

Minutes of the 19th meeting of NERC Council in UK Research and Innovation (redacted)

NATURAL ENVIRONMENT RESEARCH COUNCIL

Nineteenth meeting of NERC Council in UK Research and Innovation held at the Doubletree by Hilton London Angel Kings Cross on Wednesday, 7 December 2022.

Members present:

Professor Sir Duncan Wingham (Executive Chair), Nick Folland (Senior Independent Member), Professor Hannah Cloke, Dr Matthew Harwood, Professor Sir Stephen Holgate, Professor Peter Liss, Clare Matterson, Gordon McGregor, Professor John Pyle, Professor Gideon Henderson, CSA, Defra, Professor Graham Underwood, Chair, Science Committee

NERC/UKRI Directors (Head Office): Nigel Bird (Director, Major Projects), Alison Robinson (Deputy Executive Chair and Director, Business Delivery and Insight), Professor Susan Waldron (Director, Research and Skills), Dr Iain Williams (Director, Strategic Partnerships)

Apologies: Judith Batchelar, Dr Rebecca Heaton, Michael Lewis, Rashik Parmar

Other attendees: Dr Liam Haydon, Item 4, Shewly Choudhury, Item 6, Robyn Thomas, Item 8, Professor Dame Ottoline Leyser (CEO, UKRI), Item 9, Professor Christopher Smith (Executive Chair, AHRC), Item 10

Secretariat: Helen Page

Introductory items

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

- 1.1 Duncan Wingham welcomed members to the nineteenth meeting of NERC Council and noted that apologies had been received from Judith Batchelar, Rebecca Heaton, Michael Lewis and Rashik Parmar.
- 1.2 Duncan Wingham asked members for any updates to their declared interests or any vested interests in the items being discussed today. None were declared.
- 1.3 Duncan Wingham informed Council that this would be Graham Underwood's last meeting as his tenure as Chair, Science Committee ended on 31 December 2022. He thanked him, on behalf of Council, for his valuable contribution to NERC over many years.
- 1.4 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 eighteenth meeting were confirmed as a good record.
- 1.5 Duncan Wingham advised that all of the actions from the previous meeting had been completed.

2. Update from CSA, Defra (Oral)

2.1 Gideon Henderson provided an update under three headings:

i. Government

Gideon Henderson commented that further changes in Government since Council last met had resulted in both a new Prime Minister and a new Secretary of State for Defra. He added that the Autumn statement had re-confirmed the Government commitment to increase public funding for science over the next two years although he added that there would not be any additional funding to address inflationary pressures.

Gideon Henderson informed Council that the National Science and Technology Council (NSTC) had been re-established as a cabinet committee to deliver UK strategic advantage with a focus including the following areas: artificial intelligence; quantum; skills portfolio; and government procurement.

ii. Cross-Government activity

Gideon Henderson reminded Council that Chris Skidmore was leading a net zero review commissioned by the Government. He added that a new adaptation committee, Climate Adaptation Research and Innovation Board (CARIB), had been established, co-chaired by Sir Patrick Vallance and Gideon Henderson with Duncan Wingham as a member.

Gideon Henderson informed Council that the Chief Medical Officer had published his annual report in December 2022 which focused on air quality.

iii. <u>Defra</u>

Gideon Henderson informed Council that Thérèse Coffey was the new Secretary of State for Defra and that she had a range of broad priorities including: reviewing progress on the environmental targets set out in the Environment Act (on air quality, water, biodiversity, waste and trees); net zero and the environment land management scheme.

Gideon Henderson commented that the Marine Science Co-ordination Committee (MSCC) had now ended and had been replaced by an internal Government committee which would continue to interact with external partners in marine science.

Gideon Henderson advised that Defra had a current on focus on a range of issues such as: avian flu; the crab deaths in North East England; COP 15 and COP27.

Gideon Henderson commented that the UN Environment Programme (UNEP) was coordinating activity on pollution and chemicals with a view to establishing similar international programmes to those on biodiversity and climate.

