alternative technologies to atomise the seawater will be developed and tested for size specificity, production rate, and energy efficiency. These include; superheated water, electrospray, Rayleigh jet breakup, bubble formation from pressurised air, and Powercloud derived from Archipelago's proprietary Powerdrop ® technology. Several of these techniques are already showing promise of improved energy efficiency and size mono-specificity (Fig. 3B). Initially these methods will be developed and tested in parallel at the nozzle development facilities. SCU's dedicated facility includes two sizes of non-recirculating wind tunnel developed specifically for MCB nozzle testing. There is a custom designed industrial plant to supply high pressure air, water, and heat. The key objectives are to establish the resulting sea salt aerosol size distribution, the degree to which it can be manipulated, the production rate, and energy efficiency for each technology. The leading two technologies will move to the prototype stage (internal performance stage gate). Spray characterisation results will inform WP.C2.

WP.A2 Prototype development and testing Parts of this work are to be undertaken within the separately funded REFLECT project (UoC & SCU, late yr 1 – yr 3). In this stage you will undertake the engineering design for an overall system of sufficient scale to achieve production of 0.5-1x1016 CCN s-1, targeting ~10x increase on the current ARIEL output. The design phase will confirm the viability of upscaling the most promising water atomisation techniques to field testable prototypes and determine the process inputs, feasibility, safety, and environmental considerations. Following the design phase review (stage-gate) prototypes will be manufactured for field testing. This process will involve engineering design consultants and certifiers to ensure safety and regulatory compliance. The prototypes will be tested in WP.B2.

WP.A3 Prototype upscaling and manufacture Parts of this work are to be undertaken within the separately funded REFLECT project (SCU & UoC yr 4). Based on the outcome of WP.B2 field testing (stage-gate) a technology prototype will be selected for the manufacture of 1-2 additional systems. The final number of sprayers (target 3) will be dependent on performance and informed by modelling undertaken in WP.C1 to support the experimental planning. The system selected may be the existing ARIEL technology if new prototypes prove unable to outperform the existing system or are found to be unreliable or impractical for operations at sea. ARIEL was improved iteratively over multiple field campaigns and the expectation is that there will be improvements to new prototypes following each round of field testing.

WP.B2 Prototype indoor testing (UoC & SCU, late yr 2 / early yr 3). Indoor testing of UoC prototypes led by UoC now falls within the REFLECT project. Initially the prototypes will be tested on land or indoors (stage-gated if outdoors). This will serve to iron out any initial engineering issues, and confirm the performance of the design by sampling the produced sea spray aerosols downwind while monitoring the engineering parameters of seawater flow and energy consumption. SCU has developed proven methodologies for such land-based testing.

3.1 Scope and Matched funding

3.1.1 The scope of this Schedule 2 is based on the delivery of a Project with an estimated total cost of £15,000,000.

3.1.2 Upon signature of this Grant Agreement, ARIA commits an initial contribution of £1,035,718 (inclusive of all taxes) to deliver the Phase 1 Milestones and associated Project Activities. The costs associated with the Phase 2 Project Activities and Milestones are not included within the Maximum Sum and Funding Period.

3.1.3 ARIA will release up to a further £3,964,282 to deliver Phase 2, subject to you securing matched funding at a minimum ratio of 2.522:1 (match:ARIA). To access the additional £3,964,282 of potential ARIA funding, you must secure matched funding totalling £10,000,000. If lower levels of matched funding are secured, ARIA may release funding proportionally, maintaining the 2.522:1 ratio (match:ARIA) provided the Project team retains sufficient resources to reach the next go/no-go decision point.

3.1.4 In the event that the full £10,000,000 of matched funding is not obtained, the parties may consider options to reduce the scope of the Project accordingly, or terminate the Grant Agreement.

3.1.5 Matched funding may include both financial and in-kind contributions (e.g. the provision of services or resources such as vessel time or equipment), subject to ARIA's approval.

3.1.6 You shall provide an update on the status of matched funding discussions in each of your quarterly progress reports. Where matched funding is confirmed within a given quarter, you shall include appropriate evidence (such as letters of intent or funding agreements) with that quarterly update.

3.1.7 Upon receipt and acceptance of confirmed matched funding evidence, at ARIA's sole discretion it may release the corresponding portion of funding. Where appropriate, the parties will agree a formal variation to this Grant Agreement in accordance with Clause 26 of the Grant Conditions set out in Schedule 1.

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted]

Phase 1 Milestones

ID	Milestones	Measure	Date	Notes
1	Report on nozzle progress	Completion of initial nozzle design, fabrication, required operating plant and commencement of performance testing (key testing parameters: size distribution, production rate, energy requirement) for two nozzle technologies.	Commencement date + 6 months	

2	Engagement documentation reviewed	Development of community, stakeholder, and traditional owner engagement strategy submitted to ARIA programme team and Oversight Committee. Evidence of ongoing community engagement and codesign provided to the ARIA team and oversight committee.	Commencement date +12 months	
3	Match funding secured **Go/no go milestone**	Review of status of match funding. In accordance with para 3.1 above	Commencement date +19 months	

Phase 2 Milestones

The following Phase 2 Milestones are provided for indicative purposes only. Progression to these Milestones, and any associated scope described in the Project Activities above, is subject to a "Go" decision at Milestone 3.

ID	Milestones	Measure	Date	Note
4	Submission for funding for small outdoor experiment campaign **This is a Go/No Go Milestone**	Evidence submitted that the land based and small sea based experiments can be conducted in a safe manner, compliant with regulation, with effective control measures and that key stakeholders, the local population and the wider public have been effectively consulted. Impact assessment will be undertaken by the GBR	Commencement date +15 months	

		Marine Park Authority as the regulator If approved, small sea based experiments are expected to start from month 27.		
5	Nozzle prototype design evaluation	Detailed nozzle prototype design completed and evaluated as feasible for at least 1 technology and ready for commencement of construction. Data and technical know-how submitted to ARIA public repository. (revert to existing SCU plant for further testing if not met)	Commencement date +27 months	Delivery of the milestone has dependencies on the University of Cambridge
6	Methodology report	Initial demonstration of aircraft-based cloud albedo and microphysics measurement technology & methodology.	Commencement date +27 months	
7	Prototype Stage gate milestone **Go/no-go milestone for initiating WPA3 & WP.B4**	Completion of a stage gate review of prototype testing to proceed to multiple unit manufacture with either existing SCU plant or new prototype and commit to a major field campaign. New prototype technology to be evaluated against existing technology in particle production rate, sea salt aerosol size distribution, reliability (and technical simplicity), feasibility,	Commencement date +36 months (some dependency on start date due seasonal field-testing requirement)	Delivery of the milestone has dependencies on the University of Cambridge

		occupational health and safety considerations, and suitability for operations at sea.		
8	Final submission for funding for large outdoor experiment **This is a Go/No Go Milestone**	Evidence submitted that the large outdoor field trials can be conducted in a safe manner, compliant with regulation, with effective control measures and that key stakeholders, the local population and the wider public have been effectively consulted. The size of the outdoor experiment to be agreed at this go/no go point to match the available budget, but not to exceed an application area of 10 km by 10 km Impact assessment will be undertaken by the GBR Marine Park Authority as the regulator Experiment takes place between months 42 and 54, depending on season	Commencement date +36 months	
9	Documentation (Relies also on subcontractors CSIRO, QUT, and Freie Universität Berlin)	Finalisation and dissemination of key research outputs of the understanding efficacy and risks workstream, including peer-reviewed publications submitted, technical reports, and policy-relevant	Commencement date +42 months	

		summaries. Data submitted to ARIA public repository.		
10	Preparations completed	Multiple prototypes constructed and run-tested ready for field testing. Preparations for major field campaign complete including long lead time items and completion of compliance and risk mitigation procedures to support safe and responsible field operations. Field campaign then runs M42 to M54	Commencement date +42 months	
11	Outdoor tests completed	Major field campaign completed.	Commencement date +54 months	
12	Project completed	Finalisation and dissemination of key research outputs, including peer-reviewed publications submitted, technical reports, and policy-relevant summaries. Data submitted to ARIA public repository.	Commencement date +60 months	

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time:

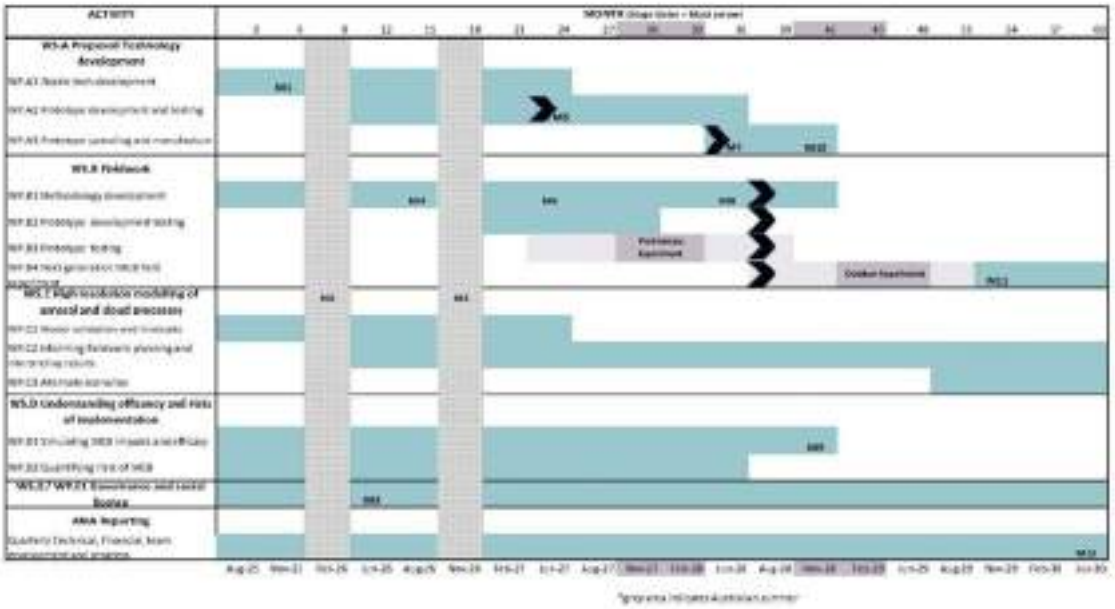


Figure 5: Project timeline. Purple lines indicate suggested stage gates.

3.3 The intended long-term outcomes are summarised below:

- This project will provide the first direct measurement demonstrating the ability of Marine Cloud Brightening to alter cloud albedo and reflect more incoming solar radiation back into space
- We will combine comprehensive in-situ cloud microphysical measurement data of controlled deliberate sea salt aerosol cloud perturbations with state-of-the-art lagrangian cloud modelling to begin to unravel the second indirect effects of aerosols on cloud in detail that has not previously been possible
- Marine Cloud Brightening technology will advance from the initial proof of concept systems which enabled the first outdoor testing to occur to systems approaching the scale that could enable the first limited-area demonstration trials to commence
- The project will elevate the bar for best practice governance and engagement with community, stakeholders, indigenous traditional owners and the public, including genuine two way sharing of knowledge and co-design of the research

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement

Planning	• Roles and responsibilities • External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears based on actual costs incurred.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g. Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for

Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made on the following timeline: (a) within 14 days of receiving any Grant Claim, ARIA will either approve or not approve any Grant Claim and will inform you; and (b) Payment of the Grant Claim will be made within 16 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Daniel Harrison	Project developer and lead across all WP	Southern Cross University (SCU)
[redacted]	Lead the high-resolution modelling component of the project (WS.C).	Freie Universität Berlin (FU)
[redacted]	Supervise the surface-based measurements of aerosols and atmospheric chemistry during fieldwork (WS.B), and supervise the experimental work on atmospheric chemistry risk in the QUT atmospheric chamber (WP.D2).	Queensland University of Technology (QUT)
[redacted]	Lead research into the implications of introducing additional seawater on heterogeneous atmospheric chemistry (WP.D2)	Queensland University of Technology (QUT)
[redacted]	Lead the efficacy and risk modelling component and oversee work to improve model parameterisations (WS.D).	Commonwealth Scientific and Industrial Organisation (CSIRO)
[redacted]	lead the UNSW contribution to piloted aircraft sampling during the field campaigns and contribute to study of the	University of New South Wales (UNSW)

	MCB plume behaviour (WS.B)	

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location of organisation
Commonwealth Scientific and Industrial Organisation (CSIRO)	Provide models and modelling support for the ACCESS-EMS-GBR use as well risk modelling development that will inform Governance.	Australia
University of New South Wales (UNSW)	Provide resources (aircraft) and technical expertise for methodology development and field observations	Australia
Queensland University of Technology (QUT)	Involvement with field and laboratory investigation of aerosol characteristics. Includes resources, infrastructure, researchers and students	Australia
Freie Universität Berlin	Provide researchers and resources to conduct cloud microphysical modelling as a strategic component to the project	Germany

PART 2 - GRANT APPLICATION

Application titled "Marine Cloud Brightening in a complex world – moving beyond the Twomey effect" submitted 9 December 2024

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

The University of Manchester **(Grant Recipient)**

Oxford Road
Manchester
M13 9PL

10 June 2025

Attention: Professor Hugh Coe

Dear Professor Hugh Coe,

FPCW-PR01-P009- A REsponsible innovation Framework for assessing noveL spray tEChnology Research To examine local AlbeDo changes from Marine brightening and its multi-scale impacts. (REFLECT) – Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	REFLECT. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£6,100,000 (inclusive of all taxes where applicable)

Commencement Date	The Commencement Date is 10 June 2025 The Project Activities as detailed in Schedule 2 of this agreement shall commence on the 1 August 2025.	
Completion Date	The completion is 31 July 2028	
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions	
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £10 million (per year in aggregate	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Professor Hugh Coe Department of Earth and Environmental Science The University of Manchester [redacted]	
Grant Manager	Mark Symes, Programme Director, [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	Head of Department Earth & Environmental Sciences [redacted]

Notices	ARIA Contracts [redacted]	Executive Director Research & Business Engagement [redacted] [redacted] copied to Professor Hugh Coe [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to [redacted]

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding **"Grant Agreement"** between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 13 June 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of The University of Manchester to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(b), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

6.4 For the avoidance of doubt any decision to terminate the Grant Agreement as a result of a Go/No Go Milestone will be made at ARIA's sole discretion and done so in accordance with clause 22.6.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 For Grants over £500k: Annually, and on each anniversary of the Commencement Date and at the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate

mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the

Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no

higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. NOT USED

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Go/No-Go Milestone means a decision point for ARIA to determine whether it wishes to proceed with or terminate the Project Activities (any decision regarding a Go/No-Go Milestone will be made at ARIA's sole discretion, following a Grant Review as outlined in Clause 6);

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

Marine Cloud Brightening (MCB) and Marine Sky Brightening (MSB) are two of the most significant opportunities to increase the average planetary albedo and provide a mechanism for cooling the earth. The reduction of global ship emission of sulphur for the purposes of improving global air quality has been demonstrated to lead to a significant reduction in cloud albedo providing clear evidence at scale that intervention could be viable. The biggest technical barriers for the development of MCB are associated with the ability to produce aerosols at a high enough rate in an energetically efficient way and at the 'correct' size in a real world environment. Without field testing at a limited scale, it is not possible to examine the technology, nor the predictive capability of model tools to accurately assess the impact of any perturbation.

2. Aims and objectives of the Project Activities

REFLECT will develop and test spray technologies to deliver sea salt aerosol particles; their application for Marine Cloud Brightening (MCB) and Marine Sky Brightening (MSB); and a robust framework for testing both their effectiveness and wider environmental impacts through a stepwise, consultative and inclusive approach.

3. Project Activities

3.1 **Phase 1 - Work package A (WPA): Effective Spray Generation of Aerosols (UoC, Archipelago, UoM)**

The focus is to research promising novel droplet generation methods for MCB/MSB that may prove more optimal than current effervescent spraying technology. We aim to develop at least two of the following emerging spray techniques into efficient field ready prototypes: 1) superheated atomisation[3,4]; 2) electrospraying[5,6]; 3) Rayleigh jets[5,6,7]; 4) bubble bursting atomisation[8,9]; 5) Powercloud spray system from inkjet technology developer Archipelago Technology. Only the superheated approach is developed elsewhere, by a close collaborator, Southern Cross University (SCU).

Spray technology development will proceed in three stages. *Stage A1* will develop each of the five methods in parallel at the laboratory scale with single nozzle testing including combinations so that the findings from one method can be applied to others. The methods that show most promise will progress to *Stage A2* where arrays of nozzles will be tested within wind tunnel facilities at UoC and the Manchester Ice Cloud Chamber (MICC). These experiments will examine whether aerosol particle size distributions change as a result of coagulation before scaling the technology further. *Stage A3* will scale up at least two of the technologies into prototypes for field testing. Prior to a stage gate review at M36 or any outdoor trials, the prototypes will be tested indoors, in a large controlled environment such as a hangar or warehouse. This is a low risk approach to verify correct and safe operation of the entire spray generation system, including droplet dispersal and filtration before going out into the field.

The progression of each spraytechnology is dependent on evaluation against the following metrics: spray generation rate, droplet size range, overall power consumption and unit cost to achieve the target spray rates, filtration requirements, spatial requirements, robustness to marine environments, and

manufacturability. The latest results from our chamber experiments and parcel modelling will provide metrics to evaluate and improve sprayer performance during laboratory scale development. Spray technologies that show no improvement over existing spray technology will not progress to the next stage; however, the risk of not producing new applications is low since we are pursuing multiple approaches. Impacts of sprayer performance will be tested in WPC.

Methods 1-4 will involve the use of engineering design consultants (UoC currently liaising with a potential subcontractor) for prototype(s) design. The design scale-up for method 5 will be undertaken by Archipelago and the manufacturing of a prototype for all methods will involve outsourcing to fabrication companies. We are working closely with SCU who have suppliers with relevant experience in engineering for marine environments willing to share knowledge to streamline development. We have already identified suppliers with capacity for manufacturing some of the main components for each technology, including for silicon-based nozzles.

Key outcomes: KO1: Single nozzle tests and stage one technology evaluations completed for at least two methods (M6) and for three further methods (M18); KO2: Multi-nozzle tests and stage two technology evaluations completed for at least one technique (M18) and for the remaining techniques (M30); KO3: First field trial capable prototype designed, built and fully tested indoors (M30) KO4: Second prototype tested indoors (M36); KO5: Continued testing (indoors) and refinement of prototypes and final design recommendations for what future MCB/MSB testing would require (M60).

Whether injecting sea salt (NaCl) particles into the base of marine clouds will give the desired cloud response depends on how aerosol particles of different sizes and compositions compete for water vapour. If too many small particles are generated they may not be capable of growing into cloud droplets, on the other hand, large particles require a lot of water to grow and this can suppress clouds forming on smaller particles, and may also lead to drizzle. We will experimentally test this for the first time by comparing our process models, ACPIM[11] and PARSEC[12], to results from the UoM cloud and aerosol chamber. Findings will be directly fed into the multi-scale modelling framework (WPC), since PARSEC is embedded in the UK Met Office Unified Model (UM) via UKESM1 (WPC).

During the first 6 months we propose necessary upgrades to the indoor Manchester Ice Cloud Chamber (MICC) by fitting new state-of-the-art probes using customised inlets fabricated at the UoM. We will also build a standalone spray system for aerosol generation, based on known technology (Palas UGF2000) and ultrasonic atomisation that can generate realistic background aerosol size distributions with mode diameters in the range 40 to 250 nm. This relatively low-tech development does not have the same potential for scale-up as the spray technology, but it can produce variable particle size distributions and allows experiments to commence quickly. We propose to use two simple, single component aerosols for background activation experiments such as $(NH_4)_2SO_4$ and fulvic acid, which span observed atmospheric aerosol hygroscopicity. Aerosols will be generated inside the MICC, and we will perform cloud formation experiments, measuring the cloud drops. Experimental data will be used to drive the UoM cloud parcel model, ACPIM[11], developed to evaluate competition effects. We will experiment with external mixtures of both background aerosol and NaCl aerosol, evaluating against ACPIM and correcting biases. Findings from the experiments will be transferred to the spray testing so that the correct droplet sizes and concentrations can be targeted. As the spray systems mature they will be installed in the MICC to test their performance in competition with a background aerosol population.

Key outcomes: KO6: MICC upgrades (M06); KO7: MICC experiments evaluating single component aerosol ($(NH_4)_2SO_4$, organic acid) at 3 different mode sizes compared to ACPIM simulations using

approximately 5 cooling rates (M10) KO8: addition of external mixtures of NaCl particles of different sizes with feedback to spray development (M18); KO9: external mixture evaluation using new spray technology in MICC (M24); KO10: refinement of spray technology during MICC tests (M30).

