From: Date: Tue, 6 May 2025 at 14:24 Subject: Environmental Information Regulations request - EIR: Recruitment of independent oversight committee on "exploring climate cooling" To: EIR requests at ARIA < info@aria.org.uk > Dear Advanced Research and Invention Agency, Please consider this request having regard to the Environmental Information Regulations (2004). Could you please disclose any correspondence, policy or guidance regarding the process for ARIA's identification, assessment and recruitment of members of the "independent oversight committee" for the "Exploring Climate Cooling Programme". Similarly I would like you to disclose any policy, guidance or correspondence that covers the definition and process for disclosure of interests or conflicts of interest for members of the committee. I note the strong public interest in this information given the defacto moratorium on geoengineering under the Convention on Biological Diversity and the environmental impact of decision making on geoengineering experiments. Please provide the information by email, enclosing copies of the original documents where relevant rather than summaries of their contents. If any redactions are made I would request that they are individually justified and no documents are withheld without being individually justified. If anything in my request is unclear please do not hesitate to contact me. Yours faithfully, Please use this email address for all replies to this request: Is info@aria.org.uk the wrong address for Environmental Information Regulations requests to Advanced Research and Invention Agency? If so, please contact us using this form: https://www.whatdotheyknow.com/change_request/new?body=aria Disclaimer: This message and any reply that you make will be published on the internet. Our privacy and copyright policies: https://www.whatdotheyknow.com/help/officers For more detailed guidance on safely disclosing information, read the latest advice from the ICO: https://www.whatdotheyknow.com/help/ico-guidance-for-authorities https://www.whatdotheyknow.com/help/ico-anonymisation-code Please note that in some cases publication of requests and responses will be delayed. If you find this service useful as an FOI officer, please ask your web manager to link to us from your organisation's FOI page.

Aria EIR <eir@aria.org.uk> From: Sent: 29 May 2025 12:22

To: Subject: Attachments:

Re: Environmental Information Regulations request - EIR: Recruitment of independent oversight committee on "exploring climate cooling" EIR Response Letter - 29.05.25.pdf

Dear

Please find attached a letter concerning your request for information below. We would be grateful if you could reply at your earliest convenience.

Kind regards,

ARIA



29 May 2025

Dear ,

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 6 May 2025. As your request relates to environmental information, ARIA will process your request in accordance with the EIR. Your request is detailed in Appendix 1 for reference.

ARIA is a research and development funding agency focused on scientific and technological developments. ARIA manages breakthrough projects across the R&D spectrum, by providing research funding for third party applicants. You may have seen our <u>recent announcement</u> in respect of the projects which we are funding as part of our Exploring Climate Cooling programme.

You can find out more information on the Exploring Climate Cooling programme on our website and we refer you to the section headed "Oversight Committee" which contains details of the Committee's members and work <u>here</u>. You can sign up for updates <u>here</u> and follow us on X/Bluesky/LinkedIn.

Having reviewed your initial request, we consider your requests for (a) "any correspondence...regarding the process for ARIA's identification, assessment and recruitment of members of the "independent oversight committee" for the "Exploring Climate Cooling Programme"". and (b) "any...correspondence that covers the definition and process for disclosure of interests or conflicts of interest for members of the committee.", to be wide in scope, as currently drafted. The request for "any correspondence" will require ARIA to conduct searches across a wide range of systems to locate and retrieve the information you are seeking. This will likely result in a high volume of electronic and paper records to locate, retrieve and review. This may result in ARIA being unable to respond to your request due to



the cost and burden on our resources it would result in, as currently drafted.

Accordingly, to enable us to process your request, we would advise you to limit the scope of your request to exclude the reference to "correspondence".

Subject to your response, we reserve our position as to whether an extension to the original statutory deadline of 20 working days is required.

Please do let us know if it would be helpful to discuss the above, or if you have any questions.

Yours faithfully,

ARIA



Annex 1: Original Request

"Dear Advanced Research and Invention Agency,

Please consider this request having regard to the Environmental Information Regulations (2004).

Could you please disclose any correspondence, policy or guidance regarding the process for ARIA's identification, assessment and recruitment of members of the "independent oversight committee" for the "Exploring Climate Cooling Programme".

Similarly I would like you to disclose any policy, guidance or correspondence that covers the definition and process for disclosure of interests or conflicts of interest for members of the committee.

I note the strong public interest in this information given the de facto moratorium on geoengineering under the Convention on Biological Diversity and the environmental impact of decision making on geoengineering experiments.

Please provide the information by email, enclosing copies of the original documents where relevant rather than summaries of their contents. If any redactions are made I would request that they are individually justified and no documents are withheld without being individually justified.

If anything in my request is unclear please do not hesitate to contact me."

 From:
 Aria EIR <eir@aria.org.uk>

 Sent:
 02 June 2025 18:10

To:

Subject: Re: Environmental Information Regulations request - EIR: Recruitment of independent oversight committee on "exploring climate cooling"

Dear

We write further to our letter dated 29 May, in which we sought confirmation on the scope of your request in relation to "correspondence". Please would it be possible to confirm your view in response to that letter?

