



Confirmed minutes of the 7th meeting of NERC Council in UK Research and Innovation

NATURAL ENVIRONMENT RESEARCH COUNCIL

Seventh meeting of NERC Council in UK Research and Innovation, held at 58VE, London on Thursday, 12 December 2019.

Members present:

Professor Duncan Wingham (Executive Chair), Mr Nick Folland (Senior Independent Member), Professor Gideon Henderson, Professor Louise Heathwaite, Mr Imran Khan, Mr Gordon McGregor, Professor Dame Julia Slingo, Lord Willis of Knaresborough

NERC/UKRI Directors (Head Office): Dr Phil Heads (Interim Director, Research and Skills, and Strategic Partnerships), Mr Geoff Robins (Transformation Director, UKRI), Ms Alison Robinson (Director of Corporate Affairs)

Apologies: Professor Stephen Holgate, Professor Karin Lochte, Mr Nigel Bird (Interim Chief Operating Officer), Professor Graham Underwood (Chair of Science Committee)

Other attendees: Ms Candice Snelling for item 3, Ms Jo Thompson for item 4, Mr Robyn Thomas for items 6, 7, 8, Mr Rick Stock for item 7

Secretariat: Mrs Helen Page

Introductory items

1. Executive Chair's welcome and introductions (Oral)

- 1.1 Duncan Wingham welcomed members to the seventh meeting of NERC Council in UKRI and to the first meeting being held at the UKRI London Head Office, 58VE. Apologies had been received from Professors Holgate and Lochte. Council joined Duncan Wingham in congratulating Stephen Holgate on his Lifetime Achievement Award from the World Allergy Organisation.
- 1.2 Duncan Wingham asked members for any updates to their declared interests. None were declared.
- 1.3 Duncan Wingham asked members for any amendments and matters arising from the minutes of the previous meeting. No amendments were made and the minutes of the sixth meeting were confirmed as a true and accurate record.
- 1.4 Duncan Wingham advised that the majority of the actions listed on the Decisions and Actions paper were either completed or on the agenda.
- 1.5 Two actions (2.1v and 2.1vi) from the September meeting related to the status of two funding calls; Industrial Strategy Challenge Fund (ISCF) Smart Sustainable Plastic Packaging (SSPP) and Climate and Environmental Risk Analytics for Resilient Finance on

which Duncan Wingham provided an update for Council.

1.6 Smart Sustainable Plastic Packaging (SSPP)

Duncan Wingham advised Council that he had recently chaired a Programme Board meeting on this ISCF challenge and a number of calls under the initiative were being announced. The first round of demonstrator calls would be the most substantial of these and would focus on plastic reduction and methods of recycling plastic. In addition, there were a number of calls being led by Innovate UK which would be joint business/academic as well as an academic call which would be launched in February 2020 for approximately £10 million.

1.7 Duncan Wingham commented that it had been important to ensure that, across all of the calls, it was evident that the call related to the overarching aim of the programme and this had been the subject of some discussion with the external Challenge Advisory Group. The outcome of the discussion had resulted in some changes to the usual process and the introduction of some mandatory questions to the assessments.

1.8 In response to a query raised on engaging the community in writing the calls, Duncan Wingham advised that the Advisory Group had broad business representation. Whilst decisions were made by the Programme Board, there was a positive relationship between the two bodies.

1.9 A general comment was raised relating to the calls for the Strategic Priorities Fund (SPF) which had been written with limited engagement with the wider community. Duncan Wingham acknowledged that time constraints in launching the calls had led to a lack of consultation.

1.10 NERC/Innovate UK Climate and Environmental Risk Analytics for Resilient Finance

Duncan Wingham advised that a joint call with Innovate for up to £10 million was expected to launch in late January/early February 2020.

1.11 One action from the September meeting remained outstanding (7.6) awaiting the arrival of the new Director of Strategic Partnerships, Dr Iain Williams, who will join NERC in January 2020.