Work Package B (WPB): Field Trials (UoM, UoC, UoL)

We will develop an experimental test bed that will be used to validate (i) spray performance in real world conditions and (ii) model tools that predict aerosol mixing through the boundary layer, impacts on the surface albedo and responses of the cloud. The WP is deliberately cautiously staged, with a formal stage gate review at M30 to externally evaluate the effectiveness, safety, and risks before any field experiments are carried out. It will develop in close synergy with our responsible research and innovation[13] (RRI) framework (WPD) and be regularly examined by our management team and key stakeholders (Part 2: Governance). A second stage gate at M42 is possible to allow re-evaluation after the initial experiment.

Stage B1 (M1-M30): identification of field location, safety and risk management framework development:
Identification of an optimum field location will be made in year 1 based on the likelihood of representative conditions and operational considerations. A coastal, land-based location will: reduce cost; allow ready access to technical support for ease of servicing/modifying; facilitate space and power for sprayers and instrumentation. In the case of the second field experiment, the background CCN concentration should be as close to 100 cm^{-3} as possible to represent clean, marine conditions[14] where cloud albedo response is sensitive[15] and ideally an airfield for small aircraft within range.

A Technical, Safety and Risk Management Framework will be developed synergistically with the RRI Framework (WPD), guided by the technical consideration decision tree and funding approval decision tree in the ARIA Programme Thesis. Our framework will be a living document that, alongside a technical progress report and the RRI Framework (WPD), will form the basis of the Stage Gate review (M30) and acceptance via the ARIA evaluation process ahead of any field trials. This will include the plans, safety documentation and technical, regulatory and environmental assessments of risk and mitigation plans.
We will begin with low emission rates (~10^{14} s^{-1}) lasting only a few minutes, evaluating outcomes and risks at each stage as we scale in a stepwise manner to approach target rates of ~5 x 10^{16} s^{-1} lasting up to one hour to examine cloud interactions. Our experiments involve real time monitoring so that they can be rapidly terminated. Our Framework documentation will include wider safety assessments such as near field exposure, discussions with landowners, and government compliance (eg Environment Agency, SEPA). A risk assessment and Environmental Impact Assessment will be carried out, though we anticipate risks are very low given that the volumes of filtered seawater are of the order of 5-6 l/min or 300-400l over an hour long experiment and spraying will be done in offshore wind conditions. Drafts of the framework will be regularly presented to ARIA, our Advisory Board, and to Key stakeholders (see WPD) and recommendations incorporated into the document which will be made publicly available online.
Key outcomes: KO11: Locations selected for the two field trials (M12) KO12: Technical, Safety and Risk Management Framework developed (Draft M21; Acceptance Stage Gate M30)

Stage B2 (M32-M48): Testing Effective Distribution of Spray Aerosols in the Atmospheric Boundary Layer - This Stage B2 forms part of Phase 2 and is subject to para 3.3 below. Generation of large aerosols or near-field coagulation may produce giant CCN that may preferentially activate, suppressing activation of background aerosol[16] and/or initiating drizzle[17]. Rapid evaporation of water from the spray may inhibit mixing[18], and although initial experiments[19] and modeling[20] suggest this effect may be

modest, confirmation via field observations is necessary. Spray generation and mixing will be tested in this first field trial. Field scale spray systems (WPA) will be installed alongside the current SCU spray system for comparison in a 40 day field experiment, although spraying will be limited to a few short periods on any given day (M38). Atmospheric monitoring of the marine boundary layer will include use of radiosondes, a wind profiler, radiometers and a ceilometer as well as in-situ observations of the background aerosol, temperature and humidity. Operational models (Met Office's Unified Model (UM) and Numerical Atmospheric-dispersion Modelling Environment (NAME)) will forecast plume direction, altitude and dispersion width. Plume evolution will be observed by scanning aerosol and Doppler lidars. A UAV mounted aerosol instrument will examine the aerosol size distribution development in the plume (100 nm-10 μm diameter) and UAV borne radiometers will monitor any resulting changes in the local planetary albedo. These observations will constrain and validate our models of physical and thermodynamical plume evolution, mixing and impact on albedo. Large Eddy Model (LEM) simulations will be used to interpret the observations (WPC).

Key Outcomes: KO13: Assessment of performance of spray technologies (WPA) in real world conditions to inform final stage-gate review (M42). KO14: Data stored in a publicly available repository (M42).

Stage B3 (M42-M60): Determination of Clear Sky Albedo and Cloud Responses to Aerosol Injection into the Boundary Layer - *This Stage B3 forms part of Phase 2 and is subject to para 3.3 below*: Responses of clouds to changes in aerosol are highly uncertain. Introduction of aerosol into a cloud system may change drizzle, cloud thickness, entrainment and diurnal cycle of cloud, all of which interact with each other in complex ways. LEM and Cloud Resolving Model (CRM) tools have been used to investigate these interactions but critically have yet to be tested against observations of an aerosol injection on a scale large enough to assess cloud responses. The second 40 day field study (M48), will seek to investigate cloud responses and test the LEM and CRM cloud simulations (WPC). A new Frequency Modulated Continuous Wave (FMCW) mobile cloud radar and micro rain radar will be added to the Stage B2 observations. The FMCW radar is capable of high resolution scanning and retrieval of droplet size distributions and so offers a powerful way of examining the plume interaction with cloud. These observations will deliver the necessary constraints to validate model predictions and target improvements. At the scales envisaged, large aircraft fly too fast to adequately resolve the plume features though small, slower aircraft may be used.
Key Outcomes: KO15: Public report on field trial outcomes (M60); KO16 Publicly available data archive (M60).

Work Package C (WPC): Modelling (UoE, FMI)
In WPC we will assess the regional dynamical and climate scale responses and impacts of a large-scale implementation of spray technology for MCB and MSB. Models will be used to extend the necessarily limited number of observations at local scales (WPA, WPB) to additional meteorological regimes and to larger spatial scales. This will be achieved through a seamless multiscale-framework. We will utilise:-

i) Parcel models: The UoE cloud parcel model (PARSEC)[12], and the UoM bin microphysics model (ACPIM)[11] are state-of-the-art size dependent cloud models that serve as the benchmarks for the development of droplet activation parameterisations in climate models. PARSEC is already operational within the UM, and whilst too computationally expensive for decadal simulations, can be used for shorter (up to 1 year) process-orientated UM simulations. PARSEC can track aerosol growth and evaporation for specific bin sizes explicitly in global climate simulations allowing competition effects to be quantified for regions with different background aerosol and updraft regimes for comparison against idealised chamber experiments (WPA).

ii) *LES models:* The Met Office NERC Cloud model (MONC)[21] multi-moment bulk microphysics model and the UCLA Large-Eddy Simulation (UCLALES) coupled with the Sectional Aerosol module for Large-Scale Applications (SALSA)[22] bridge the gap between microphysical processes and larger scale models.
iii) *Nested models:* The Nested Unified Model with Aerosol and Chemistry (NUMAC)[23] can be used to assess the impact of plume concentrations at surface level, visibility, deposition etc. that cannot be resolved with climate models. iv) *Earth System Models:* UKESM1 is a well-respected climate model that can be used to assess the dynamical impacts of MCB/MSB[24].

MONC and UCLALES simulations will be performed using the observed aerosol size distribution from the sprayers and appropriate meteorological boundary conditions to simulate the aerosol plume and impacts on cloud development, microphysical and radiative properties (see WPB). Synergistic NUMAC model simulations and UKESM1 coupled simulations will investigate a number of scaled up experiments. These will include centring the NUMAC grid on i) the UK, ii) the Namibian stratocumulus cloud deck, iii) the Caribbean ocean, iv) the N. Atlantic Ocean, and v) the Indian Ocean. These simulations will use the sprayer-derived aerosol size distribution (WPA/WPB) which can be explicitly modelled in terms of emissions and will use the standard activation scheme[19] and that developed from emulation of the PARSEC model to facilitate accurate simulation of cloud droplet number response to spray injection on climate timescales.
UKESM1 simulations, which are fully coupled to a dynamical ocean, will allow assessments of dynamical feedbacks, and the local and remote cooling impacts for each of the regions where sea-salt aerosol is applied. This is critical in understanding climate impacts should any large-scale use be successful in cooling a limited area of the ocean as inhomogeneous spray scenarios have been shown to lead to very inhomogeneous climate responses[24,25]. Particular foci will be on the effectiveness of MCB/MSB in ameliorating climate extremes, tipping points and climate change-induced wildfire, hurricane development, Amazon die-back, sea-ice loss, and changes in the Indian monsoon as appropriate. Other areas may be investigated.

NUMAC simulations are unable to provide climate projections, but the superior resolution provides a realistic and more detailed representation of the impacts on cloud properties and precipitation for any potential large-scale use. Air-quality (sea-spray contributes to the PM2.5 and PM10 pollution targets adopted by the UK and internationally) will be impacted by extensive sprayer use and could lead to some deleterious impacts if installed around populous regions. Similarly, visibility could be very strongly impacted[24]. Simulations can adjust use strategies to take account of e.g. location, time of year, meteorological conditions etc. Time-slice NUMAC simulations will be run for future scenarios through to the end of the century utilising various future Shared Socioeconomic Pathways (SSP) and GeoMIP scenarios.

Key Outcomes: KO17: Spray characteristics embedded into models (M30; M42) KO18: Simulations of aerosol plume and impacts on cloud evolution and radiative properties (M30; M48); KO19: Reports on impacts of sprayer use if applied to key regions optimised in WPA for MCB and MSB on simulations of cloud, visibility, air-quality and further optimisation/improvement (M30; M48) K020: impacts of optimised sprayer used for MCB and MSB under various future climate scenarios (UKESM1-climate) (M30; M48).

Work Package D (WPD): Responsible Innovation and Societal Engagement (UoM)
We build on well-established imperatives for science and innovation that it is socially desirable and undertaken in the public interest, by seeking to (i) "anticipate" the impacts of MCB/MSB field

experiments; (ii) "reflect" on the uncertainties and ambiguities of research; (iii) "engage" in meaningful two-way engagement with society; and (iv) "act" on its findings to inform the trajectory of MCB/MSB research and innovation in the project and more broadly[13,26]. We will facilitate "upstream" societal engagement to address these aspects in advance of significant research activities to help avoid sociotechnical lock-in to undesirable pathways. WPD will elicit perceptions of, and preferences for, MCB/MSB experimentation pathways through (1) semi-structured interviews with diverse experts and stakeholders from across academia, government, civil society, and industry (M1-18), (2) qualitative deliberative workshops with socio-demographically diverse members of the public[27] (M15-30), and (3) a quantitative nationally representative survey of the public (M27-41). The work will include consideration of key ethical concerns known to pervade SRM research, including 'moral hazard' or 'mitigation deterrence' (the pursuit of MCB/MSB may distract from efforts to reduce greenhouse gas emissions) and 'slippery slope' (research and experimentation may lead to undesirable deployment)[28].

In tandem with the project's technical stage-gate process (see WPB), WPD will develop and apply a social stage-gate process to ensure that responsible innovation is addressed prior to MCB/MSB field experiments taking place (M30, M48). Building on earlier frameworks, this will include consideration of risk management, regulatory compliance, clear communication, impacts review, and stakeholder and public engagement[13]. This forms part of our wider commitment to the ARIA Programme Oversight and Governance measures, which will include regular engagement with the Independent Oversight Committee (IOC) and your own independent oversight and advisory group (IOAG).
These tasks will be carried out by a dedicated responsible innovation and societal engagement Postdoctoral Research Associate and supported by the work package lead.

Key outcomes: KO21 Synthesis of the stakeholder interviews and public workshops and survey on the responsible conduct and societal preconditions for MCB/MSB field experiments (M30), that are peer reviewed (M41); KO22 a social stage-gate process for ensuring that responsible innovation is addressed prior to MCB/MSB field experiments taking place (M30, M42).

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the [redacted] (note these costs include an estimate for the use of the NERC facilities these costs are subject to agreement with NERC):

Phase 1 Milestones:

ID	Milestones	Measure	Date
1	Initial nozzle testing process validated	Single nozzle tests and stage one technology evaluations completed for at least two methods	Commencement Date + 8 months

2	Field Sites Selected and Outline Engagement Plan for review	Suitable field sites identified and initial technical feasibility study conducted. Outline engagement plan available. Report on both of these to be submitted to the programme team and oversight committee.	Commencement Date + 14 months
3	Engagement for outdoor experiments underway	Initial mapping of stakeholders complete. First community engagement/codesign event held.	Commencement Date + 20 months
4	Technical, safety, risk and Responsible Innovation Framework drafted	Draft technical, safety and responsible innovation framework, identifying the key risks and mitigation measures and describing the plan for experiment delivery available for sharing with local community, ARIA and oversight committee. Available for sharing with local communities, ARIA and oversight committee and independent risk assessors.	Commencement Date + 23 months
5	Demonstration that one or more of the single nozzle and lab-scale technologies can reproduce the desired particle size distribution **This is a Go/No Go Milestone**	Demonstrate cloud activation model prediction using chamber experiments and use this to assess effectiveness of sprayers to meet target distributions.	Commencement Date + 26 months
6	Independent risk assessment	Risk and impact assessment by independent environmental consultant complete	Commencement Date + 26 months

7	Final submission for funding for outdoor experiment **This is a Go/No Go Milestone**	Indoor demonstration of spray systems, at least one spray system can be demonstrated to be operable in the field at scale. Full technical and Responsible Innovation Framework submitted, with evidence that the field trials can be conducted in a safe manner, compliant with regulation, with effective control measures and that key stakeholders, the local population and the wider public have been effectively consulted.	Commencement Date + 32 months

3.3 The following Phase 2 Milestones are provided for indicative purposes only. Progression to these Milestones, and any associated scope described in the Project Activities above, is subject to a "Go" decision at Milestone 7. The costs associated with the Phase 2 Project Activities and Milestones are not included within the Maximum Sum and Funding Period. Any additional costs shall be subject to prior agreement by ARIA. In any case agreement to proceed with the following Phase 2 Milestones will be at ARIAs sole discretion and subject to a Variation in accordance with Clause 26 of the Grant Conditions set out in Schedule 1.

Phase 2 Milestones:

8	Report on outcomes of first outdoor experiment, showing that effects are measurable. **This is a Go/No Go Milestone**	Demonstrating that a limited scale field trial can deliver spray at a scale that is detectable and the spray plume characteristics can be predicted with appropriate size distributions and number concentrations (of the order of 10^15s^-1) and are controllable within the safety and risk criteria. Report on ongoing community engagement and codesign/codelivery	Commencement Date + 44 months

9	Final Report on model simulations and integration with experimental data	Final outcome of model simulations of sprayer use on local, regional and global scales.	Commencement Date + 50 months
10	Final report on outcomes of outdoor experiments to demonstrate impact of sprayer on MSB and MCB	Final report demonstrating (or not) the effectiveness of a field scale spray system in affecting the clear sky albedo and the cloudy sky albedo at a scale of 10 km by 10 km. The report will include an examination of key risks and remaining uncertainties, recommendations for next steps and learnings from the community engagement and codesign/codelivery process	Commencement Date + 62 months

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time:. [redacted]

3.4 The intended long-term outcomes are summarised below:

- Spray systems for generation of sea spray with rates and size ranges optimised for marine cloud brightening and marine sky brightening
- Operational UK based field test facility for MCB and MSB limited area research
- Model systems for prediction of MCB and MSB effects optimised using real world data from limited area field trials
- A responsible innovation framework for MCB and MSB research

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Planning	• Roles and responsibilities

	• External communications • Vision • Project details • Code and data management • Project plan + project management
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • Invoicing and cost reporting Optional: • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant

relates).

5.3 Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Hugh Coe	PI, lead WPB	University of Manchester and NCAS
[redacted]	[redacted]	University of Manchester
Rob Bellamy	Lead WPD: Responsible Innovation and Societal Engagement	University of Manchester
[redacted]	[redacted]	NCAS, University of Manchester
[redacted]	[redacted]	NCAS, University of Manchester
[redacted]	[redacted]	University of Manchester
Shaun Fitzgerald	Lead WPA	University of Cambridge
[redacted]	[redacted]	University of Cambridge
Dan Mace	WPA spray development	Archipelago Technology
James Haywood	WPC lead	University of Exeter
[redacted]	[redacted]	University of Exeter
Sami Romakkaniemi	WPC Large eddy modelling lead	Finnish Meteorological Institute
Lindsay Bennett	WPB NCAS Observations	NCAS, University of Leeds
[redacted]	[redacted]	NCAS, University of Leeds
[redacted]	[redacted]	NCAS, University of Leeds

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location or organisation
University of Cambridge	Development, evaluation and testing of spray technologies	Cambridge
University of Exeter	Delivery of regional and global model simulations, analysis and interpretation	Exeter
University of Leeds	Provision of radar and other NCAS Atmospheric Measurement Observing Facility (AMOF) instruments and Project Communications	Leeds
Finnish Meteorological Institute	Delivery of Large Eddy Simulations using UCLALES-SALSA, analysis and interpretation	Finland
Archipelago Technology	Development of Archipelago Powercloud Technology for MCB and MSB application	Cambridge

PART 2 - GRANT APPLICATION

Application titled "A Responsible innovation Framework for assessing NOvel Spray Technology Research to examine local AlbeDo changes from Marine brightening and its mUlti-Scale impacts. (NOSTRADAMUS)" submitted 9 December 2024.

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

   For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

    For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

    This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

University College London **(Grant Recipient)**

Gower Street, London WC1E 6BT

19 August 2025

Attention: Ines Steenmans

Dear Ines,

FPCW-PR01-P013 - How to speak about climate cooling?: co-creating a climate cooling engagement toolkit in the Arctic and the UK– Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to Exploring Climate Cooling and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	How to speak about climate cooling?: co-creating a climate cooling engagement toolkit in the Arctic and the UK. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£359,948 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 25 August 2025
Completion Date	The completion is 24 May 2029
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process referred to in clause 6 of the Conditions

Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £5 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Dr Ine Steenmans, Associate Professor, [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted]
Notices	ARIA Contracts [redacted]	[redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to [redacted]

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

3.3. Not used.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

5. Amendments to the Grant Conditions

5.1. Not used.

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 22 August 2025

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of University College London to the terms and conditions in this Grant Funding

Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period

about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 For Grants between £100k and £500k: At the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(b) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and

Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially

within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;

(b) where you become a Non-UK Entity;

(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or

(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and

(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;

(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;

(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;
(b) loss of contracts or business opportunities;
(c) loss of anticipated savings;
(d) loss of goodwill or damage to reputation; or
(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. Not used.

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or

(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,

and is in either case used in connection with the Project Activities;

Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;

Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;

Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;

Commencement Date means the date set out in the Grant Funding Letter;

Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);

Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;

Completion Date means the date set out in the Grant Funding Letter;

Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/

Conditions means these ARIA Grant Conditions;

Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked), (a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,

(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;

Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

Public engagement is an essential and as of yet underdeveloped part across all scales of climate cooling research. On a project specific scale, the examples of the cancellations of SCoPEx and the University of Washington's experiments with Marine Cloud Brightening show that adequate community engagement is a prerequisite for conducting field experiments. Not only is engagement valuable for informed collective decision making, but in the absence of formal governance on climate cooling research, some authors argue that "co-producing research could serve as a de facto form of governance". Several research projects have made such engagement an essential part of their research design, with the recently published AGU Ethical Framework setting out some general guidelines. Broadly applicable studies on useful engagement strategies are, however, lacking. On the larger national or international scales, public engagement studies have recently proliferated. These have, however, so far mainly been limited to the scoping of opinions and stances towards research or future deployment. Whilst such efforts have provided valuable snapshots of public opinion and revealed important insights into contextual specificity and complexity in opinions, these studies fundamentally leave two critical gaps in your understanding.

First, these studies have failed to capture the process through which participants form, refine or change their views when exposed to new information or perspectives on climate cooling.

Second, many of these approaches have not focused on key climate actors – especially individuals whose concerns will be impactful for governance – environmental and social justice advocates, indigenous communities, community organisations and other engaged citizens.

Understanding how people form, refine or change their views on climate interventions is as important as the opinion they ultimately express. Focusing on this process will provide insights into the journey of engagement – the way individuals grapple with climate cooling information, confront their assumptions and adapt to new knowledge. This matters because opinions are not static – they emerge from ongoing dialogue, shaped by responses of those involved. By focusing on the process of engagement, you gain both a clearer picture of public opinion and of what drives public trust or skepticism towards climate cooling research.

The Arctic is often considered as a potential location for climate cooling field tests and potential future deployment. To many living in the region, especially indigenous peoples, the controversies around such experiments resonate strongly with past and ongoing colonialist projects like the construction of wind farms and hydroelectric dams. The Arctic has also been long constructed as an empty frontier or laboratory perfect for such experimentation. There are several climate cooling research projects that conduct their own outreach and there is at least one general engagement project in the Arctic conducted by the Alliance for Just Deliberation on Solar Geoengineering (SDG). While very worthwhile, the research-first projects only focus on a specific technique and location, and the SDG project is limited in scope and means, not intending to be methodologically innovative or broadly generalisable.