- 2.2 Duncan Wingham asked how the replacement for the MSCC would link up with external partners, such as the National Oceanography Centre. Gideon Henderson added that the MSCC previously had too broad a remit and it had been decided to establish some separate groups to better address the issues. He confirmed that advice into Government remained important. Council added that the MSCC had several sub-groups which were operating successfully and Gideon Henderson confirmed that these would continue.
- 2.3 Council asked for further information on the potential pollution initiative. Gideon Henderson explained that, whilst there was an Intergovernmental Panel on Climate Change (IPCC) and an Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), there was no international body for pollution which was a huge environmental challenge. Council added that it would be important to consider developing funding mechanisms for developing countries to enable them to transition.

- 2.4 Council commented that there was a UN Environment Assembly agreement to establish a treaty on ending plastic pollution which was due to be negotiated by the end of 2024. Gideon Henderson responded that this would be part of Defra's responsibilities and he would ensure there was connectivity with the team leading on it.
- 2.5 Council asked who would be responsible for calculating the cost of loss and damage in developing nations caused by climate change and Gideon Henderson advised that this was being led by BEIS and that the work was in the early stages.

3. Executive Chair's update (Oral)

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

Future Leaders Council

Duncan Wingham invited Alison Robinson to update Council on progress with the Future Leaders Council. Alison Robinson informed Council that the recruitment campaign for both the Chair and members was being led by a recruitment agency, Gatenby Sanderson, and was open for applications until 16 December 2022.

ii. Publication of Diversity Data

Duncan Wingham asked Susan Waldron to provide an update on the recent publication of diversity data for NERC funding investments. Susan Waldron informed Council that NERC had published its diversity data for grant funding from 2014-2020 to increase transparency and investigate whether our funding processes were resulting in outcomes with regard to diversity for those applying for funding compared to those who received funding. She confirmed to Council that, whilst there were no discernible differences in outcome, NERC would continue to monitor its processes to ensure there was no bias in its funding streams.

Council asked whether there was any information available on those who could have applied for funding to use as a comparison and Duncan Wingham confirmed that this information was currently being gathered.

iii. Student stipend uplift

Duncan Wingham informed Council that the decision by UKRI to increase stipends was being funded by UKRI in the short term as there was no corresponding budgetary increase for councils to accommodate this. He added that it was unlikely that UKRI would fund this in the longer term which might result in a decrease in the number of students funded for some research councils.

Duncan Wingham reassured Council that this would not be the case for NERC as Council had already agreed to increase the studentship budget and presented a slide to illustrate the impact of the uplift for NERC. He added that one consequence would be that NERC might be unable to increase studentships to the level it had anticipated.

iv. Horizon Europe

Duncan Wingham informed Council that the position remained unclear as to whether the UK would associate with Horizon Europe.

v. <u>EU Copernicus programme</u>

Duncan Wingham invited Iain Williams to provide an update on Copernicus. Iain Williams informed Council that NERC had received c. £20 million from BEIS to invest in the UK Earth Observation sector to help mitigate the impact of ongoing uncertainty with UK association to Copernicus. Gideon Henderson added that responsibility for Earth observation was in the process of moving to BEIS from Defra and added that Horizon Europe and Copernicus association might be negotiated separately.

vi. UKRI

Duncan Wingham informed Council that UKRI was currently experiencing a series of challenges due to significant changes taking place simultaneously over the next two years. The reduction in headcount over the period of the Spending Review, current high inflation and limited salary increases this year have led to low staff morale. He added that the introduction of the new grants system and the new HR, Procurement and Finance system added to these challenges. In order to address the issues of continuing to deliver with a reduced headcount, NERC had identified some changes to its ways of working. One of these changes involved the way in which NERC conducted its peer review with the intention to use expert panels, rather than reviewers, for assessment in future.

Council advised that there were some risks involved in changing the processes related to peer review including ensuring that panel members had the relevant expertise. Susan Waldron informed Council that a webinar to update the community on the proposed changes had recently taken place and that the intention would be to ensure the panels had expert panel members just as we currently had expert peer reviewers.