2. Executive Chair's update (*Slides item 2, December 2019*)

2.1 Duncan Wingham gave an oral update on some of the key activities since the previous Council meeting.

i. UKRI 2025

Duncan Wingham advised Council that he had been involved in discussions on an activity known as UKRI 2025 following a request from the UKRI Board to produce a UKRI-level Strategic Plan. A slide detailing the emerging Strategic Framework was shared with Council.

ii. Duncan Wingham informed Council that this activity was linked to the Spending Review settlement which could lead to, depending upon the election result, discussions in early January 2020 which might result in significant budget increases.

iii. Commissioning Strategic Research to address NERC Delivery Plan ambitions

Duncan Wingham reminded Council that, following discussion at the September meeting, it had been agreed to bring a more detailed proposal to this meeting. Duncan Wingham explained that progress had been delayed and it was now proposed to discuss this further in June 2020. One of the reasons for the delay was that a number of strategic

programmes, which were Official Development Assistance (ODA) related, would be ending soon which would require NERC to announce an Announcement of Opportunity (AO) by April 2020 to meet its stated targets as part of the last Spending Review once the budget was known.

iv. NERC/BBSRC

Duncan Wingham explained that he had recently attended a meeting of BBSRC Council and shared a slide with NERC Council, the living planet index, which had been discussed at the meeting. Duncan Wingham emphasised the importance of aligning the agendas of both BBSRC and NERC to address how we might feed the world whilst maintaining the environment. He and Melanie Welham, the BBSRC Executive Chair, supported by BBSRC Council, had agreed to pursue this with a view to establishing a joint funding initiative. As part of this agreement to joint working it had been decided to hold a joint dinner with BBSRC in June 2020 to discuss this initiative further. Council were very supportive of this intention and agreed that urgent action was required in this area.

- v. Gideon Henderson, who had been present at the discussion with BBSRC Council, added that BBSRC Council had been interested in the overview of NERC which Duncan Wingham had provided and that they had been supportive of the suggestion to work together on this issue. Gideon Henderson suggested that it would be useful to initiate discussion on this topic prior to the joint dinner and it was agreed to invite Melanie Welham to attend the March 2020 Council meeting.

ACTION

- vi. Duncan Wingham stated that Alison Robinson had agreed to chair a working group to co-ordinate UKRI activity for the 26th Conference of the Parties (COP26) in Glasgow in 2020. The conference would provide an opportunity to showcase a range of activities including highlighting this issue.

vii. Governance, Responsibilities and Ownership (GRO) programme

Duncan Wingham announced that the National Oceanography Centre (NOC) and the Centre for Ecology and Hydrology (CEH) had now gained independence and expressed his thanks to Paul Fox and Victoria McMyn for ensuring the smooth transition. Council congratulated NERC on this achievement.

viii. Recruitment update

- Dr Karen Hanghøj had been announced as the new Director of the British Geological Survey (BGS) from October 2019. The intention was to invite her to speak to Council in 2020 on her vision for BGS. **ACTION**
- Professor Graham Underwood, University of Essex, had been appointed as the Science Committee Chair from November 2019.
- Three new Council members had been invited to join NERC Council. Council would be informed once appointments had been accepted. **ACTION**

Items for discussion

3. UKRI Environmental Sustainability

- 3.1 Alison Robinson introduced this item which was reporting on the emerging environmental sustainability strategy which NERC was leading on behalf of UKRI.
- 3.2 Alison Robinson advised Council that UKRI had ambitions to become a leader in environmental sustainability and it would be important to operationalise this across UKRI whilst supporting world class science. She indicated to members that it would be

important to ensure we did this in line with best practice.

- 3.3 An external advisory group, UKRI Sustainability Advisory Group, had been established which had provided useful challenge on both governance and strategy.
- 3.4 Alison Robinson explained that one of the priority areas outlined in the draft strategy related to carbon which included biodiversity and pollution as part of the net zero ambition. Alison Robinson advised that it had been agreed to update the priority names in advance of discussion by the UKRI Board in January 2020.
- 3.5 She emphasised that adoption of this strategy would result in UKRI taking a leadership position in this area and that this would result in substantial changes in working practices across UKRI. Alison Robinson invited Council to comment on the emerging strategy.
- 3.6 Council highlighted the importance of ensuring that UKRI was able to deliver on any commitments and the importance of engaging widely within the research councils before agreement was given.
- 3.7 Alison Robinson confirmed that representatives from across the research councils were involved in discussions as part of a working group and data from NERC had been used to help form the priorities.
- 3.8 Duncan Wingham added that, in order to realise net zero in the widest sense, radical change would be required over the next 15 years.
- 3.9 Council commented that legislation would be required in order to achieve this on a national scale and it welcomed a clear UKRI position to ensure the organisation, including NERC, would be part of tackling this key issue.
- 3.10 Council queried whether an international comparison had been conducted as part of this exercise. Alison Robinson informed Council that an international benchmarking review had taken place and that she was confident that adopting this policy would place UKRI in a leadership position internationally.
- 3.11 Duncan Wingham agreed that UKRI were in a position to drive change and adopt a world leading position and that the first step would be to gain agreement from the UKRI Board on the draft strategy.
- 3.12 Duncan Wingham suggested to Council that the strategy be approved for discussion by the UKRI Board with the addition of some further information on international competitiveness, how it would be successfully implemented and a sharper focus on the scope.