2. Aims and objectives of the Project Activities

Your proposal seeks to adopt a dual-stream framework that goes beyond static opinion measurement towards the co-creation of a climate cooling engagement process. Fundamentally, you seek to explore how participants in the UK and Arctic communities think conversations around climate cooling could and should take place. While your project also seeks to understand what different communities think about climate cooling, it primarily focuses on the process of engagement – its design, inclusivity and desirability for participants.

3. Project Activities

Your project is structured with two core workstreams. The table below summarises some of their key parameters. The first work stream will focus on co-creative workshops with engaged citizens and communities in the Arctic, especially those who are often left out of similar climate cooling engagement endeavours. The second workstream will involve conducting citizen assembly engagements in the UK with members of the public across multiple locations.

Aspect	WP1: Arctic Communities	WP2: UK citizen assemblies
Focus	Inclusivity and Indigenous perspectives	Iterative learning and opinion shifts
Participants	3 assemblies of up to 25 participants	3 assemblies of up to 25 participants
Engagement format	Two-day workshops across three Arctic sites	Repeated two-days assemblies across three UK locations
Outputs	Academic articles, engagement toolkit.	

Work package 1 - Engaging Arctic Communities

Overview: This work stream will seek to learn about how Arctic communities prefer to speak about climate cooling. Together with local stakeholders and rightsholders, you will set up three engagement groups at different locations across the Arctic.

Objectives:

1. Explore forms of learning, deliberation, and knowledge exchange that incorporate the role, value, and norms of multiple forms of learning and knowing, such as those present among Indigenous Peoples and local community organisations in the Arctic.
2. Discuss how participants perceive the inclusivity of discussions around the issues and complexities linked to climate cooling research projects, and their subsequent willingness to take part in citizen assemblies.

Methods and Rationale:

The assemblies will consist of 3 groups of around 25 participants each who will participate in co-creative discussions/assemblies around climate cooling engagement for two full days or one weekend. Methodologically, the project combines pre- and post-session Q-sort exercises, qualitative analysis of facilitated discussions, and reflective exercises to capture the co-creative and collaborative engagement of participants. Data collection includes summaries of discussions, plans produced by participants detailing their ideas for such engagement processes, Q-sort responses, and participants'

reflective journals. The combination of quantitative Q-sort and qualitative methods will help you better understand your participant's collective and individual views towards climate cooling, as well as their reasons for holding these views or how they track with other opinions (participants' view towards climate change and technology more generally, for example).

Participants will not be required to have prior experience with climate cooling, and will ideally include a mix of Indigenous and non-Indigenous participants to see how to integrate Indigenous Traditional and Local Ecological Knowledge and non-Indigenous knowledge together. Recruitment will occur through your local contacts and collaborators—many of whom are either Sámi themselves or have experience working with Sámi communities (such as Operaatio Arktis) and/or climate cooling topics. Specifically, these sites will likely be places with dense Indigenous Populations (taking into account seasonal reindeer herding and other events), sites of past or proposed, climate cooling experiments, and other locations with engaged citizen communities that you have contacts in, while other sites with significant Sámi populations are also possibilities depending on who has the interest and capacity to work with you.

Output of WP 1:

Evidence based framework/toolkit for engagement on controversial technology: out of the collaborative engagement processes, you will be able to combine participants' perspectives about how discussions concerning controversial technologies can be structured, and whether participants perceive these engagements as worthwhile or meaningful. In addition to the toolkit, the outputs of WP 1 will be a series of academic articles reporting on the challenges and opportunities of co-creating engagement processes around controversial techniques like climate cooling.

Work package 2 - Co creation of a climate cooling engagement framework in the UK

Overview of research design: This work package explores how iterative exposure to SRM knowledge supports public understanding and deliberation over time.

Objectives:

1. Identify forms of learning, deliberation and knowledge exchange that best support participants in refining their views on SRM/Climate cooling over time.
2. Explore how participants' opinions about SRM/Climate cooling evolve over time and through iterative exposure to SRM knowledge

Methodology and rationale: The research questions for this work package are: how do participants' opinions about SRM evolve over time and through iterative exposure to SRM knowledge, and what forms of learning, deliberation and knowledge exchange best support participants in refining their views on SRM over time? The research design involves a pilot citizen assembly model where approximately 25 participants, representing a diverse cross-section of the population, convene annually over three years for two-day sessions. This frequency allows for sustained engagement, providing the time necessary for participants to process complex information, deliberate collaboratively, and refine their views over time. Other, non-SRM interventions (e.g. seabed curtains) are less likely to be directly applicable to the UK context.

Methodologically, the project combines pre- and post-session Q-sort exercises, qualitative analysis of facilitated discussions, and reflective exercises to capture the evolution of participants' knowledge and

opinions. Data collection includes transcripts of discussions, Q-sort responses, and participants' reflective journals. The longitudinal structure is critical to the robustness of the methodology, as it allows for the observation of opinion shifts over an extended period rather than relying on static, one-time snapshots.

You propose selecting 25 participants, selected to reflect a representative and diverse cross-section of three locations. This assembly would convene for two full days or weekends each year over the course of two years, allowing for sustained engagement, iterative learning, and longitudinal data collection.

Output of WP2: Evidence based framework/toolkit for engagement on controversial technology: out of the continuous engagement, you would be able to combine participants' perspectives about how engaging discussions about controversial technologies can be structured. This aims to be directly applicable to ARIA's broader mission of engaging with cutting edge research.

Output of both projects:

The combined long term engagement and Arctic focused work packages will produce unique insights with the strengths of contextual, and in-depth/long term methodologies embracing multiple forms of knowledge, compared to other climate cooling engagement studies. For example, AGU's Ethical Framework for Climate Intervention is "A code of conduct to guide the research, experimentation and deployment of climate intervention measures" by consulting experts and advisors, while the EU Co-Create stakeholder forums are focused on governance and decision making, not on the process of public engagement itself. Currently existing frameworks like post-normal science or other citizen science frameworks are also helpful guides, but are not designed specifically with the challenges of climate cooling in mind. While most relevant to projects taking place in the UK funded by ARIA, your toolkit may be useful to add to or fuse with engagement work done by other project proposals from the CCCR and the British Antarctic Survey, which are proposed to take place in the Arctic. Even though many regions could be suited for expanding the contextual focus of the toolkit, and might indeed be included in the future, the Arctic is the most accessible and relevant region. Additionally, restraining the scope to the UK and the Arctic will allow you to focus on technologies relevant to these regions, thus not stretching your expertise, time, or participants' patience. The expertise and connections of Albert and Cody will help ensure that the engagements are scientifically informed and not extractive, while helpful for raising awareness around how the Arctic is being affected by climate change.

3.1 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the cost breakdown sheet [redacted]

ID	Milestones	Measure	Date
1	**Publicly confirm site partners:** [WP2] Identification of policy partners [WP1] Trust building phase with local communities as well as right holders, and presentation of the pilot at the Arctic Circle Assembly in Reykjavik, Iceland (Justification: Determines feasibility of engagement strategies and may influence adjustments in project scope or methods)	Production of co-creators map for ARIA for both WP2 and WP1 Presentation of WP1 at Arctic Circle Assembly	Commencement Date + 6 months
2	**Kick off the first UK location workshops** [WP2] (Justification: Confirms readiness for full-scale implementation; provides early feedback on engagement approach).	Minimum of one UK workshop completed.	Commencement Date + 12 months
3	**Commence first Arctic workshop** [WP1] (Justification: Confirms feasibility of engagement model in Arctic conditions; potential adjustment of timeline/resources based on outcomes).	One Arctic workshop completed, with co-creators and rights holders.	Commencement Date + 18 months (depending on location and seasonality (see points before))
4	[W **Submit pilot report** [WP1&2] (Justification: Consolidate insights from both pilots and share with ARIA and other grantholders. Determine whether project pivots, additional expertise or follow-up funding is needed).	Have a first report on key lessons from the first two pilot locations and a presentation to other ARIA grantholders.	Commencement Date + 24 months

5	**Completion of all workshops for both work packages** [WP1&2] (Justification: Marks the transition from data collection to analysis and toolkit development)	All planned workshops completed.	Commencement Date + 39 months
6	**Publication of the engagement toolkit** (Justification: Final milestone signaling project completion).	Toolkit published and shared with all partners.	Commencement Date + 44 months

There are a few points to note regarding project specificities and how they affect the milestones:

WP1 and WP2 are different work packages, yet have similarities. They both require scoping phases during which trust building with partners and co-creators will be essential. You estimate building trust with local communities and rightsholders in the Arctic will take longer in part due to historical colonial dynamics that have and continue to shape relationships and influence engagement processes.

A major difference between WP1 and WP2 is their geographical focus: WP2 is based in the UK; WP1 takes place in multiple Arctic locations. Some Arctic rights holders live according to specific livelihood practices that follow seasonal changes, for example related to hunting or fishing, or to the annual migration of reindeer herds. To ensure meaningful engagement with co-creators, you must align your milestones with the cultural and seasonal rhythms of these communities. This requires you to remain flexible in your planning. You therefore choose pilot studies as your first milestones.

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted]

3.2 The intended long-term outcomes are summarised below:

- Establish a new model for inclusive, long-term public participation with climate cooling.
- Provide a starting point for ongoing model-development in other geographical and social contexts around the globe
- Inform research frameworks by integrating diverse knowledge systems.
- Build long-term, trust-based networks between Arctic rights holders and climate researchers for lasting engagement.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Kick off	• Roles and responsibilities • External communications • Project details
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Invoicing and cost reporting Optional: • Key Learning, discoveries and decisions • Stories to highlight • Priorities for the next quarter • Challenges • Changes to team and new collaborations • technical evidence saved to drive e.g. report or presentation as requested by PD • review meeting slide deck saved to drive as requested by PD Review meeting with ARIA Programme Team
Annual	• ARIA impact metrics • Attendance at annual ARIA event
Ad hoc	• As required, Programme Director/ Programme Team may request additional information and evidence • Workshops - potential to be invited to ARIA workshops
Project closure	• Project closure report

5. Payment

5.1. Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears based on actual costs incurred.

For quarterly payments, the cadence of payments will align with ARIA's financial year beginning 1st April e.g. Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on

5.2. Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried

out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3. Grant Claims must be submitted to ARIA by the 15th Working Day of the month following the end of the relevant period.

5.4. Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1. For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Dr. Ine Steenmans	Principal Investigator	University College London
Cody Skahan	Key researcher	University College London
Chloé Colomer	Key researcher	University College London
Albert van Wijngaarden	Key researcher	University College London

7. Sub-Contractors

7.1. For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location of organisation

PART 2 - GRANT APPLICATION

Application titled "How to speak about climate cooling?: co-creating a climate engineering engagement toolkit in the Arctic and the UK" submitted 09 December 2024

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

   For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

    For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

    This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

Institut Polytechnique Rural de Formation et Recherche Appliquée (IPR/IFRA) **(Grant Recipient)**

Katibougou BP 06

Koulikoro, Mali

21 August 2025

Attention: Amadou Coulibaly

Dear Amadou,

FPCW-PR01-P008 Investigating the Impacts of Earth Cooling Approaches on the Variability and Wet-Dry Spell Dynamics of the West African Monsoon – Standard Grant Funding Letter

Congratulations, we can't wait to see what you will achieve and very much look forward to working with you and your team.

You recently submitted an application in response to the ARIA Exploring Climate Cooling Programme and ARIA is pleased to offer you a Grant for the performance of the Project Activities up to the Maximum Sum, subject to your agreement to, and compliance with, the terms and conditions set out in this Grant Funding Letter and its Schedules.

1. Overview of the Grant

Any reference in this letter to "you" or "your" means the Grant Recipient and any capitalised terms have the meanings given in the ARIA Grant Conditions (Conditions).

The key elements of the Grant are described in the table below:

Project Activities	Investigating the Impacts of Earth Cooling Approaches on the Variability and Wet-Dry Spell Dynamics of the West African Monsoon. A more detailed description of the Project Activities is set out in Schedule 2 (Project Activities).
Maximum Sum of the Grant (inclusive of taxes)	£272,074 (inclusive of all taxes where applicable)
Commencement Date	The commencement date is 25 August 2025
Completion Date	The completion is 24 August 2028
Grant Review Intervals	ARIA will review the Grant at quarterly intervals using the process

	referred to in clause 6 of the Conditions	
Adequate Insurance	Employers' liability - At least £5 million (as required by the Employers' Liability (Compulsory Insurance Act 1969)) Public liability: £5 million (per year in aggregate)	
Monitoring and Reporting	The performance reports referred to in clause 7 of the Conditions shall be provided at the frequency identified in Schedule 2 to the ARIA point of contact as set out in the project kick-off documentation.	
Project Representative	Dr. Amadou COULIBALY, Director of WASCAL Doctorale Study Programme on Climate Change and Agriculture at IPR/IFRA Phone: [redacted] E-mail: [redacted] / [redacted]	
Grant Manager	Mark Symes, Programme Director [redacted]	
Escalation Contacts	**ARIA**	**Grant Recipient**
	Chief Product Officer [redacted]	[redacted] Phone: [redacted] Email: [redacted]
Notices	ARIA Contracts [redacted]	[redacted] Phone: [redacted] E-mail: [redacted]

2. Confirmation of Bank Details

2.1. You must complete and sign the Confirmation of Bank Details form available here as part of your acceptance of the Grant and return it to [redacted]

3. The Grant Agreement

3.1. Once you sign a copy of this Grant Funding Letter in accordance with paragraph 6 (Acceptance) below, it will form a binding "**Grant Agreement**" between you and ARIA that includes and incorporates the following documents:

3.1.1. the **Grant Conditions** in Schedule 1;

3.1.2. the **Project Activities**, **Milestones** and **Grant Application** in Schedule 2;

3.1.3. the **Royalty percentages** (including annexes) in Schedule 3; and

3.1.4. the terms relating to Data Protection in Schedule 4.

3.2. The parties confirm that it is their intention to be legally bound by the Grant Agreement.

3.3. If you have previously entered into a Letter of Intent with ARIA under which ARIA has provided funds and you have started to carry out the Project Activities, the amounts already provided to you will be taken account in and form part of the Grant, and those activities already carried out by you will be deemed to be Project Activities that have been carried out under the Grant Agreement.

4. Warranties

4.1. By signing this Grant Funding Letter, you warrant and represent that:

4.1.1. your obligations under the Grant Agreement are legal, valid, binding and enforceable;

4.1.2. all authorisations and consents necessary to enable you to enter into and perform the obligations in the Grant Agreement have been obtained;

4.1.3. the person signing the Grant Agreement is duly authorised to sign on your behalf; and

4.1.4. your Project Representative referenced in the table above is authorised to make decisions and provide information on your behalf.

4.1.5. none of the parties (personnel or researchers) involved in the delivering or administering this Project and Grant agreement have previously:

4.1.5.1. Committed any Prohibited Act;

4.1.5.2. Been the subject of investigation, charge, or legal proceedings in connection with any alleged or actual Prohibited Act;

4.1.5.3. Been declared ineligible to participate in UK government procurement programs or any other governmental contract due to involvement in fraud, bribery, or corruption

5. Amendments to the Grant Conditions

5.1. Not used

6. Acceptance

6.1. To accept this Grant Funding Letter, please arrange for an authorised signatory to sign and date the duplicate copy of this Grant Funding Letter as indicated below, and return to ARIA as a complete signed original of the Grant Agreement including its Schedules, accompanied by evidence of the authorised signatory's authority to enter into the Grant Agreement and to bind the Grant Recipient.

6.2. The offer of this Grant Funding Letter will expire on 26 August 2025.

Yours sincerely

for and on behalf of ARIA

Name of ARIA signatory:

Position Held:

Date:

I confirm the agreement of Institut Polytechnique Rural de Formation et Recherche Appliquée (IPR/IFRA) to the terms and conditions in this Grant Funding Letter and its Schedules.

Signature:

Name:

Position:

Date:

SCHEDULE 1 - GRANT CONDITIONS

1. PRECEDENCE

1.1 Where there is any conflict between the documents that make up the Grant Agreement the conflict will be resolved in accordance with the following order of precedence:

(a) the Grant Funding Letter;
(b) these Conditions;
(c) the remaining Schedules to the Grant Agreement with the exception of Schedule 2 Part 2 (the Grant Application);
(d) Schedule 2 Part 2 (the Grant Application); and
(e) any other documents incorporated by reference in, or developed in accordance with, the Grant Agreement.

2. DURATION AND PURPOSE OF THE GRANT

2.1 The Grant Agreement will subsist for the duration of the Funding Period unless extended by written agreement signed by a duly authorised representative of the parties or terminated earlier in accordance with its terms. Any provision of the Grant Agreement that expressly or by implication is intended to come into or continue in force on or after termination or expiry of the Grant Agreement shall remain in full force and effect, including clauses 1, 2, 4, 7.4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.3, 22.7, 22.8, 22.11, 22.12, 23, 24, 26, 27, 28, and 30.

2.2 You may only use the Grant for carrying out the Project Activities. You may not make any changes to the Project Activities without ARIA's prior written agreement.

2.3 You may not unreasonably withhold, condition or delay your agreement to any changes requested by ARIA to the Project Activities or the amount of the Grant. Any agreed change will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

3.1 In performing the Project Activities, you shall meet the requirements of all applicable Laws regarding the environment and safety, including laboratory safety requirements, in all material respects.

4. PAYMENT OF GRANT

4.1 Subject to the remainder of this clause 4, ARIA will pay the Grant to you:

(a) up to the Maximum Sum;
(b) in pounds sterling (GBP) by wire transfer into your bank account, details of which you provided in the Confirmation of Bank Details form attached to the Grant Funding Letter; and
(c) if a tax is chargeable in respect of the Grant, all payments will be deemed to be inclusive of all such taxes and ARIA will not be obliged to pay any additional amount.

4.2 The bank account of which you provided details in your Confirmation of Bank Details form (and any alternative bank details nominated subsequently by you) must be an ordinary business bank account

with appropriate segregation of duties and control. During the Funding Period, you must notify ARIA of any change of bank account details as soon as reasonably practicable on the same form and signed by an approved signatory. You must notify ARIA of any change of signatory for approval, as soon as known.

4.3 You will be the sole recipient of the Grant and you will be responsible for managing the Grant as between you and any Third Parties involved in performing the Project Activities. This includes securing the repayment of the Grant if requested by ARIA in accordance with the Grant Conditions, including where the Grant has already been distributed to Third Parties.

4.4 You must promptly notify ARIA if any money is incorrectly paid to you for any reason, and must repay it as soon as reasonably practicable. Any amount not immediately repaid will be recoverable as a civil debt.

4.5 ARIA reserves the right not to pay any Grant Claims that are not submitted within the period set out in the Grant Funding Letter or that are incomplete, incorrect or not accompanied by full supporting documentation (including any documentation that ARIA reasonably requests).

4.6 You may not apply for or obtain Duplicate Funding for any Project Activities.

4.7 You may not retain any Unspent Monies and must repay them to ARIA within 30 days after ARIA's request for repayment.

4.8 You acknowledge the critical importance of cash flow for Sub-Contractors (including startups and small businesses) and commit to paying all valid and undisputed invoices relating to the Project within a maximum of 30 days from the date of receipt.

4.9 Where required, you will work with Sub-Contractors to arrange more frequent payment schedules (e.g., same day, weekly or milestone-based payments) to better support their cash flow needs.

5. ELIGIBLE AND INELIGIBLE EXPENDITURE

5.1 ARIA will only pay the Grant for Eligible Expenditure incurred by you in carrying out the Project Activities. You must provide ARIA with any evidence reasonably requested by ARIA (including receipts, invoices and other documentary evidence) that all Grant Claims relate to costs that are Eligible Expenditure.

5.2 You may not in any circumstance claim as Eligible Expenditure paid-for lobbying, which means using the Grant to fund lobbying (via an external firm or in-house staff) in order to undertake activities intended to influence or attempt to influence Parliament, government or political activity; or attempting to influence legislative or regulatory action.

6. GRANT REVIEW

6.1 ARIA will review the Grant at the intervals specified in the Grant Funding Letter. The review will take into account your carrying out of the Project Activities against the Milestones. As part of the ARIA review process, ARIA will review the reports produced by you in accordance with clause 7.3.

6.2 Following the review carried out under clause 6.1, ARIA may choose to do any of the following, taking into account any representations made by you in the course of the review:

(a) consent to the Project Activities and the Grant Agreement continuing in line with existing plans;

(b) increase or decrease the Grant for the remainder of the Funding Period, as applicable;

(c) redefine the Milestones;

(d) require you to carry out remedial activity with the aim of improving delivery of the Project Activities; and/or

(e) terminate the Grant Agreement in accordance with clause 22.