Council asked whether there were any issues with staff recruitment and retention in light of the low morale and Duncan Wingham commented that there was currently no noticeable impact.

vii. <u>UKRI Sustainability</u>

Duncan Wingham advised Council that UKRI were seeking to agree a UK wide concordat with the university sector and a cross-section of funders to agree a goal on sustainability that would be both transparent and measurable. He added that he had met recently with a range of universities in Scotland to discuss this activity and that a wider meeting of UK Higher Education Institutions would take place in February 2023.

viii. Antarctica

Duncan Wingham informed Council that he would be visiting Antarctica in January 2023 alongside Sir Andrew McKenzie, Chair, UKRI, Professor Dame Ottoline Leyser and Professor Dame Jane Francis. He invited Nigel Bird to provide an update on the progress with the building programme. Nigel Bird commented that the replacement building was back in construction and was expected to be a weather tight structure by the end of 2022.

ix. Launch of NERC Strategic Delivery Plan

Duncan Wingham commented that there had been a successful launch of the NERC Strategic Delivery Plan last week which had included a talk from the fashion sector. He added that NERC had reached an agreement with Innovate UK and AHRC on a £15 million UKRI Circular Fashion Programme which was showcased at the event to demonstrate how NERC would deliver the strategy.

x. UKRI Alcohol Provision

Duncan Wingham informed Council that UKRI had recently announced that alcohol would no longer be provided for any future NERC Council meetings.

Items for discussion

- 4. MRC/NERC Joint Session: Feedback (Oral) Slides, item 4
- 4.1 Duncan Wingham informed Council that, following the joint session held yesterday, he had agreed, in principle, with Professor John Iredale, Executive Chair, MRC to create a small joint working group to explore options for future joint strategic programmes. He added that the intention was to return to both Councils with some proposals in mid-2023. ACTION: item to be added to the rolling programme for June 2023 to discuss further the opportunities for working with MRC on a joint strategic programme

- 4.2 Alison Robinson introduced this item and presented slides which summarised the outcomes from the joint session which had been captured to assist the joint working group in taking these ideas forward. The slides were also being noted by the MRC Council to ensure a shared record of the joint meeting. Liam Haydon observed the item.
- 4.3 Alison Robinson outlined the opportunities identified at the joint session under three headings: planetary health; pollution and net zero. Duncan Wingham suggested that, as discussions were already taking place with the Department of Health under the Building a Green Future theme related to net zero in the health system, this idea was not taken forward as a potential MRC/NERC programme.
- 4.4 Council commented that the joint session had been extremely valuable and congratulated those who had organised the session and welcomed the concise summaries of the wide-reaching discussions.
- 4.5 Council asked whether the cost of health outcomes was being sufficiently factored into the economic case for mitigation and suggested this be considered further by the joint working group.
- 4.6 Gideon Henderson supported the adaptation and pollution themes and asked whether consideration might also be given to the environmental consequences related to food production and the biodiversity/nature theme such as the benefits to mental health.
- 4.7 Council mentioned that there was a global Lancet commission looking at health and environment which had an equity and economic element to it. Council added that it would be important to ensure policy and research evidence was better aligned.
- 4.8 Council remarked that the overlap areas between MRC and NERC were not always clear and it would be useful to identify people within both communities who were already working at the interface to develop the ideas further and to consider secondments to improve communication between the communities. Council added that it would be important to better demonstrate the benefits of the changes being made to the population, factoring in the economic cost.
- 4.9 Council observed that it would be useful to think broadly about potential collaborations, including, for instance, across the multi-disciplinary, challenge-based units being established by the MRC, noting that this would require careful consideration of potential risk in terms of continued emphasis of NERC's core remit across its National Capability investments. Council agreed that beginning with a focus on shared strategic programmes might be a better starting point for bringing the communities together.
- 4.10 Council asked whether there were international comparisons where joint working was already in place and where we might also form partnerships. Duncan Wingham added that he was seeking to meet with the Academy of Medical Sciences which might provide an opportunity for partnership working.
- 4.11 In summary, Duncan Wingham noted that there was broad agreement to develop strategic activity with MRC and that the intention would be to discuss this in greater detail at the June 2023 Council meeting.
- 5. Balance of the National Capability Portfolio 2022/23-2024/25 (NERC 22/35) Slides, item 5
- 5.1 Iain Williams introduced this item and reminded Council that they had previously agreed to

revert the budget for National Capability (NC) to 40% of NERC core budget at their meeting in June 2022. He presented slides to illustrate the income data for 2021/22 for each research centre and the proposed change to the distribution of NC science funding up to 2024/25.