Separately, the scope of your request requires ARIA to conduct searches across a wide range of systems to locate and retrieve the information you are seeking. We are in the process of collating and reviewing information and documents which may fall within the scope of your request. On an initial review, it is clear that the complexity and volume of the information you have requested means that it will be necessary to extend the time period within which we are required to respond, to ensure that all relevant documents are located, reviewed and processed for disclosure. The EIR permits the time for response to be extended from 20 working days to 40 working days, meaning that we will come back to you by no later than 2 July 2025. We will work to expedite the review process and will endeavour to respond earlier where practicable.

Kind regards,

ARIA

From:

Sent: 03 June 2025 09:08

To: Aria EIR

Subject: Re: Environmental Information Regulations request - EIR: Recruitment of independent oversight committee on "exploring climate cooling"

Dear Aria EIR,

Thank you for your message laying out the difficulty in searching all correspondence and I appreciate your efforts in ensuring you are able to respond. I would prefer to narrow the request to 'internal ARIA email correspondence', this should limit the scope and quantity of systems needing to be searched. Please do advise if you believe the cost burden would still be too high.

Many thanks for your assistance.

Yours sincerely,

From:	Aria EIR <eir@aria.org.uk></eir@aria.org.uk>
Sent:	02 July 2025 17:03

To: 02 July 2025 17:03

Subject: Information Request to ARIA

Attachments: 2025.06.23 Letter to pdf; bundle 02.07.2025.pdf

Dear

 $Please find \ attached \ our \ letter \ in \ response \ to \ your \ Environmental \ Information \ Request, \ along \ with \ its \ annexes.$

Kind regards,

ARIA



2 July 2025

Dear ,

We are writing in response to your recent request for information to the Advanced Research + Invention Agency ("ARIA") dated 6 May 2025 in which you asked:

- "Could you please disclose any correspondence, policy or guidance regarding the process for ARIA's identification, assessment and recruitment of members of the "independent oversight committee" for the "Exploring Climate Cooling Programme"."
- "Similarly, I would like you to disclose any policy, guidance or correspondence that covers the definition and process for disclosure of interests or conflicts of interest for members of the committee."

On 29 May 2025, ARIA wrote to you in order to advise that the inclusion of "any correspondence" may result in ARIA being unable to respond to your request. This was due to the wide scope requiring ARIA to conduct searches across a wide range of systems to locate and retrieve the information, resulting in a high cost and burden on resources. On 3 June 2025, you responded to ARIA to say "Thank you for your message laying out the difficulty in searching all correspondence and I appreciate your efforts in ensuring you are able to respond. I would prefer to narrow the request to 'internal ARIA email correspondence'". In light of this agreed limitation, we have reframed your requests, as below.



Response to EIR request

- 1. Internal email correspondence, policies or guidance regarding the process for ARIA's identification, assessment and recruitment of members of the "independent oversight committee" for the "Exploring Climate Cooling Programme"
- 2. Internal email correspondence, policies or guidance that covers the definition and process for disclosure of interests or conflicts of interest for members of the committee

We confirm that we hold information in the scope of your request, and attach the following at Annex 1-4:

- 1. Exploring Climate Cooling Programme Oversight and Governance
- 2. ARIA Oversight Committee Introductory Meeting Agenda & Background 29 August 2024
- 3. ARIA Conflicts of Interests policy
- 4. Confirmation provided by each Oversight Committee Member to ARIA of no undisclosed conflicts of interest

We do also hold communications internal to ARIA in which colleagues discuss the Oversight Committee and the issues raised in your request. However, given that the communications are internal to ARIA, the communications fall under the "internal communications" exception under Regulation 12(4)(e). We appreciate that the public interest is served by transparency, however, ARIA colleagues need to have a safe space internal to the organisation in order to enable a free and frank exchange of views and engage constructively on issues. Having reviewed all relevant internal correspondence within scope of your request, and discussed with the colleagues involved with the correspondence, we are of the view that disclosing the relevant communications would discourage open and candid internal discussions in the future, which could undermine ARIA's ability to run rigorous processes and make well-informed decisions.

We have also identified a document which is in the course of completion, setting out the design of the Oversight Committee. This document is being prepared with the intention of publishing the final version on ARIA's website, to help inform interested readers as to the form and function of the Oversight Committee. As this document is a working draft, it is not being provided in response to your request pursuant to Regulation 12(4)(d). Once again, we appreciate that the public interest is served by transparency, but given that the



document is not finalised, it does not represent any final position in relation to the Oversight Committee. Therefore, we conclude that the public interest favours non-disclosure at this time. If helpful, we are happy to notify you when this document is published - please let us know if you would like us to do so.

In respect of **Annex 1 - Exploring Climate Cooling - Programme Oversight**, it may be helpful to draw out the following:

"The programme oversight committee is a panel of experts (including international members) that is independent of the project teams and the programme director and that makes recommendations directly to ARIA's leadership. Roughly half of the members of the oversight committee were in place in time to contribute during the selection of projects by ARIA's leadership and the programme team. Additional members will continue to be appointed to the committee at the recommendation of the existing oversight committee members (and with the approval of ARIA's leadership) as the need arises. This flexible intake approach allowed for independent oversight during project selection, whilst also allowing the precise expertise of the committee to be tuned to best suit the projects that have been selected.