ACTION

- 3.13 Council were in agreement and commented on the excellent annex.

4. NERC Public Engagement Strategy (NERC 19/38) (Slides, item 4, December 2019)

- 4.1 Alison Robinson introduced this item and reminded Council that they had previously agreed a public engagement strategy and programme budget for NERC in 2016 and that this paper presented a revised strategy for their agreement.
- 4.2 Alison Robinson explained that it had been decided to retain three objectives from the current strategy (inspiring the public, convening debate on contemporary issues and public dialogue) and add two new objectives on building the capacity of researchers and promoting engaged research.
- 4.3 Council asked what the barriers to public engagement had been since the initial strategy

and what lessons had been learnt.

- 4.4 Alison Robinson explained that there was a need to continue to build confidence and expertise in sharing the outcomes of research and that it would be important to include more of the NERC community in doing this. It would be important to ensure researchers were supported and welcomed as credible and trusted voices.
- 4.5 Council were pleased with the work which had been done so far and emphasised the overarching purpose of public engagement which was to allow the public access to the science. Council asked that the strategy be more explicit in drawing out how to engage public audiences about the future, how to engage youth and broader audiences, how to engage them in solutions to echo the NERC delivery plan and to more clearly set out what difference the strategy sought to make in five years' time.
- 4.6 Alison Robinson explained that she had been working closely with UKRI in developing the revised strategy. She responded to specific questions about potential collaborations with other research councils, noting that NERC and STFC were the two research councils with dedicated programme funding for public engagement although the difference in approach meant collaboration with other councils for funding was not always possible. Alison Robinson advised that a joint programme with UKRI on a healthy environments public dialogue was planned.
- 4.7 Duncan Wingham summarised that the revised strategy would be sharpened, made more explicit with regard to contemporary issues and how to engage youth audiences with hope for the future. Consideration would also be given on how to measure success. Council agreed that these amendments be made and agreed by correspondence before the next meeting.

ACTION

- 4.8 Council also asked for an update on COP26 at the March Council meeting.

ACTION

5. Infrastructure Roadmap International Comparison (NERC 19/39) (*Slides, item 5, December 2019*)

- 5.1 Alison Robinson introduced this item and noted that responsibility for the Infrastructure Roadmap would transfer to Dr Iain Williams, NERC Director of Strategic Partnerships, in January 2020.
- 5.2 Alison Robinson reminded Council that the Infrastructure Roadmap had now been published and that the international comparison which was requested at the June meeting was provided as an annex to the paper.
- 5.3 The comparison exercise included the global landscape in three areas; intelligent marine observing systems; landscape laboratories and exascale computing. Alison Robinson explained that the international mapping would be a live decision-making tool which would be reviewed regularly by NERC.
- 5.4 Council welcomed the mapping, noting that, as decisions were being taken, there would be a need for additional scientific detail and expertise to be included. For instance, Council noted that it would be important to ensure UK strengths were highlighted and commented that, whilst the UK was successful in atmosphere and oceans, more work was required in landscapes.
- 5.5 Duncan Wingham asked Council members to consider whether there was any further work required on this subject. He acknowledged that this had been a useful exercise in

identifying where it would be useful to work with other countries, for example in exascale computing.

- 5.6 Council agreed that no further work was required for the purposes of this exercise, noting that the Executive would continue with the mapping as an ongoing 'live' tool.
- 5.7 Council agreed that a discussion about how to engage the NERC community with the purpose of the Infrastructure Roadmap would take place outside the meeting.