6.3 Any change to these Grant Terms, the Project Activities, or the Grant pursuant to clause 6.2(a), 6.2(c) or 6.2(d) will be recorded in a written variation to the Grant Agreement in accordance with clause 26.

7. MONITORING AND REPORTING

7.1 You must closely monitor the carrying out of the Project Activities throughout the Funding Period and must notify ARIA as soon as reasonably practicable of any actual or potential failure to comply with any of your obligations under the Grant Agreement.

7.2 ARIA does not limit its engagement with you to purely administrative activities and will require details of all Results and all material Foreground IP, so you must allow ARIA personnel to visit your premises at a reasonable frequency and at dates and times agreed with you to liaise with your applicable researchers for the purpose of identifying Foreground IP, evaluating Milestones and assessing progress with the Project Activities. ARIA will treat the Results and Foreground IP, and other information it learns from such visits, as your Confidential Information under clause 11.

7.3 You must provide ARIA with:

(a) the Milestones and a report on your performance against the Milestones at the intervals and for the periods of time specified in the Grant Funding Letter. ARIA may copy and adapt the contents of any of the Milestones and those reports for ARIA's internal use to review, develop and shape ARIA's funded research programmes, but ARIA will treat those contents as your Confidential Information under clause 11;

(b) any assistance and information reasonably requested by ARIA to establish whether you have used the Grant in accordance with the Grant Agreement; and

(c) a quarterly report on the use of the Maximum Sum, details broken down in accordance with ARIA's prescribed form.

7.4 ARIA is built for long-term impact and needs to be kept informed of the impact of its funding activities and compliance with the terms of the Grant Agreement. ARIA will therefore have the right to make reasonable requests for information from you from time to time after the end of the Funding Period

about the impact metrics, commercial exploitation or other dissemination of the Results and how this has benefited the United Kingdom. You must respond and provide the information requested within one month (unless ARIA specifies otherwise). If requested, ARIA will treat the information provided as your Confidential Information under clause 11. Nothing in this Grant Agreement will be deemed to limit ARIA's ability to use, share or publish such information as part of aggregated and anonymised reporting. This clause 7.4 shall survive termination or expiry of this Grant Agreement.

8. AUDITING AND ASSURANCE

8.1 At the end of the Funding Period you must provide ARIA with independent assurance that the Grant has been used for carrying out the Project Activities. To satisfy this requirement you must provide a statement showing that the use of the Grant has been certified by an independent and appropriately qualified auditor or accountant.

8.2 Subject to clause 11, ARIA and/or its authorised representative may, at any time during the Funding Period and for up to 7 years after the end of the Funding Period, conduct audits in relation to your use of the Grant and your compliance with the Grant Agreement. You must act reasonably in cooperating with any such audit, including by granting access to relevant documentation, premises and personnel.

8.3 You must:

(a) maintain an appropriate system of financial management and controls, maintain detailed records in relation to those controls, and provide copies of those records to ARIA on request; and

(b) retain, and procure that your Sub-Contractors retain and will provide to you on request, all relevant documentation relating to the Eligible Expenditure (including invoices, receipts and accounting records) during the Funding Period and for a period of 7 years thereafter.

9. FINANCIAL MANAGEMENT

9.1 You must:

(a) Comply with the Principles relating to Fraud as set out in Annex B to the Grant Agreement.

(b) maintain a sound administration and audit process, including internal financial controls, to safeguard against fraud and theft, money laundering, terrorist financing or any other impropriety, or mismanagement in connection with the administration of the Grant; and

(c) notify ARIA of any actual or suspected cases of fraud, theft or financial irregularity relating to the Project Activities as soon as they are identified, and keep ARIA informed of your remedial actions.

9.2 In the event of any actual or suspected fraud, theft or other financial irregularity (which includes use of the Grant for any purpose other than that envisaged by the Grant Agreement), ARIA may, at its absolute discretion:

(a) require you to take any remedial steps that ARIA may reasonably specify; and/or

(b) suspend the Project Activities and future payment of the Grant to you,

and in all cases you must explain to ARIA what steps are being taken to investigate the fraud, theft or irregularity (as applicable) and must keep ARIA informed about the progress of any such investigation. You must, if required by ARIA, refer the matter to an external auditor or any other relevant Third Party.

10. CONFLICTS OF INTEREST

10.1 You must inform ARIA promptly of any actual, perceived or potential conflicts between your and your Representatives' obligations under the Grant Agreement and your and their personal, business or professional interests. You must have adequate procedures to manage and monitor any actual or potential conflicts of interest, whether identified in the application process or notified to ARIA during the Funding Period.

10.2 If ARIA is not satisfied that you are adequately managing any actual or potential conflicts of interest, or that these conflicts are not capable of such management, the parties will discuss the issues raised and try to agree a resolution. If this is not possible, ARIA may request you or your Representative to cease the conflicting activity and if that is not acceptable to you or your Representative, either party may terminate the Grant Agreement on at least 30 days' notice in writing.

11. CONFIDENTIALITY

11.1 Except to the extent set out in this clause 11 or where disclosure is expressly permitted by the other party, each party must treat all Confidential Information belonging to or disclosed by the other party as confidential and will not disclose any such Confidential Information to any other person without the prior written consent of the other party, except to any persons who are directly involved in the provision of the Project Activities, who need to know the information and who are subject to binding obligations of confidentiality to the disclosing party.

11.2 ARIA may publish a summary of the Grant Agreement in any medium (having redacted both parties' Confidential Information), including a summary of any changes to the Grant Agreement agreed from time to time. Additionally, ARIA may publish a copy of the Milestones (in whole or in part) in any medium (provided that, where such Milestones contain or constitute your Confidential Information, ARIA has given you a reasonable opportunity to make representations in respect of any redactions or amendments you wish to be applied). For the avoidance of doubt, ARIA's publication rights under this clause 11.2 are exercisable at ARIA's sole discretion.

11.3 Nothing in this clause 11 will prevent either party disclosing any Confidential Information of the other party:

(a) for the purpose of the examination and certification of its accounts and/or pursuant to section 6(1) of the National Audit Act 1983;

(b) to any government department, consultant, contractor or other person engaged by that party, provided that such party only discloses information necessary for the purpose

concerned and obtains appropriate confidentiality undertakings in relation to such information;

(c) where disclosure is required by Law, including under the Information Acts to the extent they apply to that party and where no exception to disclosure under them is applicable; or

(d) where that party (acting reasonably) considers disclosure necessary or appropriate for the carrying out of its public functions.

11.4 Nothing in this clause 11 will prevent either party from using any techniques, ideas or know-how gained during the performance of its obligations under the Grant Agreement in the course of its normal business or activities, to the extent that this does not result in a disclosure of the other party's Confidential Information or an infringement of the other party's Intellectual Property Rights.

12. STATUTORY DUTIES

12.1 Each party must comply with its obligations under the Law, including where applicable the Information Acts, the EA and the HRA and you shall notify ARIA immediately of any investigation of or proceedings against you under the EA.

12.2 You acknowledge that ARIA is subject to requirements under the Information Acts (other than the FOIA) and you will provide reasonable assistance and cooperation to ARIA to assist ARIA's compliance with its information disclosure obligations.

12.3 You acknowledge that ARIA, acting in accordance with the Information Acts (other than the FOIA), may disclose information concerning you and the Grant Agreement without consulting you. ARIA must take reasonable steps to notify you of any request for information to the extent permissible and reasonably practical and will give you adequate opportunity to make representations before ARIA discloses any information relating to such matters. ARIA will be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

12.4 Where you are subject to the Information Acts and receive a request for disclosure that relates to ARIA or the Grant Agreement you will notify ARIA and give ARIA adequate opportunity to make representations to you before you disclose any information relating to such matters.

12.5 You must take account of the requirements of the National Security and Investment Act 2021 before assigning or licensing Results or Foreground IP. You are encouraged to give a voluntary notice to the Secretary of State under the Act in advance of any such assignment or licence if the assignment or licence is likely to meet the requirements of section 18 of the Act and inform ARIA if any mandatory or voluntary notification is made.

12.6 You must take account of the Secure Innovation and Trusted Research Guidance. You must also consider any risks to the physical safety and security of the public and implement any appropriate mitigations and measures where the Project Activities you carry out have the potential to interact with the public.

13. DATA PROTECTION

13.1 Each party must comply at all times with its obligations under the Data Protection Legislation. At ARIA's request you must provide ARIA with all relevant documents and information relating to your data protection policies and procedures that ARIA may reasonably request.

13.2 The parties do not envisage that either party will process any Personal Data for or on behalf of the other party under or in connection with the Grant Agreement. If either party anticipates that the other will process any Personal Data on its behalf under the Grant Agreement it must notify the other party and the parties must agree a variation to the Grant Agreement under clause 26 to incorporate appropriate provisions (such as those set out in Schedule 4) in accordance with, or as otherwise required by, the Data Protection Legislation.

14. SUBSIDY CONTROL AND STATE AID

14.1 ARIA intends that the Grant complies with the Subsidy Control Act 2022 on the basis that the Project Activities are not economic activities and do not give a specific advantage to one or more enterprises. You must take all reasonable steps to maintain this position and to assist ARIA to comply with the requirements of the Act and must cooperate with any investigations under the Act.

14.2 Where the EU state aid laws apply to the Grant (where the Project Activities will affect trade between Northern Ireland and the EU), you acknowledge that the Project Activities are designed and performed so they are compatible with state aid laws. You will take all reasonable steps to assist ARIA to comply with state aid law requirements and cooperate with any investigations by the European Commission into the Project Activities.

14.3 ARIA will immediately stop future payments of the Grant and may require repayment of some or all of the Grant if subsidy control or state aid laws so require for the funding to be compliant.

15. INTELLECTUAL PROPERTY RIGHTS

15.1 You must act in good faith and comply with the spirit of clauses 15 and 16 and not seek to avoid their application by artificial means.

Background IP

15.2 The Grant Agreement does not affect the ownership of your Background IP. You must notify ARIA during the Funding Period if any additional Background IP is required either to carry out the Project Activities or to exploit commercially any of the Results.

Foreground IP ownership

15.3 You will own all Foreground IP unless your policy is for individual researchers to own the Foreground IP they create, or you agree your Sub-Contractor (or another third party) will own all, or parts of, the Foreground IP. Where your Sub-Contractor or individual researchers (or any other third party involved in the performance of the Project Activities) will own any of the Foreground IP you must impose on them the obligations relating to Foreground IP and Results contained in clauses 15 and 16.Where you

assign any Foreground IP to a Third Party (including your technology transfer company) you must impose on that Third Party the obligations relating to Foreground IP and Results contained in clauses 15 and 16.

15.4 You must submit all (i) all patents within or covering the Foreground IP and (ii) data generated from any activities or experiments identified in the Project Activities to the Future Proofing our Climate and Weather Intellectual Property Pledge promptly following creation or filing (as applicable) of such patents and/or data (unless otherwise agreed in writing with, or instructed by, ARIA). For clarity, your rights to use and commercialise Foreground IP set out in clauses 15 and 16 are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge. You hereby agree to comply and uphold the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge.

Attribution to ARIA

15.5 You must ensure that whenever any Results are used with or communicated to Third Parties or are exploited commercially, ARIA's funding of the Project Activities is suitably accredited in accordance with ARIA's accreditation guidelines in force at the time. When using ARIA's name and logo you will comply with ARIA's branding guidelines in force at the time.

Patenting and publication

15.6 You must ensure that all Foreground IP is protected and managed in a professional manner, which may include patenting of any Results that are patentable.

15.7 You must notify ARIA where practicable at least 30 days (and in any event at least 48 hours) before publication of any Results by any person. This is intended to give ARIA the opportunity to discuss with you the possibility of filing a patent application before publication, and if appropriate assisting you with that process.

15.8 You must give ARIA as much notice as possible, but no less than 30 days' notice, of any decision to abandon or withdraw patent protection for any of the Results for the lifetime of the relevant patents or such shorter period as is agreed with ARIA so that ARIA can consider whether it wishes to fund future prosecution and maintenance and/or request the assignment of the patents to ARIA or its nominee.

Inventor first preference

15.9 Subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge if any inventor or active participant in the Project Activities expresses interest in the exploitation of the Foreground IP they have developed, you must give them an opportunity to negotiate an assignment or commercial licence of the Foreground IP, on reasonable terms, prior to negotiating with any entity in which an inventor or active participant in the Project Activities is not involved as a shareholder or other key stakeholder.

16. COMMERCIALISATION OF RESULTS

16.1 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, where they are capable of commercial exploitation you should seek to exploit the Results commercially. This should be done, where applicable, in accordance with the Commercialisation Hypothesis.

16.2 Save for Results that are subject to the terms of the Future Proofing our Climate and Weather Intellectual Property Pledge, if for any reason you choose not to exploit any such Results commercially within a reasonable timeframe (or, where applicable, the timeframe set out in the Commercialisation Hypothesis) you are encouraged to discuss the position with ARIA, and you may request that ARIA exploit them or assist you with their exploitation. In this case ARIA may request that you assign the relevant Foreground IP to it or its nominee. Any assignment would include a licence back to the relevant Foreground IP for research purposes.

Non-UK Commercialisation

16.3 Save as set out in the Future Proofing our Climate and Weather Intellectual Property Pledge, to avoid any restriction on commercialisation, no consent is required from ARIA for any Non-UK commercialisation or any sale of Foreground IP to a Non-UK Entity. However, ARIA is set up to create value for the UK and therefore you must secure a fee payable to ARIA (**ARIA Non-UK Fee**) in each of the following circumstances:

(a) where you are a Non-UK Entity;
(b) where you become a Non-UK Entity;
(c) where you assign or Commercially License any Foreground IP to a Non-UK Entity; or
(d) where you have assigned or Commercially Licensed any Foreground IP to a UK Entity that subsequently becomes a Non-UK Entity.

16.4 In order to avoid any unnecessary complexity, the ARIA Non-UK Fee will be based on the terms that you agree with any person to which you assign or Commercially License the relevant Foreground IP. This ARIA Non-UK Fee will amount to an additional twenty-five per cent (25%) of the value of the consideration (including upfronts, licence fees, milestone payments, royalties, shares or other securities, buyouts, exit fees and other consideration) that you receive from the exploitation of the relevant Foreground IP during any period that the above circumstances exist.

16.5 For example, if you would receive £100 (via royalty or royalty buyout), you must ensure your contractual mechanism enables you to collect an additional £25 and pay that additional amount to ARIA.

16.6 The ARIA Non-UK Fee is payable within 90 days after the end of each relevant Financial Year for receipts related to that calendar year. You are encouraged to use the clauses in Annex 1 in your Commercialisation Licences of Foreground IP.

Crown Body customers

16.7 You must ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities, and in suitable quantities for the Crown Body's requirements.

Spin-outs

16.8 ARIA seeks to maximise future investment of entrepreneurial talent and capital in start-up companies commercialising the Results of its funded activities. To that end, having funded the full economic cost of the research, ARIA places restrictions on the level of equity stakes and royalties that you may negotiate in exchange for the assignment or Commercialisation Licence of any Foreground IP.

16.9 If you or your technology transfer company assign or licence any Foreground IP to any third party or to a start-up established for the purpose of commercially exploiting the Results (a NewCo) you together with any connected person (including any investment fund to which you may transfer any part of your stake) shall be entitled to:

EITHER

(a) hold or have the right to hold no more than 10% in fully-dilutable shares or equity (pre investment) in the third party or NewCo (with no other preferential subscription rights), not including any shares or equity subscribed for cash on arm's length terms alongside other investors;

OR

(b) charge a royalty, with no upfront payments, annual fees, milestone payments or minimum royalties, payable by the third party or NewCo under any licence or assignment of the Foreground IP at no more than the relevant rate, and on the other terms, set out in Schedule 3.

16.10 The provisions of clauses 16.9(a) and 16.9(b) shall not apply to any equity taken or royalty charged in consideration of:

(a) IP other than Foreground IP licensed or assigned to the third party or NewCo; or
(b) facilities, equipment, personnel or other material support or services provided to the third party or NewCo independent of the Project Activities,

with such equity or royalty limited to the proportion that reflects the contribution made by IP that is not Foreground IP.

16.11 You must notify ARIA in writing before any transaction completes of the overall equity stake or royalty percentages agreed under clause 16.8 (and any impact of clause 16.9, if relevant).

17. ASSETS

17.1 You must keep a register during the Funding Period and for up to 7 years after the end of the Funding Period of all Assets, with all relevant details about each Asset. You must use any Assets purchased with Grant monies for the Project Activities.

17.2 At the end of the Funding Period all equipment purchased for use on the Project with funds provided by ARIA shall remain your property.

18. INSURANCE

18.1 You must maintain Adequate Insurance (including public liability insurance) either as a self-insurance arrangement or with an insurer of good repute to cover all insurable claims and liabilities under or in connection with the Grant Agreement. You must provide evidence of that insurance to ARIA on request.

19. ASSIGNMENT AND SUBCONTRACTING

19.1 You may not transfer, assign, novate or otherwise dispose of the whole or any part of the Grant Agreement or any rights under it, to another organisation or individual, without ARIA's prior written consent.

19.2 You shall not subcontract any of the Project Activities to a Third Party except to the extent permitted, and to the person or persons identified, in Schedule 2 Part 1. You must seek ARIA's prior consent to appoint any new Sub-Contractors not identified in Schedule 2 Part 1. You shall (i) be responsible for the acts and omissions of any Sub-Contractor as though they were your own, and (ii) enter into a written agreement with each Sub-Contractor on terms that are at least as protective of ARIA's rights and interests as the terms of this Grant Agreement and which contains all other provisions as are necessary to ensure that the Sub-Contractor complies with your obligations under this Grant Agreement.

20. BORROWING, LOSSES, GIFTS, SPECIAL PAYMENTS

20.1 You must obtain ARIA's prior written consent before:

(a) borrowing or lending money from any source in connection with the Grant Agreement;

(b) giving any guarantee, indemnity, security over any Asset or letter of comfort in relation to the Grant Agreement;

(c) making any gift or writing off any debt or liability in connection with the Grant, and must keep a record of all gifts given and received in connection with the Grant.

21. PUBLICITY

21.1 The parties will agree the text of a press release or other announcement to publicise the award of the Grant and all such publicity must comply with ARIA's accreditation and branding guidelines. Neither party may make any other press release or announcement about the Grant or publicise details of the Grant Agreement without the other's consent, except as required by Law.

21.2 You must comply with all reasonable requests from ARIA to facilitate visits and provide reports, statistics, photographs (with consent of your personnel if required) and case studies that will assist ARIA in its promotional and impact assessment activities relating to the Project Activities.

22. EVENTS OF DEFAULT AND TERMINATION

Events of Default

22.1 ARIA may exercise its rights set out in clause 22.2 if any of the following events occur:

(a) you fail to comply with any of your obligations under clauses 2.2, 7.2, 9.1, 11, 12, 13, 15.5 or 25, or commit a material breach of any other term of the Grant Agreement in the reasonable opinion of ARIA;

(b) you do not commence the Project Activities within 30 days after the Commencement Date unless an extension is agreed with ARIA;

(c) you fail to improve the performance of the Project Activities, notwithstanding your having undertaken the remedial activity agreed with ARIA in the remedial plan under clause 6.2(d);

(d) you or the researchers involved in the Project Activities obtain any funding from a Third Party that, in the opinion of ARIA, undertakes activities that are likely to bring the reputation of the Project Activities or ARIA into disrepute;

(e) you provide ARIA with any materially misleading or inaccurate information in your grant application or in subsequent related correspondence;

(f) you commit a Prohibited Act or fail to report a Prohibited Act to ARIA, whether committed by you or a Third Party, immediately upon becoming aware of it;

(g) you are subject to an Insolvency Event;

(h) the Grant or any part of it is held by a court or competent authority to be a prohibited subsidy under the Subsidy Control Act 2022 or an illegal state aid;

(i) you undergo a Change of Control which will, in the reasonable opinion of ARIA:

(i) be materially detrimental to, or result in fundamental changes to, the Project Activities;

(ii) result in your being unable to receive the Grant; and/or

(iii) raises national security concerns.

Rights reserved for ARIA in relation to an Event of Default

22.2 If an Event of Default has or may have occurred, ARIA may by written notice to you take any one or more of the following actions:

(a) suspend the Project Activities and payment of the whole or any part of the Grant for such period as ARIA may determine, acting reasonably;

(b) reduce the Maximum Sum, in which case the payment of Grant will thereafter be made in accordance with the reduction and notified to you; and/or

(c) subject to clause 22.4, terminate the Grant Agreement with immediate effect as from the date of service of the notice of that termination.

22.3 Where this Grant Agreement is terminated for an Event of Default described in clause 22.1(f) or 22.1(h), ARIA may require you to repay the entire amount of the Grant previously paid to you.