- 5.2 Iain Williams outlined that NERC was recommending a 2% increase each year, for all centres, on all funding lines over the Spending Review period. In addition, the British Antarctic Survey (BAS) and the National Oceanography Centre (NOC) would receive an additional 4.5% of science funding each year to address both the low science funding, in comparison to infrastructure funding, at these centres and lower science funding than comparable sized NERC centres.
- 5.3 Duncan Wingham highlighted that some research centres were better able to generate additional income from other sources and it was important to recognise this when looking at the balance of funding across the centres.
- 5.4 Council asked for clarity on the balance of headcount across the centres and it was confirmed that the majority of both the NC science and non-NERC funding supported scientific staff.
- 5.5 Council commented that it would be important to consider prioritising the research rather than funding the centres equally and Duncan Wingham advised that the proposal was not seeking to equalise the funding. He added that both BAS and NOC received significantly less funding than their international counterparts and that it was important to acknowledge that, whilst there were other agencies working, for example, on satellites and atmospheric research, there was no equivalent organisation for oceanography or Antarctic research in the UK.
- 5.6 Gideon Henderson supported the proposal and agreed that directing additional funding to both BAS and NOC was worthwhile. He commented that there might be some funding opportunities for oceanography via the Centre for Environment, Fisheries and Aquaculture Science (CEFAS).
- 5.7 Council was supportive of the proposal and asked whether there might be any impact as a consequence, for example, on long term programmes or reduction in headcount. Iain Williams commented that prioritisation might be necessary, in a similar way to that which has commenced for oceanographic observations, adding that inflationary pressures would also have an impact.
- 5.8 Council asked whether NERC might conduct an international comparison, for example, on large infrastructure, such as ships, and Antarctic spend. Council added that it would be useful to discuss further how the UK compared to its international counterparts and review any strengths or weaknesses in the UK NC provision. Duncan Wingham added that an international comparison beyond science expenditure was complex and acknowledged that a further discussion would be required as part of the next Spending Review.
- 5.9 Council asked whether there was any update on the difficulties related to the increase in energy costs. Nigel Bird explained that the current long term purchase agreements had protected NERC from the increases to an extent and that there was a strategy to move to on-site self-generation where practical.
- 5.10 In summary, Duncan Wingham confirmed that there was broad agreement to the proposal and that NERC would now proceed to implement the new budgets.
- 6. NERC's approach to 'Place' (NERC 22/36)
- 6.1 Iain Williams introduced this item and Shewly Choudhury observed.
- 6.2 Iain Williams explained that Council had previously discussed 'place' at a Council retreat in

March 2020 and that it was timely to return to NERC's approach in the light of the Government's 'Levelling Up' agenda which committed to a BEIS target to invest 55% of its Research and Development (R&D) budget outside the Greater South East (GSE) by 2024/25.