The initial members of the committee (see biographies below) were identified by ARIA on the basis of their expertise and international standing across a wide range of areas relevant to climate science and climate engineering. Potential members were then invited to join the committee by ARIA's leadership after meeting with the programme director and ARIA's CEO. These initial members have been appointed for the duration of the programme (5 years). Members appointed subsequently will be appointed for the remaining duration of the programme by invitation from ARIA's leadership, at the recommendation of the existing members of the committee and after consulting with the programme director. At the outset, the committee will have the opportunity to deliberate on and refine its terms of reference, for approval by ARIA's leadership."

Additionally, **Annex 1 - Exploring Climate Cooling - Programme Oversight** includes the names, affiliations and biographies of the current members of the committee, together with information on their specific roles on the committee and any potential conflicts of interest.

We also wanted to draw your attention to the Oversight Committee's note on the announcement of the Exploring Climate Cooling projects, published 7 May 2025, here, in which the Oversight Committee states:



"We are advisory: we do not have the power to prevent or withdraw funding. However, we are constituted to have an unconstrained voice that is independent of the programme, and, when needed, independent of ARIA as an organisation. We have started as a disciplinarily and geographically diverse set of actors. Membership of the committee will expand and change over the coming months. We will seek additional geographic, legal, ethical, governance scientific, and other expertise to adapt as the programme evolves. Our intention is to build the committee and wider set of collaborators to ensure that we have the expertise to ensure that key governance principles such as learning, transparency, collaboration, risk minimisation and community engagement become real and visible practice."

Next Steps

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 <u>eir@aria.org.uk</u>.

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

Yours sincerely,

ARIA



Annex 1: Exploring Climate Cooling — Programme Oversight and Governance

Annex 2: ARIA — Oversight Committee — Introductory Meeting Agenda & Background — 29 August 2024

Annex 3: ARIA Conflicts of Interests policy

Annex 4: Confirmation provided by each Oversight Committee Member to ARIA of no undisclosed conflicts of interest

Annex 1: Exploring Climate Cooling – Programme Oversight and Governance)



Exploring Climate Cooling

Programme oversight and governance

What are ARIA's core principles for governance of this programme?

The various governance measures that ARIA has put in place for this programme have been designed with the following principles in mind:

- **Deliver valuable knowledge.** We aim to select and design for research that will address the most pressing critical scientific questions surrounding approaches for actively cooling the climate.
- **Minimise risk.** All experiments should be designed to reduce direct risk as far as possible.
- Engage with, and respect local communities.
- **Be transparent, open** and **honest** at both the programme and project level, including around intentions, how the research is conducted, outputs, and impacts.
- **Communicate proactively**, to keep communities and the public fully informed on the programme and its outputs.
- **Be cognisant of the broader implications** of research on approaches for actively cooling the climate.
- **Learn.** Success will require a **willingness to adapt** to lessons learned during the programme and to changing circumstances

Measures to try and uphold these principles are discussed in the programme thesis. In particular, we are:

- Working with and refining a detailed framework for approving funding for outdoor experiments in order to be transparent about our decision-making, ways of minimising risk and engagement with communities.
- Opening the funding opportunity to a global pool of researchers in order to support a wider set of perspectives on critical questions.
- Maintaining a policy of transparent reporting of findings and open IP (when applied to climate intervention) in order to ensure that the knowledge gained is available for public benefit.



The programme's independent oversight committee (see below) is a mechanism intended to strengthen governance of the programme.

However, ARIA acknowledges that this is a complex and ethically-challenging research field and that circumstances unforeseen by the proposed governance measures may arise. By applying the principles above, ARIA will continue to iterate and update the programme's governance mechanisms in order to adhere to the principles above.

The role of the oversight committee and its relationship to the project teams

The programme oversight committee will have three main roles prioritised in this order:

- 1. Supporting ARIA's leadership in the effective oversight and governance of the outdoor experiments conducted as part of this programme, including producing guidance to ensure transparent and objective communication of findings.
- 2. Shaping the development of internationally-accepted and responsible norms and standards for oversight and governance of outdoor experiments of approaches for actively cooling the Earth.
- 3. Identifying constructive ways to contribute to the wider international discussion on possible governance mechanisms for these approaches.

The programme oversight committee is a panel of experts (including international members) that is independent of the project teams and the programme director and that makes recommendations directly to ARIA's leadership. Roughly half of the members of the oversight committee will be in place in time to contribute to the review of the full proposals, with the remaining members being appointed after project selection, but before these projects actually start. This two-intake approach will allow for independent oversight during project selection whilst also allowing the precise expertise of the committee to be tuned to best suit the projects that are ultimately selected.

The initial members of the committee (see biographies below) were identified by ARIA on the basis of their expertise and international standing across a wide range of areas relevant to climate science and climate engineering. Potential members were then invited to join the committee by ARIA's leadership after meeting with the programme director and ARIA's CEO. These initial members have been appointed for the duration of the programme (5 years). Members appointed during the second intake (or subsequently) will be appointed for the remaining duration of the programme by invitation of ARIA's leadership, after consulting



with the programme director and the existing members of the committee. At the outset, the committee will have the opportunity to deliberate on and refine its terms of reference, for approval by ARIA's leadership.