Opportunity for you to remedy an Event of Default

22.4 If ARIA wishes to exercise any right under clause 22.2 in connection with an Event of Default which is capable of remedy:

(a) ARIA will provide reasonable notice to you specifying particulars of the Event of Default, how it must be remedied and the timescales for its remedy; and

(b) following receipt of a notification under clause 22.4(a), you will be given a reasonable opportunity to remedy the Event of Default before ARIA exercises the relevant right under clause 22.2.

22.5 Without prejudice to any other provision of the Grant Agreement, you may terminate the Grant Agreement on written notice to ARIA if ARIA commits a material breach of the Grant Agreement which is either not capable of being remedied or, if the breach is capable of being remedied, ARIA fails to remedy such breach within 30 (thirty) days of receiving written notice requiring it to do so.

General Termination Rights

22.6 Notwithstanding ARIA's right to terminate the Grant Agreement under clause 22.2(c), either party may terminate the Grant Agreement (in whole or in part) at any time by giving at least 60 days' prior written notice to the other party.

22.7 You must promptly notify ARIA in writing if at any time the principal investigator or any key researcher(s) named in Schedule 2 working on the Project Activities is unable or unwilling to continue to be involved in the Project Activities or is moving to a new organisation without the desire to continue the research. Within 60 days after the date of that notice, you must either:

(a) nominate one or more successors, subject to ARIA's approval; or

(b) agree that the Grant is transferred to another organisation subject to your and the new organisation's agreement in writing and ARIA's approval of the transfer

If ARIA is unwilling to accept the nominated successor(s) or does not approve a request for transfer, it may terminate the Grant Agreement by at least 30 days' written notice to you.

Consequences of Termination

22.8 If the Grant Agreement is terminated you must return any Unspent Monies to ARIA within 30 days after the date of the termination notice, save where ARIA gives written consent to their retention.

22.9 Where ARIA terminates the Grant Agreement in accordance with clause 22.6, ARIA will be liable to pay any Unavoidable Costs subject to:

(a) you taking all reasonable steps to mitigate such loss; and
(b) the Unavoidable Costs being:

(i) proven, reasonable, and not capable of avoidance or recovery;
(ii) incurred under arrangements or agreements that are directly associated with this Grant Agreement;
(iii) supported by full particulars, including a fully itemised and costed list of such costs, with supporting evidence and copies of any relevant Sub-Contracts, and such information has been provided to the reasonable satisfaction of ARIA;

(iv) costs not relating to Sub-Contracts with an entity which directly or indirectly controls you, is controlled by you, or is under direct or indirect common control with you;

(v) costs that would not have been incurred had this Grant Agreement continued until the end of the Funding Period as set out in the Grant Funding Letter (or, if it has been extended, the expiry of such additional period).

22.10 You shall ensure that any Sub-Contract, or the part of the Sub-Contract which relates to the Services, over £250,000 will terminate automatically and immediately upon termination of this Agreement.

22.11 If requested by ARIA from time-to-time, you must (acting in good faith) provide ARIA with a reasonable estimate of the Unavoidable Costs which would be payable under this Grant Agreement in the event that the Grant Agreement was terminated (calculated on the basis described in clause 22.8).

22.12 ARIA's total liability under clause 22.9 shall be limited to the Maximum Sum under the Grant Agreement (or relevant part), including any sums paid, due or becoming due to you at the date of termination.

22.13 If the Grant Agreement is terminated or expires ARIA will not be liable to pay any of your costs or those of any of your contractors or suppliers related to any transfer or termination of employment of any employees engaged in the provision of the Project Activities, unless they have been hired for the purpose of the Project Activities, are specified personnel in the Grant Funding Letter and are normal statutory or contractual requirements. You must at ARIA's request promptly prepare a written exit plan to provide for the cessation or seamless transfer to a Third Party of the Project Activities following expiry or termination of the Grant Agreement.

23. DISPUTE RESOLUTION

23.1 The parties must use all reasonable endeavours to resolve in good faith any dispute that arises during the term of the Grant Agreement.

23.2 All disputes and complaints must be referred in the first instance to the Grant Manager and the Project Representative.

23.3 If the dispute cannot be resolved between the Grant Manager and the Project Representative within a maximum of 15 Working Days, then the matter will be escalated to a formal meeting between the parties' Escalation Contacts.

24. LIMITATION OF LIABILITY

24.1 Neither party's liability for any of the following shall be subject to the limitations or exclusions of liability otherwise provided for in this clause:

(a) fraudulent misrepresentation or any other fraudulent act or omission;

(b) payment of sums properly due and owing to the other in the normal course of performance of this Grant Agreement;

(c) a breach of clause 13;

(d) liability arising under any indemnity in this Grant Agreement; or

(e) liability which may not lawfully be excluded or limited.

24.2 Subject to clause 24.1, ARIA accepts no liability for any consequences or Losses (except, for clarity, as set out in this Grant Agreement or for ARIA's breach of this Grant Agreement), whether arising directly or indirectly, that may arise in connection with:

(a) your carrying out the Project Activities;

(b) the use of the Grant by any person;

(c) any reduction, suspension, withdrawal or request for repayment of the Grant in accordance with this Grant Agreement; or

(d) termination of the Grant Agreement in accordance with this Grant Agreement.

24.3 Subject to clause 24.1, neither party will be liable to the other party, whether for breach of contract, tort (including negligence) or otherwise, for:

(a) loss of profit, sales or turnover;

(b) loss of contracts or business opportunities;

(c) loss of anticipated savings;

(d) loss of goodwill or damage to reputation; or

(e) any indirect, special or consequential loss or damage;

in each case arising out of or relating to the Grant Agreement, whether or not such loss or damage was foreseeable or the other party was advised of its possibility.

24.4 Subject to clause 24.1, each party's total aggregate liability arising out of or relating to the Grant Agreement or its subject matter or anything which it has done or not done in connection with the Grant Agreement or its subject matter (whether for breach of contract, tort, including negligence, or otherwise), will not exceed the amount of the Maximum Sum.

24.5 You shall under no circumstances in connection with this Grant Agreement be entitled to recover damages, or obtain payment, reimbursement, restitution or indemnity more than once in respect of the same loss, shortfall, damage, deficiency, breach or other event or circumstance.

24.6 ARIA shall be entitled to set off any of your outstanding liabilities against any amounts that are payable by it pursuant to this Grant Agreement.

25. RESEARCH ETHICS AND CODE OF CONDUCT

25.1 As a recipient of a Government grant you must operate in accordance with the Concordat.

25.2 All research data:

(a) must be generated using sound scientific techniques and processes;

(b) must be accurately recorded in accordance with good scientific practices by the people conducting the research; and

(c) must be analysed appropriately, without bias and in accordance with good scientific practices.

25.3 The Results must be stored securely and be easily retrievable with document trails that allow reconstruction of key decisions and conclusions of the Project.

25.4 You must comply with the Code of Conduct and ensure that your Representatives undertake their duties in a manner consistent with the principles set out in the Code of Conduct. You must immediately notify ARIA if you become aware of any actual or suspected breaches of the principles contained in the Code of Conduct.

26. VARIATIONS

26.1 Any variation to the Grant Agreement will only be valid if it is agreed in writing and signed by an authorised representative of each party.

27. GENERAL

27.1 Notices: All notices and other communications in relation to this Grant Agreement must be in writing and will be deemed to have been duly given if personally delivered, e-mailed, or mailed (first class postage prepaid) to the address of the relevant party as stated in clause 2.1 of the Offer Letter. If personally delivered or if e-mailed all such communications will be deemed to have been given when received (except that if received on a non-working day or after 5.00 pm on any Working Day they will be deemed received on the next Working Day) and if mailed all such communications will be deemed to have been given and received on the third Working Day following such mailing.

27.2 Change of control: You must notify ARIA as soon as practicable in writing of any arrangements that are in progress or in contemplation that if completed will result in a Change of Control, and must provide to ARIA sufficient details about the circumstances surrounding the proposed Change of Control and the identity of the proposed acquiror to allow ARIA to assess whether clause 22.1(i) is likely to apply.

28. GOVERNING LAW

28.1 This Grant Agreement (including any non-contractual disputes or claims arising in connection with this Grant Agreement) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

29. Not used

30. DEFINITIONS AND INTERPRETATION

30.1 Where they appear in these Conditions or the Grant Agreement:

Adequate Insurance means the insurance requirements and amounts set out in the Grant Funding Letter.

Asset means any asset that is purchased, improved or developed using the Grant including equipment and fixed assets;

Background IP means IP that is:

(a) owned by or licensed to a party prior to the Commencement Date; or
(b) developed by or on behalf of a party during the Funding Period but not in connection with the Project Activities,
and is in either case used in connection with the Project Activities;
Bribery Act means the Bribery Act 2010 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning this legislation;
Change of Control means the sale of all or substantially all your assets; any merger, consolidation or acquisition of you with, by or into another person, or any change in the ownership of more than fifty percent (50%) of your voting capital in one or more related transactions;
Code of Conduct means the Code of Conduct for Recipients of Government General Grants published by the Cabinet Office in November 2018 which is available (at the Commencement Date) at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/754555/2018-11-06_Code_of_Conduct_for_Grant_Recipients.pdf
including any subsequent updates from time to time;
Commencement Date means the date set out in the Grant Funding Letter;
Commercialisation Licence means a licence of IP other than a research or evaluation licence and/or subcontract manufacture (and **Commercially License** means to license under a Commercialisation Licence);
Commercialisation Hypothesis means the exploitation plan approved by ARIA and set out at Schedule 2 Part 2, as may be amended by agreement between the parties during and after the Funding Period;
Completion Date means the date set out in the Grant Funding Letter;
Concordat means the Concordat to Support Research Integrity which can be found at https://ukrio.org/about-us/the-concordat-to-support-research-integrity/
Conditions means these ARIA Grant Conditions;
Confidential Information means any information (however conveyed, recorded or preserved) disclosed by or on behalf of a party to the other party, whether before or after the date of the Grant Agreement, that ought reasonably to be considered to be confidential (whether or not it is so marked),
(a) including: (i) information relating to the business, affairs, customers, clients, suppliers or plans of the disclosing party; (ii) the operations, processes, product information, know-how, designs, trade secrets or software of the disclosing party; (iii) any information developed by the parties in the course of carrying out the Project Activities; (iv) Personal Data supplied by either party to the other for the purposes of, or in connection with, the Grant Agreement; and (v) and any information derived from any of the above,
(b) but not including information which: (i) was public knowledge at the time of disclosure (otherwise than by breach of clause 11); (ii) was in the possession of the receiving party, without restriction as to its disclosure, before receiving it from the disclosing party; (iii) is received from a Third Party (who lawfully acquired it) without restriction as to its disclosure; or (iv) is independently developed without access to the Confidential Information; and (v) the content of this specific version of the Grant Agreement, save in respect of any information which is exempt from disclosure under the Information Acts as they apply to the relevant party;
Crown Body means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

Data Protection Legislation means all applicable laws from time to time in force in England and Wales on data protection, including but not limited to, the Data Protection Act 2018, the retained EU law version of the GDPR and the Privacy and Electronic Communications (EC Directive) Regulations 2003, SI 2003/2426, and any national laws or regulations implementing Directive 2002/58/EC (as updated by Directive 2009/136/EC) and any judicial or administrative interpretation of any of the above, and any guidance, guidelines, codes of practice, approved codes of conduct and approved certification mechanisms issued by any relevant supervisory authority as applicable;

Duplicate Funding means funding provided to you by a Third Party which is to fund the same activities as the Project Activities;

EA means the Equality Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

EIR means the Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004;

Eligible Expenditure means the payments made by you during the Funding Period for the purposes of carrying out the Project Activities which comply with clause 5 and ARIA's published eligibility rules (which provide for full economic cost reimbursement) and as agreed in the Grant Funding Letter;

Escalation Contact means the escalation contact appointed by ARIA or by you (as the case may be), which at the Commencement Date will be the individuals listed as such in the Grant Funding Letter;

Event of Default means any of the events or circumstances set out in clause 22.1;

Financial Year means 1 April to 31 March;

FOIA means the Freedom of Information Act 2000 and the Freedom of Information (Scotland) Act 2002, any subordinate legislation made under those Acts from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Foreground IP means any IP in the Results;

Funding Period means the period commencing on the Commencement Date and ending on the Completion Date or such later date as may be agreed between the parties unless otherwise determined in accordance with the terms of the Grant Agreement;

Future Proofing our Climate and Weather Intellectual Property Pledge means the pledging system for patents relating to approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification (operated by ARIA or by a third party), in the form set out at Annex A;

GDPR means Regulation (EU) 2016/679;

Grant means the sum or sums ARIA will pay to you up to the amount set out in the Grant Funding Letter, in accordance with clause 4 and subject to the provisions set out at clause 22.

Grant Agreement has the meaning given in the Grant Funding Letter;

Grant Claim means a request submitted by you to ARIA for payment of the Grant;

Grant Funding Letter means the letter from ARIA to you to which these Conditions are annexed;

Grant Manager means the individual who has been nominated by ARIA to be your day-to-day point of contact in relation to the Grant;

Grant Review means the process for reviewing the grant outlined in clause 6;

HRA means the Human Rights Act 1998 and any subordinate legislation made under that Act from time to time together with any guidance or codes of practice issued by the relevant government department concerning the legislation;

Ineligible Expenditure means expenditure incurred by you which is not Eligible Expenditure as set out in clause 5 and ARIA's published eligibility rules;

Information Acts means the Data Protection Legislation, FOIA and the EIR, as amended from time to time;

Insolvency Event means:

(i) where you pass a resolution, or the court makes an order that you be wound up (otherwise than for the purpose of a bona fide and solvent reconstruction or amalgamation); or (ii) a receiver, manager or administrator on behalf of a creditor is appointed in respect of all or part of your business or assets; or (iii) circumstances arise which entitle a court or creditor to appoint a receiver, manager or administrator or which entitle the court (otherwise than for the purpose of a solvent and bona fide reconstruction or amalgamation) to make a winding up order; or (iv) you cease to trade or are unable to pay your debts within the meaning of the Insolvency Act 1986 or any similar event occurs under the law of any other jurisdiction;

Intellectual Property Rights or **IP** means copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and any modifications, amendments, updates and new releases of the same and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world;

Law means any law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code, judgement of a relevant court of law, or directives or requirements of any regulatory body, delegated or subordinate legislation;

Losses means all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgement, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise;

Maximum Sum means the maximum amount of the Grant stated in the Grant Funding Letter;

Milestones means the outputs of the Project Activities described in paragraph 3.2 of Schedule 2;

NewCo has the meaning given in clause 16**;**

Non-UK Entity means a legal entity that is not a UK Entity;

Personal Data has the meaning given to it in the Data Protection Legislation as amended from time to time;

Prohibited Act means:

(a) directly or indirectly offering, giving or agreeing to give to any servant of ARIA or the Crown any gift or consideration of any kind as an inducement or reward for (i)doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Grant Agreement; and/or (ii) showing or not showing favour or disfavour to any person in relation to the Grant Agreement;

(b) committing any offence: (i) under the Bribery Act; (ii) under legislation creating offences in respect of fraudulent acts; and/or (iii) at common law in respect of fraudulent acts in relation to the Grant Agreement; and/or

(c) defrauding or attempting to defraud or conspiring to defraud ARIA or the Crown;

Project means the Project Activities together with the Results;

Project Activities means the activities to be carried out by you that are described in the Grant Funding Letter and in Schedule 2 Part 1;

Project Representative means the representative appointed by you, who at the Commencement Date will be the individual listed as such in the Grant Funding Letter;

Representative means any of the parties' duly authorised directors, employees, officers, agents, professional advisors and consultants;

Results means all information, data, techniques, inventions, discoveries, works, software and materials generated in the course of the Project Activities;

Secure Innovation and Trusted Research Guidance means the best practice for the implementation of basic protective security measures guidance provided by NCSC and NPSA which can be found on ARIA's website;

Sub-Contract means any contract or agreement or proposed contract or agreement between you and any Third Party whereby that Third Party agrees to provide to you the Project Activities or any part thereof or facilities or services necessary for the performance of the Project Activities or any part thereof or necessary for the management, direction or control of the Project Activities or any part thereof, and **Sub-Contractor** shall be construed accordingly;

Third Party means any person or organisation other than you or ARIA;

UK Entity means a legal entity whose ultimate parent company has its headquarters and principal establishment in the United Kingdom;

Unavoidable Costs means the amounts paid or payable by you to your Sub-Contractors or other third parties in respect of the termination of Sub-Contracts as a direct result of the early termination of this Grant Agreement and which are not capable of recovery;

Unspent Monies means any monies paid to you which remain unspent at the end of the Funding Period because of termination or breach of the Grant Agreement. Unspent Monies do not include non-cancellable costs incurred prior to termination; and

Working Day means any day other than a Saturday, Sunday or public holiday in England and Wales.

30.2 In these Conditions and the Grant Agreement, unless the context otherwise requires:

(a) references to "party" and "parties" are to the parties to the Grant Agreement;
(b) the singular includes the plural and vice versa;
(c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
(d) references to clauses and Schedules are to the clauses of these Conditions and to the Schedules to the Grant Agreement;
(e) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
(f) the words "including", "other", "in particular", "for example" and similar words will not limit the generality of the preceding words and will be construed as if they were immediately followed by the words "without limitation"; and
(g) the headings in the Grant Agreement are for ease of reference only and will not affect the interpretation or construction of the Grant Agreement.

SCHEDULE 2

PART 1 - PROJECT ACTIVITIES

1. Background

The project, "Investigating the Impacts of Earth Cooling Approaches on the Variability and Wet-Dry Spell Dynamics of the West African Monsoon," explores the effects of Solar Radiation Management (SRM) on the West African Monsoon (WAM). The West African Monsoon (WAM) is a critical climatic system that governs rainfall distribution across West Africa, directly influencing agriculture, water resources, and socio-economic stability. Monsoon's seasonal progression and variability significantly affects food security, energy production, and ecosystem sustainability, making it a key driver of regional development. However, climate change is amplifying WAM variability, leading to shifts in rainfall patterns, prolonged droughts, and intense wet spells, all of which pose serious challenges to livelihoods and economic resilience.

In response to rising global temperatures, Solar Radiation Management (SRM) has emerged as a proposed geoengineering strategy to reflect a portion of incoming solar radiation and moderate global warming. While SRM may offer potential benefits in reducing extreme climate impacts, its regional consequences—particularly for complex atmospheric systems like the WAM—remain largely uncertain. Understanding how SRM might alter wet and dry spell dynamics in the WAM region is crucial for assessing its feasibility and risks.

This research investigates the impacts of SRM on the variability of the WAM, with a specific focus on wet and dry spell dynamics. Utilizing high-resolution climate models, observational datasets, and Geoengineering Model Intercomparison Project (GeoMIP) scenarios, this study aims to bridge critical knowledge gaps in how SRM could influence the monsoon system. The findings will contribute to the scientific discourse on climate interventions and provide insights into the potential risks and benefits of SRM in West Africa. Furthermore, this study aligns with the broader objectives of climate adaptation and mitigation strategies, offering actionable knowledge to inform regional climate resilience planning and sustainable development.

2. Aims and objectives of the Project Activities

The overarching goal of this project is to evaluate how SRM influences WAM variability and wet-dry spell dynamics. The project aligns with the ARIA Exploring Climate Cooling Programme and aims to:

- Assess the impact of SRM on rainfall variability and extreme weather events.
- Analyze wet and dry spell dynamics under different SRM scenarios.
- Examine the potential implications for water resources, agriculture, and regional sustainability.

- Compare SRM scenario outcomes with baseline scenarios (SSP2-4.5 and SSP5-8.5).
- Provide high-resolution climate projections to support adaptation strategies.

3. Project Activities

To achieve the ambitious research objectives, a combination of observational data analysis and advanced climate modeling approaches will be employed. The project is structured into five interconnected work packages (WPs): WP1 focuses on Data Collection and Preprocessing. WP2 focuses on Climate Modeling and Simulations. WP3 focuses on Analysis of Wet-Dry Spell Dynamics. WP4 focuses on Evaluation of Model Performance. Finally, WP5 concerns the dissemination of our findings to policymakers, stakeholders and the scientific community.