- 6.3 Iain Williams informed Council that approximately 70% of NERC funding was invested outside of the GSE due, in part, to the position of its research centres. He added that NERC also had one investment that was specifically based on place-based outcomes: the Regional Impact from Science of the Environment (RISE).
- 6.4 Iain Williams outlined the three strategic principles which NERC was proposing to embed an approach to place-based funding:
 - continue to monitor and understand where NERC investments are going and ensure we are capturing the benefits
 - make better use of wider investments to reinforce the place agenda, such as the UKRI strategic funds: Building a Green Future and Creating Opportunities and Improving Outcomes
 - build place-based consideration into specific long-term investments such as major capital and infrastructure investments (rather than all funding lines) and to consider 'place' in NERC funding and governance
- 6.5 Council commented that, whilst the information and analysis provided was helpful and demonstrated regional stretch, it was not clear whether the investments were benefitting the regions in which it was directed although it was acknowledged that this issue was complex and a broader UKRI challenge. Council suggested that NERC would benefit from exploring concepts of social value to inform specific programmes and place-based infrastructure to assist and promote community based value from these sort of investments. Council added that it would be helpful to better understand where the funding was being spent (in line with the first principle) and provide a more granular view of how NERC funding diffused into a community.
- 6.6 Council was supportive of the principles, noting the importance of place consideration in decisions on new longer term infrastructure investments. Council particularly endorsed the third recommendation: to consider 'place' when recruiting members for NERC boards/committees to ensure place was considered in NERC decision making.
- 6.7 Duncan Wingham acknowledged that, whilst it was important to consider the 'place' agenda in the context of improving outcomes for people, NERC was not proposing within the paper that it create a specific fund focused on place although there might be opportunities to address this through the UKRI Strategic Themes.
- 6.8 Council agreed that NERC might have a role to play in building capacity and improving outcomes in deprived areas and how it might incorporate social value into decision making. Duncan Wingham agreed that NERC might consider developing a novel, capacity-building intervention to stimulate growth in places of need and agreed that the Executive would reflect on this further.

7. NERC international portfolio overview (NERC 22/37) Slides, item 7

- 7.1 Susan Waldron introduced this item which provided an overview of the NERC international portfolio. She presented slides to illustrate NERC's international research reach and its impact.
- 7.2 Susan Waldron explained that NERC had multiple funding streams for international research and added that there was both reach and longevity to the international portfolio. She added that the NERC Strategic Delivery Plan contained a vision for international

- collaboration and explained that the annex provided an overview of examples of international engagement and impact including for National Capability.
- 7.3 Gideon Henderson commented that the primary focus of the examples appeared to be on the developing world and more Official Development Assistance (ODA) focussed rather than illustrating the breadth of international funding that had non-ODA relevance. Susan Waldron responded that the examples were intended to illustrate the breadth of earth systems domains, such as volcanism, and the predominance of ODA was coincidental and that a wider body of research had non-ODA country relevance.
- 7.4 Council asked whether the data might better highlight any pattern to the international collaborations such as whether they were linked to strategic partnerships.
- 7.5 Council commented that the environmental community had been successful in obtaining funding through the Global Challenges Research Fund (GCRF) and Duncan Wingham confirmed that there would not be a replacement. He added that ODA funding might be spent at UKRI level through the strategic themes.
- 7.6 Council asked whether there were any obstacles to working internationally. Duncan Wingham commented that one concern was the continuing uncertainty of non-association with EU programmes.
- 7.7 Council asked whether NERC had any involvement in the Climate Adaptation and Resilience (CLARE) programme led by the Foreign, Commonwealth and Development Office (FCDO). Duncan Wingham responded that, whilst there might be useful opportunities to partner with FCDO in the future, NERC was not currently involved in the CLARE initiative.
- 7.8 Gideon Henderson commented that the Government was revising its integrated review of the place of the UK in the global world and suggested NERC might review which countries might be most useful to collaborate with on a tactical level, for example, which countries would be best to work with on net zero. He added that, whilst NERC was not part of CLARE, it would be important to review the outcomes to see where there were gaps and to avoid any overlap.
- 7.9 Council asked what role UKRI played in enabling international partnerships and whether NERC had partnered with Belmont Forum countries. Duncan Wingham commented that UKRI had an international funding line which was directed by BEIS. He added that NERC had benefited from the Fund for International Collaboration (FIC) but not at large scale and the NERC Partnerships & Opportunities line had funded Belmont but in small numbers. Susan Waldron suggested the UKRI international strategy be shared with Council members.

ACTION: UKRI international strategy to be shared with Council members

7.10 In summary, Duncan Wingham commented that Council had welcomed this overview of the NERC international portfolio. He summarised that the view of Council was that it might be useful for NERC to develop an international strategy and noted that this could be a timely topic for the Council retreat.