Members of the committee will be paid at a fixed rate by ARIA in order to ensure that they can dedicate sufficient time to programme oversight. Remuneration will not be dependent on the progress of the project teams or on the delivery of particular recommendations regarding these teams, supporting the committee's independence. Budget will be available to allow the committee members to join in-person ARIA meetings and workshops.

The names, affiliations and biographies of the current members of the committee, together with information on their specific roles on the committee and any potential conflicts of interest are supplied below.

It is expected that the oversight committee will discuss the development of plans for outdoor experiments with the project teams and programme director, but it will be the responsibility of the project teams to develop suitable technical and non-technical plans. The oversight committee will not be involved in any direct management or day-to-day decision making for any of the projects. This approach is designed to give project teams access to the expertise of the oversight committee members (promoting the development of plans and pre-experiment activities in line with best practice), whilst allowing the oversight committee members to maintain a high level of objectivity regarding individual projects.

Budget will be available to project teams to allow them to undertake the necessary pre-experiment public engagement and co-design activities. At the point at which project teams require additional budget in order to actually perform the outdoor tests, they will go through a formal "outdoor experiment funding approval" process, whereby their technical and non-technical plans and pre-experiment activities will be assessed, and approval for release of funds for the outdoor experiment (or series of linked experiments) will be either granted or refused by ARIA's leadership on the basis of the materials that the project teams submit for consideration.

An overview of the outdoor experiment funding approval process (and the role of the oversight committee in that process) is summarised in Figure 1. This figure also shows the relationship of the oversight committee to ARIA's leadership, the ARIA board committee for ethics and social responsibility (which has visibility across all of ARIA's programmes), the programme director, and to individual project teams.



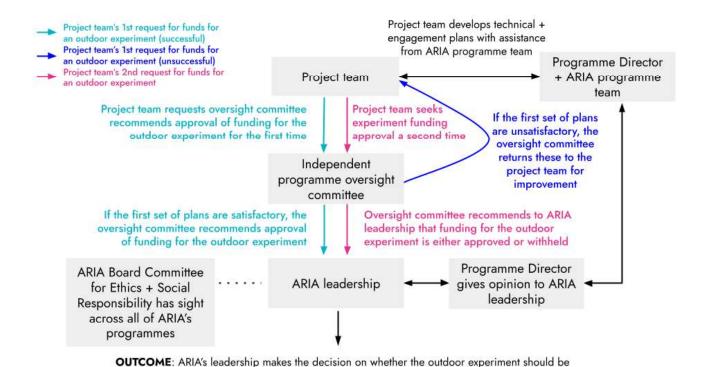


Figure 1: The relationship of the oversight committee to ARIA's leadership, the ARIA board committee for ethics and social responsibility, the programme director, and to individual project teams, together with an overview of the process by which the oversight committee can insist on alterations to project teams' plans for outdoor experiments, and how subsequent decisions will be taken.

funded or not. A summary of the oversight committee's recommendations is published.

At the outset of the outdoor experiment funding approval process, project teams will submit materials describing their plans and activities-to-date related to the outdoor experiment to the oversight committee, who will be able to scrutinise both the technical and non-technical aspects of these materials. The programme oversight committee will then make one of three recommendations to ARIA's leadership:

1. If the committee is thoroughly satisfied with the project team's plans and pre-experiment activities, then a recommendation will be made to ARIA's leadership that funding for the outdoor experiment (or series of linked experiments) should be approved (teal arrows in Figure 1).



- 2. If the committee is mostly satisfied with the project team's plans and pre-experiment activities, then a recommendation can be made to ARIA's leadership that funding for the outdoor experiment should be approved contingent on certain minor clarifications or amendments being made (teal arrows in Figure 1).
- 3. If the oversight committee is dissatisfied with the project team's plans and pre-experiment activities, then the oversight committee will have the power to refuse funding approval for any outdoor experiment (or series of linked experiments) on its own initiative at the first time of asking. Should this occur, the committee will be able to request alterations to a project team's plans and/or request that additional activities are performed prior to the start of an outdoor experiment (blue arrow in Figure 1). The project team will then be obliged to address these concerns and re-submit their updated materials to the oversight committee, with three outcomes then possible (pink arrows in Figure 1):
 - a. The committee is now thoroughly satisfied, and recommends to ARIA's leadership that funding for the outdoor experiment is approved.
 - b. The committee is now mostly satisfied, and recommends to ARIA's leadership that funding for the outdoor experiment can be approved contingent on certain minor clarifications or amendments being made.
 - c. The committee remains dissatisfied, and recommends to ARIA's leadership that funding approval for the outdoor experiment is not granted.

The ultimate decision as to whether any individual outdoor experiment (or linked series of experiments) can be funded by ARIA therefore rests with ARIA's leadership. A summary of the committee's recommendations on any particular outdoor experiment (or linked series of experiments) will be made public on the ARIA website before the experiment takes place (in the cases where funding approval is ultimately granted), or at the end of the project in cases where funding approval is not granted. This summary will be prepared by the committee members, in consultation with the programme director.