3.1 Description of the funded activities

WP 1 – Data Collection and Preprocessing

This work package (WP1) focuses on the systematic collection, preprocessing, and quality control of multi-source climate data, ensuring consistency and comparability across datasets. The first step in WP1 is the acquisition of observational datasets from leading global climate data repositories. Key sources include the Global Precipitation Climatology Centre (GPCC), the Tropical Applications of Meteorology using Satellite Data and Ground-Based Observations (TAMSAT), the Climate Research Unit (CRU), the Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS), and the European Centre for Medium-Range Weather Forecasts' ERA5 reanalysis data. These datasets provide long-term records of precipitation, temperature, and other climatic variables critical for assessing historical WAM variability. The integration of multiple datasets ensures that biases or errors inherent to any single data source can be mitigated through cross-validation and statistical adjustments. In addition to observational data, WP1 incorporates climate model outputs from Shared Socioeconomic Pathways (SSPs) and Geoengineering Model Intercomparison Project (GeoMIP) simulations. The SSP scenarios SSP2-4.5 and SSP5-8.5 serve as baselines, representing moderate and high-emission trajectories, respectively. These scenarios allow for an evaluation of how the monsoon might behave in the absence of geoengineering interventions. On the other hand, the GeoMIP experiments (G6solar and G6sulfur) simulate SRM strategies designed to counteract global warming. The G6solar scenario explores the effects of reducing incoming solar radiation, while G6sulfur simulates the injection of sulfur aerosols into the stratosphere. Comparing these scenarios with historical and projected climate patterns will provide insights into the extent to which SRM could influence WAM variability, particularly in terms of wet and dry spell dynamics. Once the datasets are collected, extensive preprocessing steps are undertaken to ensure their usability in climate modeling. A critical component of this stage is data standardization, which involves harmonizing datasets from different sources with varying spatial and temporal resolutions. This is achieved through regridding, a process that interpolates data onto a common spatial grid, allowing for seamless comparisons and integration with regional climate models. The datasets will be standardized to a uniform 0.25° resolution, ensuring alignment with the high-resolution climate simulations that will be conducted later in the study.

Another key aspect of preprocessing is quality control, which is essential for eliminating inconsistencies and errors that could distort model outputs. This involves detecting and correcting missing values, identifying outliers, and performing bias corrections where necessary. For observational datasets, cross-validation techniques will be employed to assess consistency between different sources. In the case of reanalysis and model-generated datasets, comparisons with ground-based observations will be conducted to evaluate their accuracy in representing historical climate conditions over the study area. The final stage of WP1 involves organizing and structuring the processed datasets for input into regional climate modeling (WP2). Ensuring that the data are free from inconsistencies and biases at this stage is crucial, as any errors could propagate through subsequent analyses, leading to misleading conclusions. The outcomes of WP1 will form the backbone of this study, providing a high-quality, standardized dataset that will enable rigorous analysis of how SRM interventions might alter the West African Monsoon and its wet-dry spell dynamics

Deliverables for WP1: Data Collection and Preprocessing

D1.1: Comprehensive Multi-Source Climate Dataset Compilation

- Successfully acquired and integrated meteorological, hydrological, and climate model datasets from GPCC, TAMSAT, CHIRPS, CRU, and ERA5, ensuring a robust foundation for climate modeling.
- Assembled climate model outputs from CMIP6 and GeoMIP for historical (1985–2014) and projected future (2030–2099) climate conditions under SSP2-4.5, SSP5-8.5, G6solar, and G6sulfur scenarios.
- Established a structured data repository to facilitate seamless access and analysis across work packages.

D1.2: Preprocessed and Standardized Climate Data

- Conducted quality control measures, including bias correction, outlier detection, and gap filling, to enhance dataset reliability.
- Regridded all datasets to a uniform 0.25° resolution, ensuring consistency with high-resolution climate modeling requirements.
- Cross-validated observational data to minimize uncertainties, improving the robustness of climate model assessments.

D1.3: Data Documentation and Metadata Generation

- Developed detailed metadata and documentation outlining dataset sources, preprocessing steps, assumptions, and limitations.
- Ensured dataset interoperability by adopting standardized formats (NetCDF, CSV) for integration into regional climate modeling frameworks (WP2).

D1.4: Prepared Input Datasets for Climate Modeling and Analysis

- Structured and formatted datasets for direct use in RegCM5 simulations, ensuring compatibility with model input requirements.
- Generated baseline and SRM scenario-specific datasets to support subsequent analysis of WAM variability and wet-dry spell dynamics.

D1.5: Interim Technical Report on Data Collection and Preprocessing

- Compiled a technical report summarizing data acquisition, preprocessing methodologies, validation techniques, and final dataset readiness.
- Delivered a preliminary dataset analysis to confirm data integrity before proceeding to climate simulations in WP2.

WP 2 - Climate Modeling and Simulations

This work package (WP2) is dedicated to configuring, calibrating, and running high-resolution climate simulations using the Regional Climate Model (RegCM5) to assess how SRM strategies may influence WAM variability, particularly in terms of wet and dry spell dynamics.

A critical first step in WP2 is the configuration and calibration of RegCM5, ensuring that the model accurately represents the climatic characteristics of the West African region. RegCM5 is well-suited for this study due to its ability to simulate mesoscale atmospheric processes with high spatial resolution, making it ideal for capturing the spatiotemporal variability of the monsoon system. The model setup will include parameter tuning to improve its representation of WAM dynamics, including monsoon onset, duration, and intensity. The calibration process involves adjusting land surface schemes, convection schemes, and radiation balance parameters, using observational datasets from GPCC, CHIRPS, CRU, TAMSAT, and ERA5 as benchmarks. This ensures that simulated precipitation, temperature, and other climate variables align closely with historical records, thereby improving the reliability of future projections.

Once the model is configured, WP2 will conduct high-resolution climate simulations under different emission and SRM scenarios. The first set of simulations will establish baseline climate conditions using Shared Socioeconomic Pathways (SSP2-4.5 and SSP5-8.5). The SSP2-4.5 scenario represents a moderate-emission trajectory, where climate policies help to mitigate greenhouse gas (GHG) concentrations, while SSP5-8.5 represents a high-emission, fossil fuel-driven scenario with minimal climate mitigation. These baseline simulations are essential for understanding the natural variability of the WAM in the absence of SRM interventions, serving as a reference against which SRM impacts will be evaluated.

The next phase of WP2 focuses on SRM simulations, using the Geoengineering Model Intercomparison Project (GeoMIP) scenarios G6solar and G6sulfur to investigate potential SRM-induced modifications to WAM dynamics. The G6solar scenario involves a reduction in solar constant, simulating a global decrease in incoming solar radiation, which mimics the effects of space-based solar reflectors or other solar dimming strategies. The G6sulfur scenario, on the other hand, models the injection of sulfate aerosols into the stratosphere, a process intended to increase atmospheric reflectivity and reduce surface temperatures. These experiments are critical for assessing how SRM could modify rainfall patterns, monsoon onset, and the frequency of wet and dry spells, which directly impact water resources, agriculture, and regional climate stability in West Africa.

A fundamental aspect of WP2 is the evaluation of model performance to ensure that the simulated outputs accurately reflect real-world climate behavior. This involves rigorous statistical validation, where model-generated precipitation and temperature patterns will be compared against observational datasets (GPCC, CHIRPS, CRU, TAMSAT, and ERA5). Key evaluation metrics, including bias analysis, root mean square error (RMSE), correlation coefficients, and spatial pattern assessments, will be employed to quantify model accuracy and identify potential discrepancies. If substantial biases are detected, additional model refinements and sensitivity tests will be conducted to enhance the robustness of the simulations.

The outcomes of WP2 will provide a comprehensive dataset of simulated WAM dynamics under both natural and SRM-modified conditions, forming the foundation for subsequent analyses in WP3, which will examine the specific characteristics of wet and dry spells under different climate scenarios.

Deliverables for WP2: Climate Modeling and Simulations

D2.1: Configuration and Calibration of RegCM5

- Successfully configured and calibrated the Regional Climate Model (RegCM5) to accurately simulate WAM dynamics, including monsoon onset, cessation, intensity, and spatial variability.
- Optimized land surface schemes, convection schemes, and radiation balance parameters, ensuring improved representation of atmospheric processes.
- Conducted preliminary validation of model physics and parameterization settings using historical observational datasets (GPCC, CHIRPS, CRU, TAMSAT, and ERA5) to refine model accuracy.

D2.2: High-Resolution Climate Simulations for Baseline Scenarios

- Successfully simulated WAM under SSP2-4.5 and SSP5-8.5, establishing a baseline reference for climate variability in West Africa.
- Generated high-resolution datasets representing WAM rainfall distribution, temperature variability, and extreme event patterns in the absence of SRM interventions.

D2.3: SRM Scenario Simulations and WAM Impact Assessment

- Conducted climate simulations under GeoMIP's G6solar and G6sulfur scenarios, evaluating the potential effects of solar dimming and sulfate aerosol injections on WAM variability.
- Produced comparative datasets highlighting differences in monsoon onset, precipitation variability, and wet-dry spell occurrences between baseline and SRM scenarios.

D2.4: Model Performance Evaluation and Validation

- Assessed the accuracy of RegCM5 simulations by comparing outputs against observational datasets (GPCC, CHIRPS, CRU, TAMSAT, and ERA5).

- Performed bias analysis, root mean square error (RMSE) calculations, correlation assessments, and spatial distribution comparisons to quantify model performance.
- Identified potential systematic biases and uncertainties, implementing iterative refinements to enhance the reliability of simulated climate projections.

D2.5: Processed and Ready-to-Use Climate Model Datasets

- Produced structured datasets of WAM simulations under various scenarios, ensuring compatibility for subsequent analysis in WP3 (wet-dry spell dynamics analysis).
- Developed metadata and documentation describing model assumptions, parameterizations, and scenario-specific climate variations to ensure reproducibility.

D2.6: Technical Report on Climate Simulations and Model Validation

- Delivered a comprehensive technical report detailing model setup, simulation results, performance evaluations, and preliminary insights into the effects of SRM on WAM.
- Summarized findings to support scientific publications, and stakeholder engagement in later project phases.

WP3: Analysis of Wet-Dry Spell Dynamics

This work package (WP3) focuses on the statistical analysis of precipitation variability under different climate scenarios, with a particular emphasis on how SRM-induced modifications may alter the frequency, intensity, and duration of wet and dry spells.

To achieve a comprehensive assessment, WP3 employs multiple statistical indices that capture different aspects of precipitation variability. The Standardized Precipitation Evapotranspiration Index (SPEI) is used to measure drought severity by incorporating both precipitation and potential evapotranspiration, making it particularly useful in detecting climate change-induced drying trends. The Precipitation Concentration Index (PCI) helps identify periods of extreme rainfall concentration, distinguishing between evenly distributed precipitation and events dominated by short, intense bursts of rainfall. Additionally, the Precipitation Concentration Degree (PCD) and Precipitation Concentration Period (PCP) provide further insight into the seasonal distribution of rainfall, helping to determine whether SRM could lead to shifts in monsoon onset, peak intensity, or termination.
A key objective of WP3 is to assess how wet and dry spells evolve under different climate forcing conditions, comparing baseline (SSP2-4.5 and SSP5-8.5) and SRM (G6solar and G6sulfur) scenarios. The analysis begins with the identification of extreme wet and dry events, followed by the application of statistical techniques to quantify changes in their frequency, intensity, and duration. If SRM interventions significantly alter the distribution of wet and dry spells, it could have profound implications for flood risk, agricultural planning, and water resource management in the region.
Another essential aspect of WP3 is trend analysis, which involves examining long-term shifts in precipitation characteristics across different climatic scenarios. By applying linear regression, Mann-Kendall tests, and Sen's slope estimations, the study will determine whether specific trends such as increased drought frequency or shifts in peak monsoon rainfall are statistically significant. Furthermore, correlation analysis will be employed to explore relationships between temperature, atmospheric circulation changes, and precipitation patterns, providing deeper insight into the

underlying drivers of observed variability. Anomaly detection techniques will also be used to identify deviations from historical rainfall patterns, which may indicate emerging climate extremes under SRM interventions.

The spatial and temporal distribution of rainfall is another critical component of WP3. Given that WAM variability is highly heterogeneous across the region, WP3 will use spatial interpolation techniques and geostatistical analyses to map precipitation changes at different latitudes and longitudes. This will help identify regional hotspots where wet and dry spell dynamics are most affected by SRM, providing valuable information for climate adaptation strategies. Temporal analysis will focus on detecting shifts in monsoon onset, cessation, and intra-seasonal rainfall variability, helping to determine whether SRM could lead to delayed monsoon arrival, prolonged dry periods, or more erratic rainfall distribution.

Ultimately, WP3 aims to quantify the extent to which SRM interventions might disrupt or stabilize WAM-driven precipitation patterns. The findings will be crucial for policymakers and stakeholders, as any significant alterations in wet and dry spell dynamics could directly impact agriculture, infrastructure planning, and regional water security.

Deliverables for WP3: Analysis of Wet-Dry Spell Dynamics

D3.1: Comprehensive Statistical Assessment of Wet and Dry Spells

- Computed and analyzed wet and dry spell characteristics (frequency, intensity, and duration) under baseline (SSP2-4.5, SSP5-8.5) and SRM (G6solar, G6sulfur) scenarios.
- Applied statistical indices (SPEI, PCI, PCD, and PCP) to quantify precipitation variability and assess the impact of SRM interventions on extreme rainfall patterns.

D3.2: Trend Analysis and Climate Variability Assessment

- Identified long-term trends in precipitation characteristics across climate scenarios using Mann-Kendall tests, Sen's slope estimations, and linear regression models.
- Evaluated potential shifts in drought severity and rainfall concentration under different SRM **scenarios**, determining whether interventions exacerbate or mitigate extreme climate events.

D3.3: Spatial and Temporal Analysis of Rainfall Patterns

- Mapped the spatial distribution of wet and dry spell variability across West Africa, identifying regions most susceptible to SRM-induced precipitation changes.
- Conducted spatial interpolation and geostatistical analyses to highlight monsoon onset shifts, peak intensity variations, and cessation changes.
- Examined intra-seasonal rainfall variability to determine whether SRM affects rainfall predictability and consistency in monsoon-dependent regions.

D3.4: Correlation and Anomaly Detection of SRM Effects

- Conducted correlation analysis to examine links between temperature changes, atmospheric circulation, and precipitation variability across different SRM and non-SRM scenarios.
- Applied anomaly detection techniques to identify statistically significant deviations from historical precipitation patterns, detecting potential SRM-induced climate extremes.

D3.5: Technical Report on Wet-Dry Spell Analysis

- Delivered a detailed technical report summarizing wet and dry spell dynamics, spatial rainfall distribution, trend analysis results, and SRM-induced climate variability insights.
- Provided dataset outputs and preliminary interpretations for use in climate risk assessment and wider discussions.

WP4: Evaluation of Model Performance

Ensuring the reliability of climate model simulations is a fundamental step in understanding how Solar Radiation Management (SRM) interventions may influence the West African Monsoon (WAM). This work package (WP4) focuses on the evaluation of RegCM5 model performance, ensuring that its outputs accurately represent observed climate patterns and that uncertainties in the simulations are systematically analyzed and minimized. Since climate models are simplifications of real-world atmospheric processes, their credibility depends on rigorous benchmarking against observational datasets and inter-model comparisons.

The first step in WP4 involves comparing RegCM5 outputs with high-quality observational datasets from sources such as GPCC, CHIRPS, CRU, and ERA5 reanalysis data. These datasets provide long-term records of precipitation, temperature, and atmospheric dynamics, offering a reliable reference for assessing model accuracy. By aligning simulated rainfall patterns with observed historical data, WP4 will identify potential biases, inconsistencies, and deviations that may affect the study's conclusions. Statistical validation techniques will be applied, including bias analysis, root mean square error (RMSE), correlation coefficients, and probability density function (PDF) comparisons, to measure the degree of agreement between simulated and observed climate conditions.

Beyond observational validation, WP4 also emphasizes inter-model comparisons to evaluate the performance of RegCM5 within the broader context of global and regional climate models. This involves benchmarking RegCM5 results against outputs from other models in the Geoengineering Model Intercomparison Project (GeoMIP) ensemble. Comparing RegCM5 with models that use different parameterizations, resolutions, and physical assumptions allows researchers to assess model consistency, detect systematic errors, and quantify uncertainty sources. If significant discrepancies arise between RegCM5 and other models, adjustments in parameterization schemes and boundary conditions may be required to enhance the model's realism in simulating WAM variability.

Another crucial component of WP4 is sensitivity analysis, which examines how RegCM5 simulations respond to variations in key model parameters. Climate models incorporate numerous physical and dynamical processes, such as cloud formation, convection, land-atmosphere interactions, and radiation balance, all of which can influence precipitation and temperature patterns. WP4 will systematically alter selected parameters (e.g., convective scheme thresholds, surface energy fluxes, and aerosol interactions) to determine their impact on model outputs. This process helps to identify the most influential variables and ensures that the model's behavior remains stable and realistic under different climate scenarios. Sensitivity tests will also be conducted under baseline (SSP2-4.5 and SSP5-8.5) and SRM-modified (G6solar and G6sulfur) scenarios, allowing for a better understanding of how uncertainties propagate across different climate intervention pathways. Through these rigorous evaluation techniques, WP4 aims to enhance the credibility of RegCM5 simulations, ensuring that any observed changes in WAM dynamics due to SRM are scientifically robust and not artifacts of model deficiencies. The findings from this work package will be instrumental in determining the confidence level of climate projections, helping to refine model assumptions and improve future regional climate modeling efforts. Additionally, WP4 will generate critical insights into model uncertainties, informing the community and researchers about the limitations and reliability of climate intervention assessments.

Deliverables for WP4: Evaluation of Model Performance

D4.1: Comprehensive Validation of RegCM5 Simulations

- Conducted a detailed validation of RegCM5 performance using observational datasets (GPCC, CHIRPS, CRU, ERA5) to assess its accuracy in simulating WAM precipitation, temperature, and atmospheric dynamics.
- Evaluated biases and inconsistencies in monsoon onset, spatial variability, and wet-dry spell characteristics by comparing simulated outputs with real-world climate records.

D4.2: Statistical Assessment of Model Accuracy

- Applied statistical validation metrics, including bias analysis, root mean square error (RMSE), correlation coefficients, and probability density function (PDF) comparisons, to quantify the agreement between observed and simulated climate conditions.
- Identified and documented sources of model uncertainty, ensuring a scientifically rigorous assessment of RegCM5's predictive capabilities.

D4.3: Inter-Model Comparison with GeoMIP Ensemble

- Benchmarked RegCM5 outputs against other models in the Geoengineering Model Intercomparison Project (GeoMIP) to assess model consistency, detect systematic biases, and quantify uncertainty propagation across different modeling approaches.
- Analyzed differences in WAM precipitation, temperature response, and SRM-induced climatic shifts by cross-referencing RegCM5 results with global and regional climate model outputs.

D4.4: Sensitivity Analysis of Key Climate Parameters

- Conducted parameter sensitivity tests to determine how variations in convective schemes, surface energy fluxes, aerosol interactions, and radiation balance impact WAM simulations under both baseline (SSP2-4.5, SSP5-8.5) and SRM (G6solar, G6sulfur) scenarios.
- Identified the most influential climate drivers, ensuring that model outputs remain stable and realistic across different SRM intervention pathways.

D4.5: Technical Report on Model Performance and Uncertainty Quantification

- Delivered a comprehensive technical report detailing validation results, statistical accuracy assessments, inter-model comparisons, and sensitivity analysis outcomes.
- Provided guidance on improving RegCM5 parameterization, supporting future enhancements in regional climate modeling for West Africa.

WP5: Dissemination and Capacity Building

The dissemination of research findings is crucial to ensuring that the results of this study contribute to both scientific knowledge and wider awareness. WP5 focuses on communicating the project outcomes to policymakers, stakeholders, and the scientific community, emphasizing the academic and societal relevance of the findings. Given the complexity of Solar Radiation Management (SRM) interventions and their potential impacts on the West African Monsoon (WAM), targeted dissemination efforts will be undertaken to ensure that the insights generated by this study are accessible, actionable, and well-integrated into regional climate discussions.

A central component of WP5 is engagement with policymakers and regional stakeholders. Climate-related decisions in West Africa require strong scientific backing, particularly in areas where SRM interventions could influence agricultural productivity, water availability, and climate resilience. To this end, the project will collaborate with WASCAL (West African Science Service Centre on Climate Change and Adapted Land Use) to organize panel discussions and mini-workshops during the WASCAL Annual Symposiums. These events will provide a platform for presenting key findings, discussing implications for West African climate systems, and fostering dialogue between researchers, policymakers, and local institutions. The ultimate goal of these engagements is to bridge the gap between scientific research and policymakers, equipping decision-makers with the necessary knowledge to assess the risks and opportunities associated with SRM strategies.
In addition to stakeholder engagement, WP5 places a strong emphasis on capacity building and knowledge transfer. A dedicated local workshop will be organized at a university in Mali, targeting early-career researchers, university lecturers, and climate scientists. This initiative aims to enhance the technical understanding of SRM interventions and their potential effects on the WAM, ensuring that future research efforts in the region are well-grounded in cutting-edge scientific developments. Through interactive sessions, hands-on training, and knowledge-sharing forums, this workshop will help strengthen local expertise in regional climate modeling, SRM impact assessment, and climate intervention analysis.