ACTION: NERC Executive to consider whether NERC should develop an international strategy

ACTION: NERC Executive to consider adding international strategy as a topic for Council retreat

- 8. NERC Council Dashboard (NERC 22/38) Slides, Item 8
- 8.1 Alison Robinson introduced this item and presented the inaugural NERC Council Dashboard. Robyn Thomas observed this item.
- 8.2 Alison Robinson reminded Council that UKRI were currently reviewing the Council Terms

- of Reference. Whilst these were awaited, NERC had been considering how to present information to Council in an alternative format to reduce the number of governance related papers provided to Council whilst still providing sufficient oversight and context to aid Council decision making.
- 8.3 Alison Robinson explained that the NERC Council Dashboard provided a broad range of insight and information including: progress on the Strategic Delivery Plan; grant operations; partnerships; finance; risk; net zero and diversity and inclusion. She invited Council to comment on whether the information provided in the Dashboard, particularly on finance and risk, was sufficient to replace the current papers and asked whether there were any gaps or suggestions to improve the Dashboard.
- 8.4 Duncan Wingham added that the revised Council Terms of Reference would highlight that the role of Council was advisory and NERC had, therefore, taken a decision to replace papers which might be considered under the heading of governance, such as finance and risk, to enable an increased focus on strategic issues. The intention would be to provide the Dashboard as an information paper which would only be discussed by exception, if there were issues which required discussion.
- 8.5 Council was supportive of the direction of travel and content with both the format and the length of the information provided. Alison Robinson confirmed that she would be happy to respond to any specific questions on the detail of the Dashboard outside of the meeting.
- 8.6 Gideon Henderson commented that the Dashboard would provide a useful archive of information. He added that it would be important to ensure it did not become too large, which might lead to it not being read, and he asked for more clarity on the RAG status to be included on the Dashboard.
- 8.7 In response to a query on whether the Dashboard was aligned with the key indicators for UKRI, Alison Robinson confirmed that the annual report on progress with the Strategic Delivery Plan would have more alignment with the metrics requested by UKRI rather than the Dashboard.
- 8.8 Council commented that the most useful part of the risk paper was the cover paper which highlighted the key changes and it would, therefore, be content for risk to be covered in future by the Dashboard if this could be highlighted. Duncan Wingham added that the NERC Assurance Board (NAB) was responsible for NERC's risk management and the risk register would still be reviewed thoroughly twice a year by NAB.
- 8.9 Council asked whether output measures might also be included on the Dashboard and suggested that the Executive consider a training session for Council on how best to assimilate the information provided. Alison Robinson added that, in deciding what information to include, they had considered what Council might find useful based on both the NERC Strategic Delivery Plan and the Council Terms of Reference and that the Dashboard would not replace detailed discussion on specific topics or policy considerations.
- 8.10 Council asked for further clarity on the role of the UKRI Board with regard to governance in comparison to what was expected of Council. Nick Folland advised that the Terms of Reference for the UKRI Board and its sub-committees defined these responsibilities.
- 8.11 In summary, Duncan Wingham noted that Council welcomed the Dashboard and was content with both the format and the subject matter which provided current and historical, background information. He added that it would be important to ensure the Dashboard did not become too lengthy and advised Council that there was still an opportunity to refine it and any detailed comments might be sent to Alison Robinson.