When making recommendations as to whether any individual outdoor experiment (or linked series of experiments) can be funded by ARIA, the oversight committee will consider the following criteria:

- Is there sufficient scientific value in the proposed experiment and in the knowledge that could be gained by performing it to merit an outdoor experiment?
- Does the design of the experiment minimise risk sufficiently (e.g. to experimenters, the local environment and ecosystem, to property, etc)?



- Has sufficient meaningful engagement with the local community and key stakeholders taken place, and is there sufficient evidence of experimental co-design with these groups?
- Has there been sufficient consideration of the potential broader societal ramifications of the experiment?

Initial committee membership

The following are the initial members of the oversight committee. ARIA intends to add to the membership of this committee as the programme progresses. This includes the appointment of a permanent chair and the planned second cohort of members (the latter will join in early 2025). ARIA may subsequently also bring in additional members to the committee as necessary. The current membership therefore does not constitute the full weight of the committee, and membership will increase over the next few months.

As of September 2024, committee members are paid for their participation at a rate of £575/day. ARIA expects that participation will be ~1 day/month.

Committee Membership (as of September 2024)

Jessica Seddon (acting Chair)*

Dr. Jessica Seddon's work on environmental governance focuses on how new sources of data can be leveraged to enable new (and more sustainable) ways of interacting with the environment around us. Her career in India and the U.S. spans academic, programme leadership, and strategic advisory roles focused on institutional design for integrating science into policy and social initiatives. Dr. Seddon is currently Senior Fellow and Director of the Deitz Family Initiative on Environment and Global Affairs at the



Yale Jackson School of Global Affairs and a co-founder of The Institutional Architecture Lab.

*As acting Chair, Jessica will be working as a bridge between the ARIA programme team and the Oversight Committee to build out the membership and refine some of the operational aspects of the Committee's relationship with ARIA.

Declared conflicts of interest: none

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Arunabha Ghosh (ordinary member)

Dr Arunabha Ghosh is an internationally recognised public policy expert, author, columnist, and institution builder. He is the founder-CEO of the Council on Energy, Environment and Water, and has led CEEW to the top ranks as one of Asia's leading policy research institutions and among the world's 20 best climate think-tanks. He played a formative role in creating the International Solar Alliance, and was a founding board member of the Clean Energy Access Network. Co-author/editor of four books and with experience in 51 countries, he previously worked at Princeton, Oxford, UNDP (New York), and WTO (Geneva). The Asia Society honoured him with the 2022 Asia Game



Changer Award, for his and CEEW's "incredible work, which is making a real difference for India and for the planet". Arunabha advises governments, industry, civil society, and international organisations around the world. He is the Co-convenor of the Our Common Air Commission. He served on the Government of India's G20 Finance Track Advisory Group and advised the Sherpa Track for India's G20 Presidency in 2022-23. In 2022, the UN Secretary-General appointed him to the High-level Expert Group on the Credibility and Accountability of Net-Zero Announcements by Non-State Actors. Dr Ghosh is currently Vice-Chair of the UN Committee for Development Policy, having been first nominated to the UNCDP by the UN Secretary-General in 2018. Arunabha is a member of several international expert advisory groups: Global Commission on the Economics of Water; High-Level Group of Economists, constituted by the French president for the One Planet Lab; and the Senior Consultative Group for the U.S. Department of State's Energy Transition Accelerator. In 2020, the Government of India appointed him Co-Chair of the energy, environment and climate change track for India's Science, Technology and Innovation Policy (STIP2020). He co-chaired the international governance working group of the Royal Society's Solar Radiation Management Governance Initiative. He is a member of the World Economic Forum's Global Future Council on Clean Air, having previously been a member of the Global Future Council on Energy. He serves on the Board of ClimateWorks Foundation. A frequent speaker and adviser to governments, industry and international organisations, he writes monthly columns



across various platforms, has hosted or featured in several documentaries, and his 2019 TED Talk on air quality (Mission 80-80-80) has surpassed 270,000 views. He was a World Economic Forum Young Global Leader. He holds a D.Phil. from Oxford.

Declared conflicts of interest: none

Nana Klutse (ordinary member)

Prof. Nana Ama Browne Klutse is a distinguished Ghanaian known for her expertise in climate modelling, climate change impacts, adaptation, and mitigation strategies, particularly in Africa. She has been involved in various high-profile research projects and has contributed significantly to global climate assessments, including her work with the Intergovernmental Panel on Climate Change (IPCC) as the Vice Chair of the Working Group I. She is a full professor, researcher and the Head of the Department of Physics at the University of Ghana. She focuses on climate variability, climate



change modelling, Solar Radiation Management, and the impacts of climate change on society for her research and often addresses how climate change affects sectors such as agriculture, water resources, and health in Africa. Prof. Klutse has also been an advocate for integrating indigenous knowledge systems with scientific research to develop more comprehensive and context-specific climate adaptation and mitigation strategies. Her work aims to inform policy decisions and promote sustainable development in the face of climate change challenges. She has received various awards and recognitions for her contributions to climate science and her efforts to improve understanding and action on climate change in Africa.