To expand the reach of the project's findings beyond regional meetings, academic dissemination will also play a key role. The African Solar Radiation Modification (SRM) Research Community will serve

as a critical platform for presenting research results through panel discussions, oral presentations, and poster sessions at international climate and SRM conferences. The PI and co-PI, both members of this African SRM Research Community, will take a leading role in engaging with the broader scientific network, ensuring that findings are shared with global experts, integrated into ongoing climate intervention debates, and contribute to the development of best practices for SRM research in Africa.

Furthermore, WP5 will facilitate the publication of research findings in peer-reviewed journals and briefs, ensuring that the insights gained from this study are accessible to both scientific and policy audiences. Reports summarizing the project's results will be disseminated to national climate agencies, research institutions, and development organizations working on climate adaptation in West Africa. Special efforts will be made to translate complex scientific findings into user-friendly formats, making them comprehensible for non-scientific audiences such as local community leaders, NGOs, and environmental advocacy groups.

Deliverables for WP5: Dissemination and Capacity Building

D5.1: Capacity-Building Workshop for Early-Career Researchers and University Staff

- Organized a technical workshop at a university in Mali, providing hands-on training for early-career researchers, lecturers, and climate scientists on SRM interventions, WAM variability, and regional climate modeling techniques.
- Developed training materials and technical resources to ensure long-term capacity-building benefits beyond the project's duration.

D5.2: Stakeholder Engagement through WASCAL Panel Discussions and Symposiums

- Conducted panel discussions and mini-workshops during WASCAL Annual Symposiums, engaging policymakers, regional stakeholders, and climate experts to discuss the implications of SRM on WAM.
- Produced summary reports from these discussions, including stakeholder feedback and potential avenues for integrating SRM research into climate adaptation planning.

D5.3: Scientific Dissemination via SRM Research Community and International Conferences

- Presented research findings at the African Solar Radiation Modification (SRM) Research Community platform, contributing to ongoing global and regional discussions on climate intervention strategies.
- Delivered oral and poster presentations at international climate conferences, sharing project insights with the broader scientific community.

D5.4: Peer-Reviewed Publications

- Published at least three peer-reviewed journal articles detailing key findings on SRM's impact on WAM variability, wet-dry spell dynamics, and climate uncertainty assessments.

- Developed and disseminated briefs targeted at national climate agencies, research institutions, and development organizations, ensuring that findings are accessible to policymakers and climate adaptation planners.

D5.5: Public Outreach and Knowledge Translation

- Created simplified, non-technical reports and visual summaries of key findings to ensure accessibility for local communities, NGOs, and environmental advocacy groups.
- Utilized digital platforms, webinars, and public engagement forums to broaden awareness and dialogue on SRM interventions and climate resilience in West Africa.

3.2 The following Milestones will be used to monitor your delivery of the Project. The costs associated with completing these Milestones are estimated in the [redacted]

ID	Milestones	Measure	Date
1	Completion of Data Collection and Preprocessing	Successful acquisition, integration, and preprocessing of observational datasets (GPCC, CHIRPS, CRU, TAMSAT, ERA5) and climate model outputs (SSP2-4.5, SSP5-8.5, G6solar, G6sulfur) ensuring standardization and quality control	30th November 2025
2	Successful run of High-Resolution Climate Simulations	Successful configuration, calibration, and execution of RegCM5 simulations under different climate scenarios (SSP2-4.5, SSP5-8.5, G6solar, G6sulfur), providing baseline and SRM-modified climate projections.	31st August 2026
3	Analysis of Wet-Dry Spell Dynamics and Climate Variability	Wet-dry spell dynamics characterised (frequency, intensity, duration) and assessment of SRM impacts using statistical indices (SPEI, PCI, PCD, PCP).	28th February 2027
4	Evaluation of Model Performance	Validation of RegCM5 simulations against observational data and inter-model comparisons using bias analysis, RMSE, correlation coefficients, and uncertainty quantification techniques.	31st August 2027

5	Dissemination of Findings and Capacity Building	Organization of stakeholder engagement activities, workshops, panel discussions (WASCAL), conference presentations, and publication of peer-reviewed articles, briefs, and outreach materials. All relevant output data shared onto the open-access ARIA repository.	31st December 2027

In addition to the above Milestones, the following project plan will be used to track progress throughout the project and may be updated from time to time: [redacted]

3.3 The intended long-term outcomes are summarised below:

- Develop a comprehensive understanding of SRM's influence on WAM variability and wet-dry spell dynamics.
- Provide the community with high-resolution climate projections to inform sustainable adaptation strategies.
- Support regional climate modeling capacity-building efforts in West Africa.
- Contribute to the global scientific discourse on SRM and its regional implications.
- Strengthen collaborations between African and international climate research institutions.

4. Project Reporting requirements

You will complete, submit and attend the following reporting/meeting requirements at the frequency set out below:

Frequency	Requirement
Kick off	• Roles and responsibilities • External communications • Project details
Quarterly	Reporting: • Technical status - Red/Amber/Green • Delivery status - Red/Amber/Green • The latest progress against milestone(s) from last quarter • Invoicing and cost reporting

	Optional: ● Key Learning, discoveries and decisions ● Stories to highlight ● Priorities for the next quarter ● Challenges ● Changes to team and new collaborations ● technical evidence saved to drive e.g. report or presentation as requested by PD ● review meeting slide deck saved to drive as requested by PD Review meeting with ARIA Programme Team
Annual	● ARIA impact metrics ● Attendance at annual ARIA event
Ad hoc	● As required, Programme Director/ Programme Team may request additional information and evidence ● Workshops - potential to be invited to ARIA workshops
Project closure	● Project closure report

5. Payment

5.1 Subject to your compliance with the terms of this Grant Agreement, ARIA will make Grant payments quarterly in arrears.

For quarterly payments, the cadence of payments will align with ARIAs financial year beginning 1st April e.g. Quarter 1 Grant Claims will be for the period of 1st April to 30 June, Quarter 2 Grant Claims will be for the period of 1st July to 30 Sept and so on.

5.2 Before paying any Grant Claim, ARIA must be satisfied that the Project Activities have been carried out during the Funding Period (or that part of the Funding Period to which the claim for Grant relates).

5.3 Grant Claims must be submitted to ARIA by the 5th Working Day of the month following the end of the relevant period.

5.4 Payment of the Grant Claim will be made within 30 days after ARIA approves your Grant Claim.

6. Principal investigator/key researchers

6.1 For the purposes of clause 22.7, the following principle investigators or key researchers have been identified:

Name	Role	Organisation
Dr. Abdoulaye Ballo	Postdoctoral Researcher - WP3,WP4	IPR/IFRA, Mali
Dr. Amadou Coulibaly	Lead Principal Investigator - WP5	IPR/IFRA, Mali
[redacted]	Agricultural Engineer, Data Analysis - WP1	IPR/IFRA, Mali
[redacted]	Doctoral Research Assistant - WP1	IPR/IFRA, Mali
[redacted]	Hydro-Climatologist	University of Cape Town
Dr. Sabina Abba Omar	Climate Modeler - WP2	University of Cape Town

7. Sub-Contractors

7.1 For the purposes of clause 19, the following Sub-Contractors have been agreed:

Name	Description of activity	Location
WASCAL Competence Center	HPC access for high-resolution simulation	Burkina Faso
Climate Systems Analysis Group (CSAG), UCT	Technical support for downscaling methods	South Africa
University of Cape Town	Climate modelling and simulations	South Africa

PART 2 - GRANT APPLICATION

Application titled "Investigating the Impacts of Solar Geoengineering on the Variability and Wet-Dry Spell Dynamics of the West African Monsoon" submitted 9 December 2024

SCHEDULE 3

Royalty Percentages

Royalties on the sale or supply of products or services that are covered by, use or incorporate the Foreground IP licensed to the NewCo will only become due on aggregate net sales derived from the Foreground IP exceeding £50 million.

The maximum headline percentage royalty rate (i.e. before any royalty stacking, step-down or other reduction and excluding any ARIA Non-UK Fee) for products or services that are covered by, use or incorporate the Foreground IP, and of sublicensing income, shall be one of the following:

Type of product	Applicable headline royalty percentage (up to)
Low margin	0.5% of net sales
Medium margin	1% of net sales
High margin	2% of net sales
Sublicensing royalty	10% of net receipts

ANNEX 1

Clause for inclusion in licences of Foreground IP

[ ] ARIA NON-UK FEE

[ ].1 In this clause:

"**ARIA**" means the Advanced Research and Invention Agency;

"Crown Body" means the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;

"**UK Entity**" means a legal entity that has or whose ultimate parent company has its headquarters and principal establishment in the United Kingdom.

[ ].2 The Foreground IP was developed with funding from ARIA. As a condition of its funding ARIA requires that a benefit is returned to the United Kingdom where the Foreground IP is licensed by the Licensor to any person that is not a UK Entity. Accordingly, in addition to any other sums payable by the Licensee to the Licensor under this Agreement, the Licensee shall pay to the Licensor within 90 days after the end of each calendar year during the Relevant Period (as defined below), and within 90 days after the end of the Relevant Period, a fee (**ARIA Non-UK Fee**) on all amounts (including upfronts, licence fees, milestone payments, royalties, shares or other securities, exit fees, buyout or other consideration) payable by the Licensee to the Licensor under this Agreement in relation to the exploitation of any Foreground IP (**Relevant Amount**) that accrues during, or relates to, any period of time that the Licensee is not a UK Entity (**Relevant Period**). The amount of the ARIA Non-UK Fee is 25% of the Relevant Amount, and is payable by the Licensee to the Licensor in addition to the amounts that would otherwise be payable under this Agreement. For example if the Relevant Amount is £100 the ARIA Non-UK Fee is an additional £25, which the Licensee shall pay to the Licensor and the Licensor shall remit to ARIA.

Crown Body customers

[ ].3 You must also ensure that any Crown Body is able to procure any products and services that are covered by, use or incorporate the relevant Foreground IP within a reasonable time period at prices that are no higher than those offered to or agreed with any other customer for equivalent quantities and in suitable quantities for the Crown Body's requirements.

[ ].4 ARIA shall have the right to enforce this clause [ ] under the Contracts (Rights of Third Parties) Act 1999. Neither party may amend this Agreement in a way that detracts from ARIA's right to enforce its rights under this clause without ARIA's prior written consent.

[1] When using this clause you may substitute the relevant defined terms used elsewhere in the agreement to capture the concept of "Foreground IP". Where the clause refers to the "Licensor" and "Licensee" please use the appropriate defined terms to include the licensor, licensee, assignor and assignee of the Foreground IP. This clause is not suitable for assignments of the Foreground IP in consideration of the payment of one or more lump sum payments. In those cases the Licensor needs to be informed, and potentially make an additional payment, if the Foreground IP is subsequently assigned to a non-UK Entity or if the Assignee ceases to be a UK Entity.

SCHEDULE 4: Data Protection

1. DEFINITIONS

The following definitions apply in this Schedule.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach and Processing: have the meanings given to them in the Data Protection Legislation.

Data Protection Legislation all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder) and the Privacy and Electronic Communications Regulations 2003 (SI 2003/2426) as amended and all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant regulatory authority and applicable to a party.

Domestic Law: the law of the United Kingdom or a part of the United Kingdom.

UK GDPR: has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018.

2. GENERAL OBLIGATION

2.1. Both parties will comply with all applicable requirements of the Data Protection Legislation. This paragraph 2.1 is in addition to, and does not relieve, remove or replace, a party's obligations or rights under the Data Protection Legislation.

3. DATA PROCESSING

3.1. The parties acknowledge that for the purposes of the Data Protection Legislation, ARIA is the Controller and you are the Processor when performing its obligations under this Grant Agreement (the scope, nature and purpose of processing by the Provider, the duration of the processing and the types of Personal Data and categories of Data Subject are set out in paragraph 3.7, as updated from time to time).

3.2. Without prejudice to the generality of paragraph 2.1, ARIA will ensure that it has all necessary appropriate consents and notices in place to enable lawful transfer of the Personal Data to you [and/or lawful collection of the Personal Data by [the Provider] on behalf of ARIA] for the duration and purposes of Grant Agreement.

3.3. Without prejudice to the generality of paragraph 2.1, you shall, in relation to any Personal Data processed in connection with the performance by the Provider of its obligations under Grant Agreement:

3.3.1. process that Personal Data only on the documented written instructions of ARIA unless you are required by Domestic Law to otherwise process that Personal Data. Where you are

relying on Domestic Law as the basis for processing Personal Data, you shall promptly notify ARIA of this before performing the processing required by the Domestic Law unless the Domestic Law prohibits you from so notifying ARIA;

3.3.2. ensure that it has in place appropriate technical and organisational measures, reviewed and approved by ARIA, to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it);

3.3.3. ensure that all personnel who have access to and/or process Personal Data are obliged to keep the Personal Data confidential; and

3.3.4. not transfer any Personal Data outside of the UK unless the prior written consent of ARIA has been obtained and the following conditions are fulfilled:

3.3.4.1. ARIA or you have provided appropriate safeguards in relation to the transfer;

3.3.4.2. the Data Subject has enforceable rights and effective legal remedies;

3.3.4.3. you comply with your obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred; and

3.3.4.4. you comply with reasonable instructions notified to you in advance by ARIA with respect to the processing of the Personal Data;

3.3.5. assist ARIA, at ARIA's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

3.3.6. notify ARIA without undue delay on, and in event within 24 hours of, becoming aware of a Personal Data Breach;

3.3.7. at the written direction of ARIA, delete or return Personal Data and copies thereof to ARIA on termination of Grant Agreement unless required by Domestic Law to store the Personal Data; and

3.3.8. maintain complete and accurate records and information to demonstrate its compliance with this Schedule and allow for audits by ARIA or ARIA's designated auditor and immediately inform ARIA if, in the opinion you, an instruction infringes the Data Protection Legislation.

3.4. [[ARIA does not consent to you appointing any sub-Processor of Personal Data under this Schedule.] OR [ARIA consents to your use of sub-Processors engaged in the processing of Personal Data by way of general authorisation in respect of all sub-Processors as at the date of this Schedule. You shall make a list available to ARIA upon request. You shall give ARIA not less than 15 days' prior written notice of a change in the list of sub-Processors to give ARIA an opportunity to object to such change. ARIA must notify you in the event that it does not agree to a proposed change within 15 days of receiving a notification from you , specifying its grounds for such objection (acting reasonably). If you receive such an objection, then you may (at its option):

3.4.1. cancel its plans to change the affected sub-Processor;

3.4.2. offer an alternative which is acceptable to ARIA; or

3.4.3. take corrective steps to remove the objection identified by ARIA to ARIA's reasonable satisfaction, after which you may proceed with the appointment of the relevant sub-Processor.

3.5. If none of the above options resolve the objection, then without liability for either party, either party may terminate Grant Agreement by providing written notice of termination with immediate effect where such notice of termination is served within 30] days of you informing ARIA of the proposed change.

3.6. You confirm that it has entered or (as the case may be) will enter with its sub-Processors into written agreements incorporating terms which are substantially similar to those set out in this Schedule and which you confirm reflects and will continue to reflect the requirements of the Data Protection Legislation. As between you and ARIA, you shall remain fully liable for all acts or omissions of any sub-Processor appointed by it pursuant to this paragraph 3.4 to 3.6.]

3.7. Scope, Nature, Purpose of Processing, Types of Personal Data and Categories of Data Subjects.

Scope and purpose of Processing:	Provision of the Project Activities by you under this Grant agreement.
Nature of Processing:	[Here you should describe what the Processor will be doing with the Personal Data, for example collecting it, storing it, retrieving it, consulting it, disseminating it or destroying it, etc.

	Note the definition of processing in the UK GDPR: "*any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction*"]
Duration of Processing:	Duration of this Grant Agreement (and any post termination processing that is permitted / required).
Types of Personal Data:	[Describe here the types of data relating to the individuals concerned, e.g. names, addresses, email addresses, financial details, date of birth, place of birth, photographs, nationality, gender, signature, health records, work appraisal records, disciplinary processes, references, job applications, CVs, notes of interviews, etc. If so-called "special categories" of personal data (currently known as sensitive data) are being processed describe them here. Note the definition of special categories of personal data in the UK GDPR: "*data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation*"]
Categories of Data Subjects:	[Describe here the individuals whose data will be processed, by reference to their relationship with the company and its business, e.g. employees, directors,

	clients, prospects, suppliers, sub-contractors, consultants, job applicants, advisors, key opinion leaders, etc.]

4. INDEMNIFICATION

4.1. You shall indemnify and keep ARIA indemnified against all losses, claims, damages, liabilities, fines, interest, penalties, costs, charges, sanctions, expenses, compensation paid to Data Subjects (including compensation to protect goodwill and ex gratia payments), demands and legal and other professional costs (calculated on a full indemnity basis and in each case whether or not arising from any investigation by, or imposed by, a supervisory authority) arising out of or in connection with any failure by you or your employees, subcontractors or agents to comply with any of its obligations under this Schedule or the Data Protection Legislation.

4.2. Any limitation of liability set out in this Grant Agreement will not apply to this Schedule's indemnity or reimbursement obligations.

Annex A - Future Proofing our Climate and Weather Intellectual Property Pledge

1. Submission of Pledged Patents and Experimental Data

1.1 The Pledgor undertakes to submit relevant details of all Pledged Patents to the operator of the Pledge Repository in accordance with the Submission Guidelines.

1.2 The Pledgor undertakes to:

(a) submit (or provide a link to a publicly available digital copy of) all Experimental Data to the operator of the Pledge Repository in accordance with the Submission Guidelines; and

(b) publish such Experimental Data in accordance with the Submission Guidelines.

2. Experimental Data Licence

2.1 Subject to Clause 6.1, the Pledgor hereby grants a royalty-free, non-exclusive licence under the Experimental Data to any party that wishes to accept it ("Experimental Data Licensee") solely for the purpose of carrying out research in the Field.

2.2 The licence granted under Clause 2.1:

(a) is non-transferable and non-sublicensable;

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Experimental Data.

2.3 The Experimental Data Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Experimental Data Licensee must ensure that such third party agrees to comply with the terms of Clause 2.4 as if such third party were the Experimental Data Licensee.

2.4 The Experimental Data Licensee must:

(a) at all times when using the Experimental Data comply with all Laws; and

(b) to the extent that any data relating to the Field is generated by or on behalf of the Experimental Data Licensee in the course of carrying out research activities based on or using the Experimental Data or the Pledged Patents, make such data available on the terms of this Pledge (and such data shall be deemed to be Experimental Data pursuant to this Pledge).

3. Research Licence

3.1 Subject to Clause 6.1, the Pledgor grants a royalty-free, non-exclusive licence under the Pledged Patents to any party that wishes to accept it ("Research Licensee") solely for the purpose of carrying out research in the Field.

3.2 The licence granted under Clause 3.1:

(a) is non-transferable and non-sublicensable; and

(b) permits research activities but does not permit development, manufacture, sale or other exploitation of products or services under the Pledged Patents.

3.3 Subject to Clause 6.1, the licence granted in accordance with Clause 3.1 shall subsist until the expiry of the final Pledged Patent.

3.4 The Research Licensee may conduct relevant research activities itself or in collaboration with a third party, provided that the Research Licensee must ensure that such third party agrees to comply with the terms of Clause 3.5 as if such third party were the Research Licensee.

3.5 The Research Licensee must:

(a) at all times when using the Pledged Patents comply with all Laws; and

(b) to the extent that any patents relating to the Field are filed by or on behalf of the Research Licensee covering data generated in the course of carrying out research activities based on or using the Pledged Patents or Experimental Data, make such patents available on the terms of this Pledge (and such patents shall be deemed to be Pledged Patents pursuant to this Pledge).

4. Commercial Licence

4.1 The Pledgor undertakes to grant a non-exclusive licence on reasonable terms under the Pledged Patents and/or Experimental Data to any Signatory that requests it ("Commercial Licensee") for the purpose of carrying out commercial activities (including development, manufacture, sale or other exploitation of products or services) in the Field.

4.2 The Pledgor must grant the licence set out Clause 4.1 in good faith and in a timely fashion following such a licence being requested by the Commercial Licensee.

4.3 The Commercial Licensee must at all times when using the Pledged Patents and/or Experimental Data comply with all Laws.

5. Pledgor Know-How

At the request of a Licensee, the Pledgor undertakes to negotiate in good faith with any Licensee regarding a non-exclusive licence in the Field under any Know-how owned by such Pledgor that is necessary for a Licensee to use the technology covered by the Pledgor's Pledged Patents. Such licence may be for research or commercial purposes as agreed between the Pledgor and Licensee.