6. Talent and Skills portfolio for the future (NERC 19/40) (Slides, item 6, December 2019)

- 6.1 Phil Heads introduced this item and reminded Council that the Talent and Skills portfolio was last discussed in 2013 with the paper setting out the evolution of the portfolio in recent years.
- 6.2 Phil Heads advised that NERC core funded investment in talent and skills had been protected in real terms based on a decision taken by Council at successive spending reviews to invest in the next generation of environmental scientists as a key priority. NERC had also been successful in gaining additional funding through UKRI collective funds.
- 6.3 Phil Heads commented that UKRI had appointed a new Director of Talent and Skills and were in the process of developing their strategy. There was a possibility that any budgetary increase in funding in this area might, in future, be directed by UKRI and based on government priorities.
- 6.4 Phil Heads added that the intention to increase stipends across UKRI would, in a flat cash budget scenario, lead to fewer students being funded by NERC in future. He also reminded Council that the Advanced Training Short Courses (ATSCs) remained paused due to funding constraints. The aim of the paper was to inform Council of the trends and pressures in this area whilst the Spending Review outcome was awaited.
- 6.5 Council queried how we determined whether the talent and skills portfolio was successful and whether there was sufficient information available on those we had supported, in particular, those who had moved into industry.
- 6.6 Duncan Wingham confirmed that cohorts were followed up and Alison Robinson added that, of the two cohorts who were tracked, approximately 90% of those funded were still using their environmental qualification with approximately 40% employed in business.
- 6.7 Council welcomed these findings and the wider discussion on talent and skills. Council queried why fellowship awards had reduced since 2010 and highlighted the importance of ensuring growth in this area. Duncan Wingham agreed to look at the reduction in fellowships from 9.2% to 7.3% since 2010 as these were highly valued awards.

ACTION

- 6.8 Council raised the issue of European Research Council (ERC) replacement funding in the event of EU Exit and Duncan Wingham confirmed that, were the UK to exit the EU, there would be a UKRI equivalent.
- 6.9 In summary, Duncan Wingham noted that NERC stands out amongst the councils for its low budget share invested in Talent and Skills, while there was a strategic need to attract and retain talent in an international context. Council confirmed its appetite to increase NERC investment in Talent and Skills, including early career and advanced fellowships.
- 6.10 Once spending review budgets have been settled, it was agreed to bring a paper to Council to include: the overall Talent and Skills investment as a share of NERC's total directly

allocated budget; evidence of the value of NERC's training investment in terms of outcomes (including destinations) and investment options across the full range of Talent and Skills provision.

ACTION

7. UKRI Funding Service (NERC 19/41) (Slides, item 7, December 2019)

- 7.1 Duncan Wingham introduced Rick Stock, Programme Manager, UKRI Funding Service to lead on this item. Duncan Wingham advised that Geoff Robins was the UKRI Senior Responsible Owner for this project.
- 7.2 Rick Stock explained that the purpose of the item was to inform Council on the developing UKRI funding service and explain why the changes were being proposed as well as to provide information on the governance, timescales and the plans to communicate these changes.
- 7.3 One of the primary objectives of the project was to replace the current multiple funding services with a single, UKRI funding service, simplifying the funding types on offer resulting in a more unified approach across UKRI. The initial scope had looked at processes and policies across UKRI with a view to determining what was common to all the research councils.
- 7.4 Rick Stock acknowledged that it would be important to ensure a gradual roll-out with dual running for 18-24 months to avoid a 'big bang' approach. The current system would be phased out by 2023 and a huge amount of effort would be required in order to deliver the first funding opportunities via the new system in June 2020.
- 7.5 Council were very supportive of the plans and agreed that the key would be simplification and queried whether any one research council might be most affected by the proposal.
- 7.6 Rick Stock commented that changes would be required equally across all of the research councils although he acknowledged that some councils had more complexity and variation than others and a structured approach was in place.
- 7.7 Duncan Wingham added that an exercise was conducted previously which asked the research councils to identify the number of funding schemes in existence. As a result, it was discovered that most councils had approximately 21-22 schemes of which about 15 or 16 were almost identical with about five being distinct and Council-specific.
- 7.8 Geoff Robins commented that this project was part of the 'reforming our business' challenge which should make alignment easier and Rick Stock agreed that some of the changes would be delivered as part of this challenge.
- 7.9 Council advised that it would be important to ensure the new funding service was as flexible and future proof as possible and asked whether this had been considered.
- 7.10 Rick Stock added that this had been a key consideration and it would be important to ensure that the funding service was flexible and that the governance was in place to ensure future change could be responded to although he acknowledged it would not be possible to model all future scenarios.
- 7.11 Council commented that the demand placed on universities for post-award activities was a large commitment and asked that this was given careful thought and improved under the new system rather than added to.
- 7.12 Rick Stock responded that the entire process would be tested with users and that this would be taken into account.

7.13 In response to a query on how the changes would be communicated to the external community, Rick Stock agreed to add additional information on the external plan to ensure the community were aware.

7.14 Council asked for clarification on who would be responsible for staffing peer review panels and choosing reviewers and Rick Stock stated that the staffing of panels and choice of reviewers would remain with the research councils. Duncan Wingham added that the design of the IT structure was more advanced than the detail of the processes.