Declared conflicts of interest: none

Jack Stilgoe (ordinary member)

Dr Jack Stilgoe is a professor in science and technology studies at University College London, where he researches the governance of emerging technologies. He is part of the UKRI Responsible AI leadership team (www.rai.ac.uk).



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He worked with EPSRC and ESRC to develop a framework for responsible innovation that is now being used by the Research Councils. Among other publications, he is the author of 'Who's Driving Innovation?' (2020, Palgrave) and 'Experiment Earth: Responsible innovation in geoengineering' (2015, Routledge). He is currently chairing an oversight committee for public dialogue on geoengineering research for the Natural Environment Research Council (NERC). He previously worked in science and technology policy at the Royal Society and the think tank Demos. He is a trustee of the Royal Institution.

Declared conflicts of interest: none

Shuchi Talati (ordinary member)

Dr. Shuchi Talati is a climate technology governance expert and founder of The Alliance for Just Deliberation on Solar Geoengineering (DSG). DSG is a nonprofit organisation working towards just and inclusive deliberation about research and potential use of solar geoengineering. She is a contributing author to the American Geophysical Union's Ethical Framework for Climate Intervention Research, Experimentation, and Deployment. Dr. Talati was the co-chair of the Independent Advisory Committee to oversee SCoPEx, an effort to provide oversight for



the proposed solar geoengineering experiment by Harvard University. She most recently served as a Presidential Appointee in the Biden-Harris Administration at the U.S. Department of Energy where she focused on creating just and sustainable frameworks for carbon dioxide removal. Dr. Talati has previously held roles in academia and civil society advising on policy and governance for emerging climate technologies, including as a Visiting Scholar at the Kleinman Center for Energy Policy at the University of Pennsylvania, an AAAS/AIP Congressional Science Fellow in the U.S. Senate and the Fellow on geoengineering research governance and public engagement at the Union of Concerned Scientists. Dr. Talati has a BS in environmental engineering from Northwestern University, an MA in climate and society from Columbia University, and PhD from Carnegie Mellon in engineering and public policy.

Declared conflicts of interest: none

Annex 2: ARIA – Oversight Committee – Introductory Meeting Agenda & Background – 29 August 2024



Exploring Climate Cooling

Oversight Committee Introductory Meeting Agenda & Background

29 August, 2024

1 ARIA | Not for public distribution



Agenda

- Introductions & Introduction to ARIA [10 min]
- Oversight Committee: Status, Next Steps [20 min] pre-read: Programme oversight and
- Guiding principles

governance

- Process for process
- Conflicts of Interest
- Contracts
- Programme Launch September 12 [25 min]
- Documents and resources pre-read: Programme Thesis
- Timelines and calls
- Communications approach
- Any other business? [5 min if needed]
- ARIA | Not for public distribution

Introduction to



Unlocking scientific and technological breakthroughs that benefit everyone

- ARIA is an R&D funding agency, built to unlock scientific and technological breakthroughs to benefit everyone.
- Established by the UK Government in January 2023 with high levels of autonomy and flexibility granted via the ARIA Act.
- We fund teams of scientists and engineers to pursue research at the edge of what is technologically or scientifically possible.

Introduction to ARIA | Not for public distribution



Executive Team and Board of Directors



Ilan Gur CEO



Antonia Jenkinson CFO/COO



Matt Clifford Chair

Co-Founder + CEO, **Entrepreneur First**



David MacMillan

Dan Cole Chief of Staff

Pippy James Chief Product Officer

Non-Executive Director

Angela McLean

Government Chief Scientific Advisor



Non-Executive Director Nobel laureate + organic chemist



Non-Executive Director Sarah Hunter

Non-Executive Director

Kate Bingham

Venture Capitalist + former Chair of the Vaccines Taskforce

Technology and public

policy adviser



Non-Executive Director Stephen Cohen

UK Civil Service + Gambling Commission Commissioner

Introduction to ARIA | Not for public distribution



Our Programme Directors are scientists and engineers with diverse fields of expertise and a range of experience across industry, academia and government.

They're tasked with developing a concrete vision for how technology could enable a better future, and directing funding into research that can make it a reality.



Angie Burnett



David 'davidad' Dalrymple





Mark Symes

Gemma Bale



Suraj Brahmavar



Jenny Read



Jacques Carolan



Three core tenets of a new kind of R&D agency

Bold, long-term

ARIA pursues R&D in underexplored areas that may seem far-fetched, but could unlock world-changing capabilities.

People, then projects

We empower our Programme Directors, and the research teams they support, with the resources and freedom to dream big and experiment.

Multidisciplinary

Programme Directors fund and manage projects across the full spectrum of R&D disciplines, approaches, and institutions to discover new

pathways.