6. Termination

6.1 The Pledgor may terminate any licence it grants to an Experimental Data Licensee and/or Research Licensee under this Pledge in the event that such Licensee:

(a) materially breaches the terms of such licence or this Pledge; or

(b) breaches any Laws in its use of the Experimental Data or Pledged Patents (as applicable).

7. Transfers of Pledged Patents and/or Experimental Data

The Pledgor undertakes to make any future assignment of the Pledged Patents and/or Experimental Data to any other party (the "Recipient") conditional on the Recipient (and any successor in title) agreeing to be bound by the terms of this Pledge.

8. No Warranty

The Pledgor provides the Pledged Patents and the Experimental Data on an "as is" basis. The Pledgor makes no express or implied warranty or representation concerning the Pledged Patents or Experimental Data including but not limited to non-infringement or to the accuracy or completeness of the Pledged Patents or Experimental Data.

9. Compliance with Laws

For the avoidance of doubt, nothing in this Pledge operates to require a Pledgor, Licensee or Signatory to do any acts or grant any rights that do not comply with Laws.

10. Further Publication or Licensing

For the avoidance of doubt, nothing in this Pledge operates to restrain a Pledgor from publishing or licensing any Experimental Data or Pledged Patents more widely or on more permissive terms than those described herein.

11. Governing law and jurisdiction

This Pledge (including any non-contractual disputes or claims arising in connection with this Pledge) will be governed by and construed in accordance with the laws of England and Wales and the parties irrevocably submit to the exclusive jurisdiction of the courts of England and Wales.

Part 1 of Annex A: Definitions

1. In this Pledge, unless the context otherwise requires, the following definitions shall apply:

Experimental Data	means data generated by or on behalf of the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.2;
Field	means approaches for intentionally altering the Earth system through solar radiation modification, modification of ocean circulations, modification of cloud properties, surface engineering works, or weather modification;
Know-how	means the information, methods, formulae, processes and/or applications which may or may not be documented and which enable the use of the technology covered by the Pledged Patents;
Law(s)	means any applicable law, statute, bye-law, regulation, order, regulatory policy, guidance or industry code having the force of law, rule of court, delegated or subordinate legislation in force from time to time;
Licensee	means any Commercial Licensee, Research Licensee or Experimental Data Licensee;
Pledge	means the commitments in relation to patents, know-how and data set out in this pledge document;
Pledge Repository	[TBC]
Pledged Patents	means patents or patent applications owned by the Pledgor relating to the Field and identified by the Pledgor for inclusion in the Pledge pursuant to Clause 1.1;
Signatory	means any party who has agreed to be bound by the terms of this Pledge; and
Submission Guidelines	means the guidelines governing the submission of Experimental Data and details of the Pledged Patents to the Pledge Repository, as amended from time to time.

Annex B - Principles related to fraud

The parties involved in the Project shall adhere to the following principles at all times:

- Accountability: Responsibilities for managing fraud, bribery, and corruption risks are clearly defined, consistent, and traceable across all levels of management.
- Competence: All staff engaged in the Project possess the necessary skills, awareness, and capability to identify, prevent, and respond to risks of fraud, bribery, and corruption.
- Effective Controls: Adequate internal controls are implemented to mitigate the risks of fraud, bribery, and corruption, including implementing and supporting whistleblowing, and such controls are regularly reviewed and updated to address evolving threats.
- Continuous Improvement: Risk management practices, tools, and methodologies are continuously improved in line with industry best practices and emerging threats.
- Ethical Standards: All applicable codes of ethics and professional conduct are upheld without exception.

Annex 3: Exploring Climate Cooling - Re-thickening Arctic Sea Ice

Re-thickening Arctic Sea Ice (RASI)

Back to Funded Projects | Overview | Methodology | Research | Governance + oversight | FAQs

The Arctic is warming much faster than the global average, driving sea ice loss that threatens local ecosystems and accelerates global climate change.

While the only sustainable, long-term way to slow Arctic warming is through emissions reductions, the speed of Arctic warming has led to suggestions that deliberately thickening sea ice during winter might help to slow the melting and the rate of sea ice loss.

By bridging the gap between theoretical models, laboratory studies and real-world data collected through small-scale outdoor experiments, this project will investigate whether this approach could ever be feasible, scalable, and ecologically sound.

Overview

Led by Shaun Fitzgerald at the Centre for Climate Repair (University of Cambridge), the RASI project is supported by a £9.9m grant over 42 months. The consortium unites specialised field teams — Real Ice and Arctic Reflections — with a global network of research partners including the University of Manchester, UCL, the University of Washington, and NERSC, to combine rigorous scientific modelling with real-world Arctic experimentation.

Two separate sub-teams of researchers (Real Ice, Arctic Reflections) will conduct controlled, small-scale experiments in two locations in Canada. These experiments have been designed in close collaboration with local communities and in compliance with ARIA's stringent governance framework. The goal is to gather essential real-world data to rigorously assess if this intervention warrants further consideration.

Methodology

The outdoor experiments will take place in Nunavut, Canada, across three winter seasons (2026 to 2028). Using both above-ice and submersible pumps, the team will try to create thickened ice patches by pumping seawater from beneath existing ice and spreading it on top, where the frigid air freezes it quickly. Over the course of the project – and only if the early experiments suggest the approach is ecologically sound – later experiments will aim to cover areas up to 1 km^2 per experiment site. In the process, the RASI team will generate real-world data on variables that theory cannot yet predict – including whether this thicker ice lasts longer into the summer, how ice movement might be affected, and what the local ecological impacts of thickening might be.

In parallel, the RASI teams will look to reduce uncertainty around efficiency and scale. Data from outdoor experiments will feed into computer models to simulate interventions at scales that are not being physically tested. The RASI teams will model targeted interventions at natural choke points such as the Nares Strait – specifically, thickening ice arches. The goal is to understand if strengthening these specific areas could slow the flow of ice from the Arctic Sea into the warmer Atlantic, which is happening earlier and earlier in the year as the Arctic warms.

By collecting ice cores and water samples for study, the teams will look to improve our current understanding of whether sea ice thickening is ecologically sound. This real world environmental data will contribute to the wider programme, as scientists working on ecological modelling will then be able to simulate any ripple effects on the marine ecosystem, ensuring that the ecological cost-benefit analysis is understood before any large-scale activity is ever considered.

Research

The first phase of ARIA funded outdoor research begins in early 2026 at two locations in Nunavut, Canada. In both locations, the teams have secured Free, Prior and Informed Consent from the communities where this research will take place, ensuring engagement is meaningful, respectful and continuous. The researchers have secured the support and cooperation of municipal authorities, local Elders, and Hunters and Trappers Organisations (HTOs). Local residents have not only provided input into the experimental design but will also work alongside the researchers as part of the team.

In Cambridge Bay, Nunavut, the Real Ice sub-team will commence work in mid-January. Building on two years of engagement with local residents, and subsequent iterations of the experimental design, the team has been granted their formal permit to operate. The experiment site, located ~7km from the hamlet, was selected together with the Ekaluktutiak HTO, and their members will take part in the project.

(Real Ice team members in Cambridge Bay, Winter 2024-25, courtesy of Elise Imbeau)

The Arctic Reflections sub-team intends to perform sea ice thickening work in Nunavut in February 2026. The team has support from key local stakeholders and more details on their field research will be provided here in due course once the permitting process is complete.

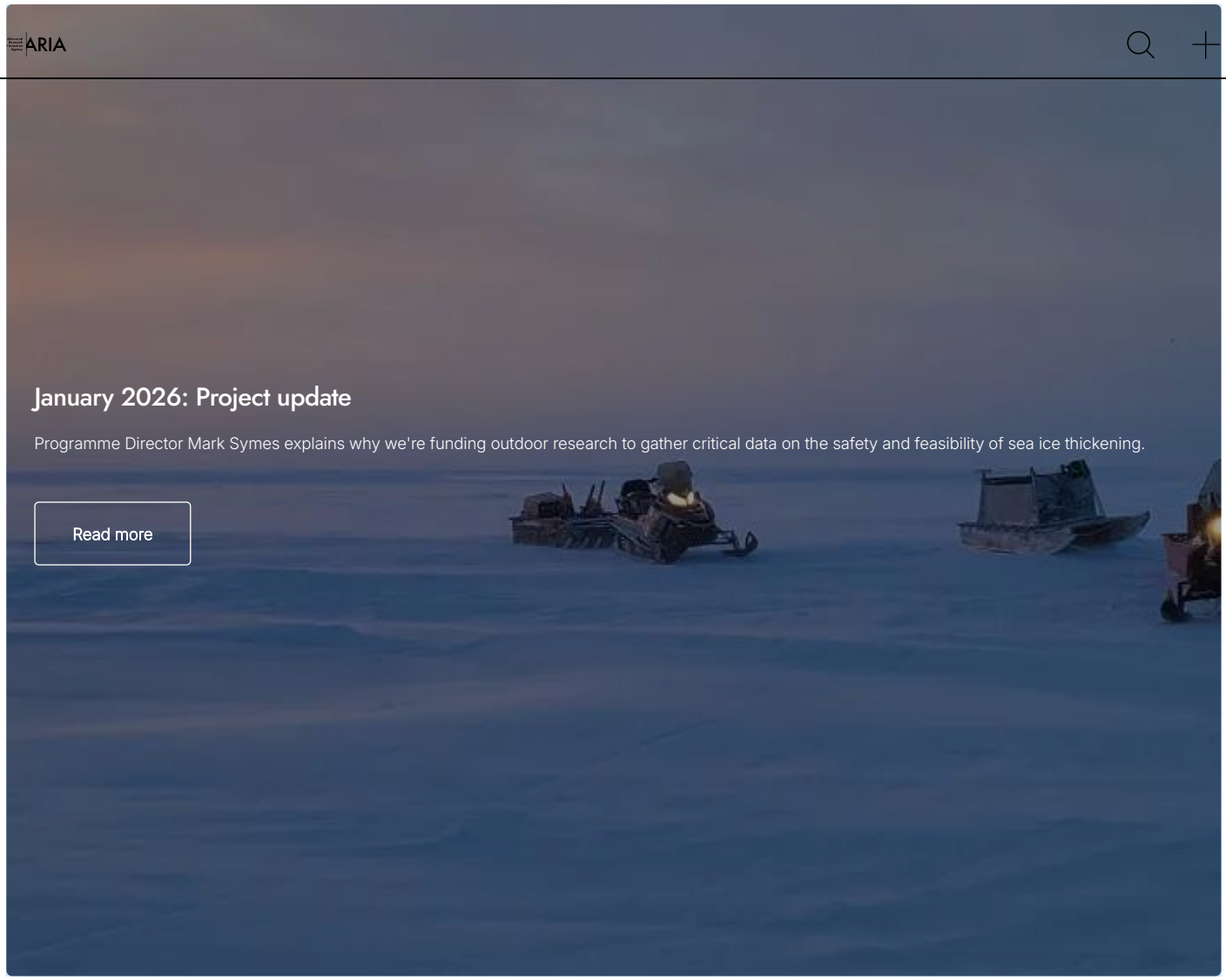
(Real Ice research site in Cambridge Bay, Winter 2024-25, courtesy of Centre for Climate Repair)

RASI's experiment and community engagement plans have been rigorously scrutinised by the programme's independent Oversight Committee and subsequently approved to proceed by ARIA's CEO. You can read the Committee's full recommendation here and the CEO's formal decision letter here.

Research is proceeding under Nunavut's well-established research permitting framework, which ensures research is ethical, responsible, and incorporates traditional knowledge.

Resources

- Real Ice: Community engagement summary, Winter 2025/26 [PDF - 484.73Kb]
- Real Ice: Nunavut Impact Review Board's screening report [PDF - 379.95Kb]
- Real Ice: Scientific research licence for experiments from the Nunavut Research Institute [PDF - 908.81Kb]
- Real Ice: Letter to ECC programme team confirming completion of CEO conditions [PDF - 172.41Kb]



FAQs for RASI

How does ice re-thickening work?

What is the specific goal of these experiments?

Doesn't the salty water melt or damage the ice that's already there?

Who is doing the research?

Where and when will the experiments happen? Why were these locations chosen for the experiments?

How are local communities, and local knowledge, incorporated into this research?

Will these experiments impact the local environment and wildlife?

Who gave permission for these experiments?

How are you ensuring these experiments are ethical and safe?

Will the results of these experiments be made public?

How are these experiments different from deployment?

How do you measure the impacts of these experiments?

Why does Arctic sea ice matter for the global climate?

How does losing Arctic Sea Ice impact local communities?

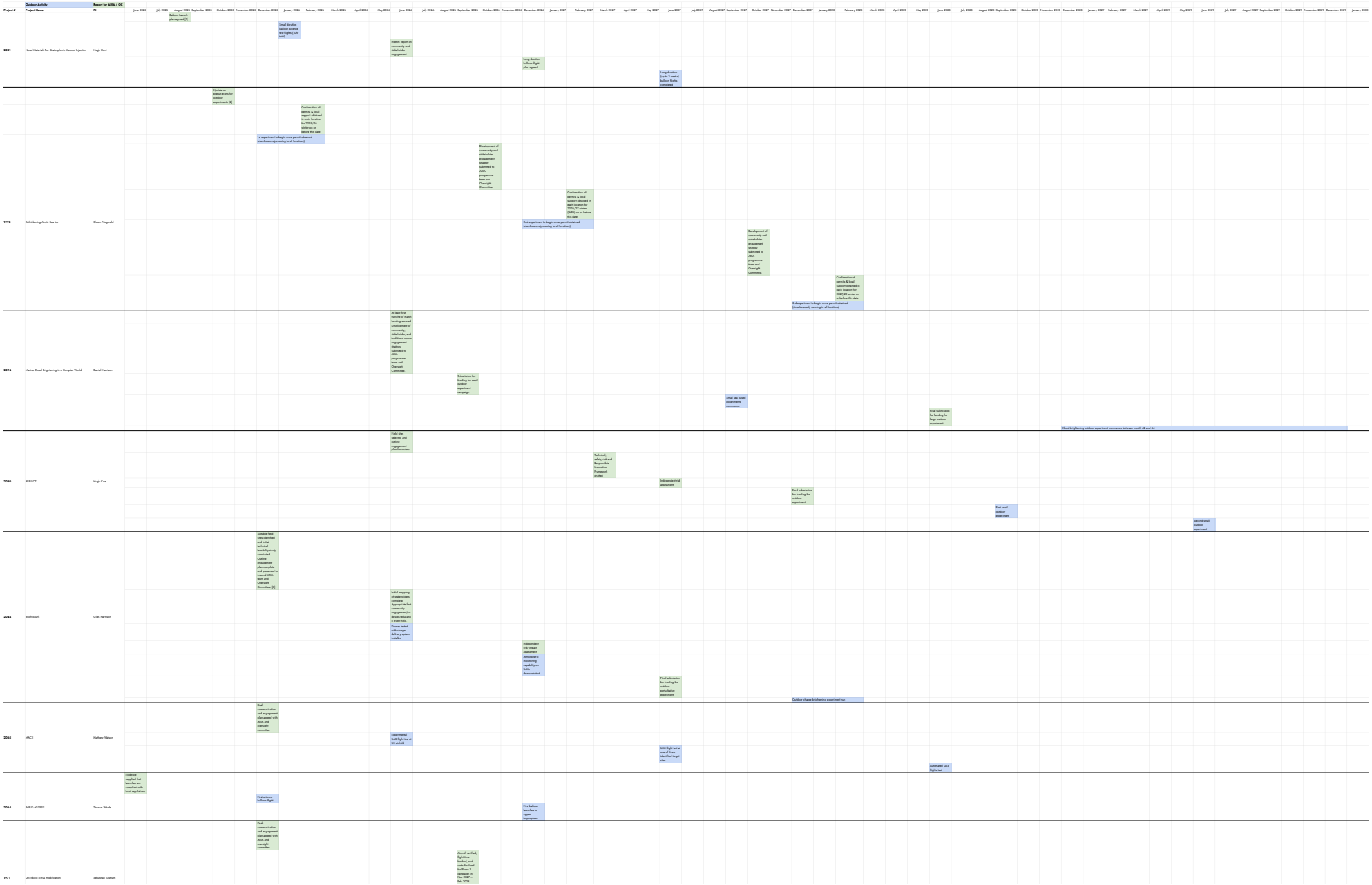
Can re-thickening sea ice solve climate change on its own?

Is the plan to scale these experiments up in the future?

What can these small scale experiments tell us about larger-scale impacts?

Help us drive momentum

Annex 4: Project experiment gantt charts


Outdoor activity
Report for ARIA / OC
Project #
Project Name
PI
June 2025
July 2025
August 2025
September 2025
October 2025
November 2025
December 2025
January 2026
February 2026
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December 2029
January 2030
2021
Novel Materials For Stratospheric Aerosol Injection
Hugh Hunt
Balloon Launch plan agreed [1]
Small duration balloon systems test flights (10s test)
Interim report on community and stakeholder engagement
Long duration balloon flight plan agreed
Long duration (up to 7 weeks) balloon flights completed
1992
Rethickening Arctic Sea Ice
Shaun Fitzgerald
Update on preparations for outdoor experiments [2]
Confirmation of permits & local support obtained in each location for 2026/27 winter on or before this date
1 st experiment to begin once permit obtained (simultaneously running in all locations)
Development of community and stakeholder engagement strategy submitted to ARIA programme team and Oversight Committee
Confirmation of permits & local support obtained in each location for 2026/27 winter (SAPs) on or before this date
2nd experiment to begin once permit obtained (simultaneously running in all locations)
Development of community and stakeholder engagement strategy submitted to ARIA programme team and Oversight Committee
Confirmation of permits & local support obtained in each location for 2027/28 winter on or before this date
3rd experiment to begin once permit obtained (simultaneously running in all locations)
2016
Marine Cloud Brightening in a Complex World
Daniel Harrison
At least first tranche of main funding secured Development of community stakeholder, and traditional owner engagement strategy submitted to ARIA programme team and Oversight Committee
Submission for funding for small outdoor experiment campaign
Small sea based experiments commence
Final submission for funding for large outdoor experiment
Cloud brightening outdoor experiment commence between month 42 and 54
2080
REFLECT
Hugh Coe
Field sites selected and outline engagement plan for review
Technical, Ethical, Legal and Governance Innovation Framework drafted
Independent risk assessment
Final submission for funding for outdoor experiment
First small outdoor experiment
Second small outdoor experiment
2046
BrightSpark
Giles Harrison
Suitable field sites identified and initial feasibility and feasibility study conducted. Outline engagement plan complete and presented to Oversight Committee team and Oversight Committee. [3]
Initial mapping of stakeholders complete Undertake first community engagement/co-design/deliverable s event held.
Events tested with change delivery system installed
Independent risk/impact assessment
Atmospheric monitoring capability on UAVs demonstrated
Final submission for funding for outdoor experiment
Outdoor charge brightening experiment run
2065
MACS
Matthew Watson
Draft communication and engagement plan agreed with ARIA and oversight committee
Experimental UAS flight test at +1 outland
UAS flight test at one of three identified target sites
Automated UAS flight test
2066
INPUT-ACCESS
Thomas Whale
Evidence supplied that families are compliant with local regulations
First science balloon flight
First balloon launches to upper troposphere
1977
Decoding cirrus modification
Sebastian Eastham
Draft communication and engagement plan agreed with ARIA and oversight committee
Aircraft verified, flight time booked, and permissions in place for campaign in May 2027 – Feb 2028.

	Outdoor Activity	Report for ARIA / OC	June 2025	July 2025	August 2025	September 2025	October 2025	November 2025	December 2025	January 2026	February 2026	March 2026	April 2026	May 2026	June 2026	July 2026	August 2026	September 2026	October 2026	November 2026	December 2026	January 2027	February 2027	March 2027	April 2027	May 2027	June 2027	July 2027	August 2027	September 2027	October 2027	November 2027	December 2027	January 2028	February 2028	March 2028	April 2028	May 2028	June 2028	July 2028	August 2028	September 2028	October 2028	November 2028	December 2028	January 2029	February 2029	March 2029	April 2029	May 2029	June 2029	July 2029	August 2029	September 2029	October 2029	November 2029	December 2029	January 2030
Project #	Project Name	PI																																																												
																																	Submission of detailed mission plan, including item clearance requirements, information on regulation,Health and safety and governance, and risk assessment for phase II																																											
																																Aircraft field campaign executed and completed Nov 27-Feb 28																																																
			Evidence supplied to internal ARIA team and Oversight Committee for review and investment call lead regulations															Stratospheric test of dropsonde																																															
1973	StratoGuard	Steve Tate																				In situ atmospheric profiling of upper troposphere / lower stratosphere																																														
																															Stratospheric flight test of novel pressure balloon																																															

[1] OC meeting is Aug 13, so ideally this can be submitted for review/discussion in that meeting.

[2] The OC meeting in October will be October 15. Ideally the update can be given before the meeting so that it can be discussed in that meeting.

[3] OC meeting is December 10