8. Discovery Science: reforming our business (NERC 19/42)

8.1 Phil Heads introduced this item which set out a proposal to pilot a new approach to delivering responsive mode – Discovery Science - funding.

8.2 Phil Heads explained that there were two contextual drivers:

- i. Recent analysis of whether NERC was funding the best science and scientists which indicated that the best scientists were not necessarily approaching NERC for funding
- ii. UKRI 'reforming our business' which aimed to optimise funding allocation.

8.3 Phil Heads emphasised the importance of minimising disruption to business as usual whilst piloting the new approach and explained that the intention was for the top 30 organisations by funding volume to be invited to submit one application each. The inclusion of assessing the quality of the applicant, their track record, would be a departure for NERC.

8.4 Phil Heads explained that the intention was to run the pilot in parallel with the upcoming round to be announced in January and awarded in November 2020. The total budget would be split equally with £10 million for standard grants and £10 million for the pilot scheme. Community engagement would be key as the change of focus would be novel to the community and would require a robust engagement plan.

8.5 Duncan Wingham added that he had, in principle, already agreed with UKRI to carry out this pilot and was therefore asking for Council approval of the plans.

8.6 Council were supportive of the plans and noted that the pilot was similar in some respects to the ERC grants which might be highlighted when engaging with the community. Council cautioned that due diligence would be required to pilot a scheme which resulted in a £10 million reduction in standard grant funding.

8.7 Council added that it would be important to measure success and consider gender balance and diversity in the decision-making process. Council advised, and the Executive agreed, that it would be important to clearly communicate the purpose of the pilot, how it differed from the usual Discovery Science funding; how early career researchers would be encouraged and assessed and how the success of the pilot would be measured. Duncan Wingham concurred with an earlier suggestion that this pilot might not be exclusive to the top 30 universities and the working group might address the detail further.

8.8 It was agreed that the Executive would draft a call and a communication plan and invite Council members to form a working group to comment on them.

ACTION

8.9 Duncan Wingham explained that the intention would be for all Discovery Science funding to adopt this approach were the pilot successful.

9. NERC financial forecasts (NERC 19/43)

Duncan Wingham introduced this item and advised Council that there were a number of financial pressures next year which he was reasonably confident could be addressed with support from UKRI.

10. NERC top risks at November 2019 (NERC 19/44)

10.1 Duncan Wingham drew Council's attention to a new risk which had been added to the register regarding the proposed changes to Discovery Science funding.

11. Minutes of the NERC Assurance Board (NAB): October 2019 (NERC 19/45)

11.1 Nick Folland updated Council on the second meeting of the NERC Assurance Board held on 18 October 2019.

11.2 Nick Folland reminded Council that the purpose of the NERC Assurance Board was to provide independent assurance to the Executive Chair and advised that the board met quarterly.

11.3 Nick Folland had taken an action at the last meeting to meet with the Chair of ARAPC, Fiona Driscoll, in response to a concern raised that NERC issues were not being sufficiently highlighted at a UKRI level and an agreement was reached that NAB would concentrate on the operational risk.

11.4 Nick Folland asked whether members had any concerns or issues to raise and none were raised.

12. Rolling Programme (NERC 19/46)

12.1 Duncan Wingham reminded members that this item provided an opportunity for them to suggest items for forthcoming meetings.

12.2 Council raised a query regarding items that were requested at the June meeting and it was agreed that the Council Secretary would ensure these had been captured and were included in the rolling programme.

ACTION

12.3 Duncan Wingham reminded Council of their request for an item on the National Capability portfolio which had been raised at the September meeting. He asked Council for some clarity on the desired content of this discussion and Council confirmed that one aspect of the discussion was to conduct some diligence as this comprised a large part of the NERC budget.

12.4 Duncan Wingham agreed that an introductory item on National Capability, which included an overview of the portfolio, how it was evaluated and how it might be evolved would be discussed in March and would be timely given that it would be the first meeting for the three new members and might be followed by a deeper dive in the future.

ACTION

12.5 Gideon Henderson suggested that some thought be given to allotting a regular agenda item for the Chief Scientific Adviser (CSA) to update Council on relevant matters and the Executive agreed to consider this.

ACTION

12.6 It was proposed to include an update on NERC engagement with COP26 at the March Council meeting (item 4.8 refers).

13. Any Other Business

13.1 No other business was raised.

13.2 Duncan Wingham thanked Council for a productive meeting

13.3 The meeting was closed.

A NERC BBSRC Responsibility?