Introduction to ARIA | Not for public distribution

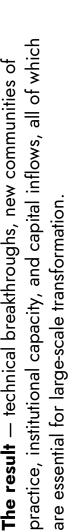


How it works in practice

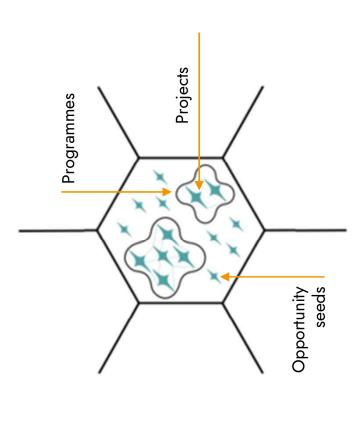
First, our PDs define an opportunity space which is likely to yield breakthroughs. Then, PDs launch and manage programmes that direct funded projects across research disciplines/institutions toward a focused objective.

Outside of programmes, PDs also fund opportunity seeds. These are lighter touch in budget and management.

practice, institutional capacity, and capital inflows, all of which **The result** — technical breakthroughs, new communities of









Our opportunity spaces

Programmable Plants

Programme Director: Angie Burnett

What if we could programme plants to remove more CO₂, fight drought, and deliver medicines to those in need?



Scalable Neural Interfaces Programme Director: Jacques Carolan

What if we could solve the mysteries of neurological disorders and mental health by interfacing with the brain in new ways?



improve our ability to model and control everything

What if we could use advanced AI to drastically

from the electricity grid to our immune systems?

Programme Director: David 'davidad' Dalrymple

Mathematics for Safe Al

Smarter Robot Bodies

Programme Director: Jenny Read

What if we could create highly dexterous, general purpose robots to ease the labour shortage of tomorrow?

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Our opportunity spaces



Programme Director: Suraj Bramhavar

natural systems to build dramatically more efficient What if we could exploit principles found in computers?



Future Proofing Our Climate and Weather

Programme Director: Mark Symes

What if we could prevent climate tipping points to avert disaster?

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Oversight Committee



Guiding Principles

- Deliver valuable knowledge. We aim to select and design for research that will address the most pressing critical scientific questions surrounding approaches for actively cooling the climate.
- Minimise risk. All experiments should be designed to reduce direct risk as far as possible.
- Engage with, and respect local communities.
- Be transparent, open, and honest at both the programme and project level, including around intentions, how the research is conducted, outputs, and impacts.
- Be cognizant of the broader implications of research on approaches for actively cooling
- Learn. Learn. Success will require willingness to adapt to lessons learned during the programme and to changing circumstances.



Proposed: Process for Process

- The Programme oversight and governance document lays out a broad overview of the committee's roles with respect to the programme team, ARIA leadership and creator teams. Within these, there are several processes to be further specified, including:
- Mode and timelines for how the OC provides input into the initial selection of projects
- Mode and timeline for how the OC contributes to the process for approval of funding for smallscale outdoor experiments
- Communications as a Committee and when acting as a Committee member. 0

Proposed approach

- "V.0" of a working protocol to be circulated by Chair two weeks in advance of a meeting
 - Revision of approach to be done through discussion to reach consensus
- Consensus protocols to be shared with ARIA CEO for approval 0
- Every effort will be made to resolve differences, keeping guiding principles and ARIA's parliamentary accountability in mind.

For discussion:

- Additional process/protocol questions?
- Confirming or refining approach

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Conflicts of interest

We plan to keep an up-to-date register of any conflicts of interest in the public programme oversight and governance documents.

Discussion:

- Any possible conflicts of interest?
- Questions about what is and is not a Col? 0

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Contracts

- You should have received a draft contract in advance of the meeting
- We are aiming for all contracts to be signed before launch (12th September)
- This means that realistically we can discuss/update terms only up until 5th September or so, in order to give everyone a chance to sign before 12th



Advanced Research + Invention Agency

Programme launch

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Documents and resources

- Programme launch scheduled for September 12th
- Programme-specific materials available on the website at launch will be:
- o The programme thesis
- The programme oversight and governance document
- The solicitation document (this is an abridged version of the programme thesis followed by instructions for applicants on how to apply)
- A narrated slideshow giving an overview of the programme, why it exists, and how to apply 0
- All materials for programme launch need to be finalised by **3rd September** at the latest (there then follows art/design work and formal sign-off)

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Communications approach for programme launch

- Simple website: The programme launch will feature the various documents for the call on the website, similarly to this currently active call in neurotechnology. There will be no "spotlighting" of the oversight committee
- ARIA will not be directing press requests to you at programme launch (unless you tell us that you want us to!), but the press may reach out to you on their own initiative for comment
- You should feel free to accept or decline to offer public comment as you see fit. There is no obligation on you to make public statements about the launch of the programme
- ARIA will provide you all with some general material that you can use in the event that you do wish to offer public comment. Use of this material is entirely optional
- Should you ever encounter issues or need support with any public communications, please reach out to me or Mike and we will coordinate with the ARIA comms team

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Any other business?

Annex 3: ARIA Conflicts of Interest policy



ARIA - Conflicts of Interest Policy

INTRODUCTION

This policy sets out the principles and rules for declaring and managing conflicts of interest at ARIA. ARIA's objective is to ensure that the influence of third parties does not compromise our decision making or independent judgement. This policy is applicable to anybody working with ARIA.

