



**Natural
Environment
Research Council**

NERC Science Committee 19th Meeting

Summary of Discussion

24 & 25 January 2024, Birmingham Institute of Sustainability & Climate Action, Elm House, University of Birmingham.

Members Present: Professor David Hannah (Chair), Professor Nicola Beaumont (25 Jan only), Professor Michael Bentley, Professor Jane Hill, Professor Anna Hogg, Professor Andrew Manning, Professor Daniela Schmidt, Professor David Topping and Dr Glenn Watts

Via teams: Professor Ian Main, Professor Dan Parsons, Professor Marian Scott and Professor Helen Williams

Ex-Officio: Professor Susan Waldron (NERC Director, Research and Skills)

Apologies: Professor Nicola Beaumont (24 January only)

Other NERC Attendees: Whole meeting: Dr Sarah Turner (Associate Director, Strategic Programme Generation & Delivery (SPG&D). Liesbeth Renders (Associate Director Discovery Science, Highlight Topics, and Talent and Skills.) **Item 5 via teams:** Professor Peter Liss (Executive Chair). **Item 7 via teams:** Liam Haydon (Head of Strategy and Planning). **Items 8 & 10:** Daniel Knight (Interim Senior Programme Manager, Strategic Programme Generation and Delivery) and Darby Knight (Programme Manager, Strategic Programme Generation and Delivery). **Item 13 via teams:** Fiona Goff (Head of Impact and Outcomes)

Secretary: Gemma Davies

Key issues discussed

Governance and Operation of Science Committee: Outcome of the annual assessment exercise 2023

Science Committee reviewed the highlights and issues raised in the annual assessment exercise and advised on improvements which might be made to the operation of NERC Science Committee.

Executive Chair update

Professor Peter Liss updated Science Committee on the new Executive Chair Professor Louise Heathwaite who will commence on 11 March 2024. He talked about nearing the end of the current spending review, Fellowships, the place agenda, the agreed funding of proposal 'Modelling Environmental Responses to Solar Radiation Management' and associated risks with misinterpretation of the research purpose, and the need for development of big ideas and to do more internationally.

EDI: Positive Action Update

The committee noted the principles by which it is possible to embed positive action in funding calls, and recognised the challenges that exist in NERC to adopt such a policy. Susan Waldron noted that to pursue positive action it would first be necessary to demonstrate that measures put in place to support more diverse applicants proved ineffective. This would require baseline data over several rounds and that did not yet exist.

The committee shared their knowledge of positive action undertaken in the wider research community and suggestions for improved diversity included ring-fencing interviews, learning from the EDI champions (funded by NERC) practical actions, and the shaping of the schemes to attract diversity, for example what can be learned from the Dorothy Hodgkin scheme. Putting aside competitive advantage and sharing of best practice and knowledge was advocated.

Think Big Workshop

The committee discussed the outcomes of the Think Big Workshop held on the 12 October 2023 and provided advice on topics/ideas that could be further developed. The committee considered many of these ideas were interdisciplinary and would benefit from cross council working. In particular, SC suggested that any health outcomes initiative would be an opportunity for cross-council working. SC discussed 'Monitoring, sensing, modelling, and prediction' noting it had more of a technological approach. It was noted that making data more accessible to the academic community was needed and that the challenges of this were around the governance of data. Science Committee raised the need for long term monitoring data for fundamental break throughs.

It was agreed that clarity is needed on what ideas were 'new' here and how these ideas fit in with NERC and UKRI strategies. The need for more disruptive thinking was also raised. SC suggested involving the community and looking at NERC Centre's strategies to pull out key big idea topics, and suggested there could be insight from reviewing unsuccessful grant applications and international organisations strategies. The need for systems thinking and connections between these topics was discussed.

NERC Discipline Balance

The committee considered where there might be gaps in strategic funding that need addressing to maintain the health of the environmental research and innovation community and/ or timely opportunities for future investments, including e.g. emergent areas, growing community capacity, or areas of interest arising from the 'Big ideas Workshop'.

Strategic Research Investment to achieve [NERC Delivery Plan Ambitions](#)

The committee reviewed 14 investment ideas generated by NERC Head Office staff, to identify those that are considered most timely to achieve NERC's remit and Delivery Plan ambitions. The ideas were ranked to identify those most appropriate for scoping towards a full Programme specification. It was agreed that seven ideas would be scoped towards a full programme specification and would come back to Science Committee later this year.

Highlight Topic Update 2024

The committee noted the new timeline for delivery of the HT Round 10 funding opportunity, and the postponement of HT Round 11 ideas process and discussed the outline areas for the evaluation in 2024 of the HT scheme. The committee advised NERC share a timetable for round 11 when possible, to ease community concerns and agreed the longer time from announcement to submission could be beneficial as it provides time for new groups to emerge. Suggestions for the Highlight Topic evaluation included presenting data in different ways e.g., topic mapping, analysing the number of applications versus success. Using the knowledge of SC members and the wider stakeholder community, including the panel chair, and outcomes / impact, (what this has led to). Options to consider how to improve the scheme could consider a mechanism to combine Topics and thinking about what more could be done with ideas that consistently fall just below the line.

NERC Doctoral Training Investments – CDT/DTP Update

The committee noted the latest developments related to Landscape awards - Doctoral Training Partnerships (DTP 2 & DTP 3) - and Focal awards - Centres for Doctoral Training (CDT), and of investment to support greater diversity in environmental sciences. The committee advised on the training needs that may be supported by collective working, particularly focal awards, for example around the UKRI themes and how best to communicate the changes in the portfolio to the community.

Demonstrating NERC's Impact and Outcomes

The committee discussed how NERC's approach to evidencing our impact and outcomes could be further evolved to maximise its utility for target audiences. SC suggested other routes to understanding impact which included: using consultancies; collecting data on NERC-funded scientists speaking at select committees; using simple infographics; creating a portal for academics to provide narratives of impact; focusing on societal impact as well as financial and policy; using novel software to track impact through use of data; using Altmetrics; harvesting data from REF case studies; mapping core metrics to different audiences. The importance of crediting impact delivery organisations was also noted.

Feedback from December Council Meeting

The Chair noted Science Committee had previously reviewed and ranked four investment cases and that Council agreed to fund 'Modelling Environmental Responses to Solar Radiation Management' and 'Delivering ecosystem services under changing climatic and societal pressures' proposals.

During this discussion Science Committee highlighted the need for careful communication around clarity of priorities and budgets and reiterated their advice that the 'solar radiation management' investment must consider ethics and governance. The Chair confirmed that this was also discussed and agreed at Council.

Standing items

The Committee confirmed the minutes and noted council feedback, the information papers, and the forward agenda.