This policy applies to all interests, whether financial or non-financial, whether potential or realised, that could interact with your responsibilities to ARIA.

It is important to note that the application of this policy will require the exercise of judgement. This is because conflicts are, by their very nature, dependent on the particular facts of each case. What might cause a conflict for one person at ARIA might not cause a conflict for another. For that reason, it is not possible to provide an exhaustive list of what would, and would not, constitute a conflict of interest.

ARIA is reliant on you approaching the issue of conflicts of interest in good faith and exercising good judgement. Each of us is responsible for managing our own conflicts of interest and protecting ARIA's important work from real or perceived impropriety.

IDENTIFYING CONFLICTS

Some definitions

Conflict of Interest	means a set of circumstances that creates a risk that an individual's ability to apply judgement or act in one role is, or could be, impaired or influenced by a secondary interest. It can occur in any situation where an individual or organisation can exploit a professional or official role for personal or other benefit (for themselves or a Connected Party);
Perceived Conflict of Interest	means a situation in which a third party observer may come to the reasonably held view that you have a Conflict of Interest;
Connected Party	means your: a. spouse, civil partner, or unmarried partner; b. sibling; c. child;

	d. parent; or e. anyone else whose relationship to you could impair your ability to make fair and unbiased decisions in your role at ARIA, or may reasonably be perceived to do so;
Recuse	to disqualify yourself as a judge in a particular case, or to remove yourself from participation in a particular forum, to avoid a conflict of interest; and
Validate	when an unconflicted colleague, or other alternate, shadows your decision-making to validate that you have followed due process.

How to approach a conflict of interest self-assessment

So long as you are complying with this policy, there's no mandatory way to approach the process for identifying conflicts of interest. What works best will depend on you, your role at ARIA, and your outside interests. That said, here are some helpful questions to get you started:

- 1. What decisions am I responsible for making at ARIA? What decisions might I reasonably be able to influence?
- 2. Can I think of any outside interest that I myself hold, or might soon hold, that:
 - a. might influence how I make those decisions or exert that influence?; or
 - b. a reasonable person might think would put my decision making or objectivity at risk?
- 3. Can I think of any outside interest that one of <u>my Connected Parties</u> holds, or might soon hold, that:
 - a. might influence how I make those decisions or exert that influence?; or
 - b. a reasonable person might think would put my decision making or objectivity at risk?
- 4. Adopting a stance of cautious over-inclusivity, is there anything that might not fall into the questions above that might be worth disclosing anyway or which would benefit from discussion with a trusted colleague?

PROCESS

When to disclose

You are required to disclose any Conflicts of Interest or Perceived Conflicts of Interest:

1. that exist at the commencement of your engagement with ARIA;

- 2. which arise during the course of your engagement with ARIA (including any periods of absence); and
- 3. which seem reasonably likely to arise during the course of your engagement with ARIA (including any periods of absence).

You should make disclosure on the first day of your engagement with ARIA, and in any other case as soon as possible following the point at which you reasonably believe that a conflict has or is likely to arise. Non-disclosure of a Conflict of Interest or Perceived Conflict of Interest could constitute a breach of contract or lead to disciplinary action.

You may be required to complete extraordinary disclosure exercises from time-to-time. For example, ARIA may wish to ask all employees, workers, secondees, and consultants to submit disclosure forms (including nil returns) at the end of a particular financial year to check the levels of compliance with this Policy across the organisation.

How to disclose

Information about how to disclose any Conflicts of Interest or Perceived Conflicts of Interest will ordinarily be included in the onboarding materials you receive at the start of your engagement.

You can use the links on ARIA's intranet to find the form for disclosing information relating to Conflicts of Interest and Perceived Conflicts of Interest.

You can access the form and make a disclosure at any time. ARIA shall treat submissions in accordance with the privacy policy applicable to that person's personal data.

MANAGEMENT OF CONFLICTS

If you report a Conflict of Interest or Perceived Conflict of Interest, ARIA will consult with you to understand the situation in more detail and what mitigations might be effective and proportionate.

Following this process, ARIA will either: (i) communicate to you in writing that ARIA does not believe the situation represents a Conflict of Interest or Perceived Conflict of Interest; or (ii) propose a conflict management plan. ARIA will endeavour to agree a final version of the conflict management plan with the conflicted individual. If agreement cannot be reached, ARIA will finalise the conflict management plan in consultation with the CEO or a Non-Executive member and provide the conflicted individual with a copy. Any conflict management plan will be reviewed, updated and re-approved from time-to-time as the circumstances demand.

Mitigations will differ depending on the nature of the situation and the category of person involved.

Annex 4: Confirmation provided by each Oversight Committee Member to ARIA of no undisclosed conflicts of interest

"The Committee Member confirms that they have no undisclosed conflicts with the Programme and that they will not submit any ARIA funding applications within the opportunity space of <u>Future proofing our Climate & Weather</u>, until 3 months after the date of expiry or termination of this Agreement. Where a Conflict of Interest (as may be defined by the Parties) (a "**COI**") arises the Committee Member will immediately notify ARIA of any such COI and comply with any mitigation activities ARIA requires."