ACTION: comments on the Dashboard to be sent to Alison Robinson

9. Dame Ottoline Leyser (Oral)

- 9.1 Duncan Wingham welcomed Dame Ottoline Leyser to NERC Council and invited her to say a few introductory remarks before inviting questions from Council.
- 9.2 Ottoline Leyser opened by reminding Council that UKRI had made a significant amount of progress as an organisation with the publication of both the UKRI Strategy and the research council's Strategic Delivery Plans. She added that UKRI had been successful in making the case to Government to invest in R&D through the Spending Review and in gaining increased flexibility in how UKRI spends its money. In addition, she commented that it would be important to maximise the benefit of investment by ensuring collaborative approaches across disciplines and sectors, for example on net zero and levelling up.
- 9.3 Ottoline Leyser outlined some of the current challenges for UKRI including: the UKRI operating model which was seeking to enable increased bottom-up, collaborative working across the councils; the introduction of both the new Funding Service and the Services for HR, Accounting, Reporting and Procurement (SHARP) along with the continuing uncertainty regarding association with Horizon Europe.
- 9.4 Council commented that the Strategic Priorities Fund had provided a successful way of bringing communities together and asked whether there might be any replacement. Ottoline Leyser replied that the UKRI Strategic Themes would help to deliver comparable benefits with the added goal of leveraging co-investment. She added that co-investment from other Government departments was now possible given the uplift in R&D funding across departments and that it would ensure priorities were addressed.
- 9.5 Council asked whether UKRI had made any progress in enabling the necessary changes in process and structure across the research landscape which were required to improve diversity and queried whether UKRI was being radical enough in its approach. Ottoline Leyser informed Council that UKRI had recently published its annual statistics and commented that the success rates from those in ethnic minority groups was unacceptable. Ottoline Leyser added that it was important to ensure the assessment process was not biased and that it acknowledged that those from under-represented backgrounds often had less conventional career paths. She commented that the introduction of the narrative CV would allow a comparison of a wider group of people in a fair and appropriate way and that there was still work to be done, particularly in defining excellence. In addition, NERC had helped to pioneer some ideas, such as trials of randomisation across the funding borderline.
- 9.6 Council asked whether the risks associated with both the introduction of the new IT systems and the reduction in headcount had been sufficiently considered. Ottoline Leyser responded that, whilst UKRI was seeking to mitigate risk as much as possible, there remained some risk as the projects were being run simultaneously. She added that Government Internal Audit were involved to provide independent assurance.
- 9.7 Council commented that they understood there was an intention to fund PhD students centrally in future rather than through the research councils and asked what role NERC might play in this. Ottoline Leyser commented that UKRI was seeking to harmonise process, administration and post award support although the science activity would remain at council level. She added that each council would retain control of the budget for PhD students within their remit, with additional collective responsibility for UKRI-wide funds, for example, interdisciplinary studentships.
- 9.8 Council asked whether there was any update on the revised Terms of Reference (ToR) for Council. Ottoline Leyser apologised for the delay in revising the ToR and explained that this was now part of the operating model work and added that it may be possible to circulate the ToR in advance of any outcomes from the governance workstream of the operating model.

- 9.9 Council asked whether the UK was maximising its opportunities for innovation and Ottoline Leyser commented that there was a rising budget for innovation, particularly through Innovate UK and emphasised that, to stay competitive, the UK needed to build broader, collaborative opportunities which UKRI was keen to support.
- 9.10 Duncan Wingham thanked Ottoline Leyser for her attendance at NERC Council and commented that NERC Council was fully supportive of the aims of the UKRI Strategy.
- 10. UKRI Strategic Theme: Building a secure and resilient world (Oral) Slides, Item 10
- 10.1 Duncan Wingham welcomed Professor Christopher Smith to NERC Council and reminded Council that it had been decided to invite each of the UKRI Strategic Theme leads to provide an overview of the theme they were leading on.
- 10.2 Christopher Smith presented slides which provided an overview of the AHRC vision for change; the AHRC Strategic Delivery Plan and AHRC's Theory of Change before moving on to provide a strategic outline of the UKRI Strategic Theme which he was leading: Building a Secure and Resilient World.
- 10.3 Christopher Smith explained that the Government's integrated review, with its focus on security and resilience, had provided a starting point when considering the objectives of this theme alongside reviewing activity currently taking place across UKRI as well as activity which had already been planned.
- 10.4 Christopher Smith explained that the three primary theme objectives provided an overarching framework and contained five sub-themes:
 - i. Global order in a time of change.
 - ii. Technologies for resilience, security and defence.
 - iii. Resilient and secure supply chains.
 - iv. Behavioural and cultural resilience.
 - v. Strengthening resilience in natural and built environment.
- 10.5 Christopher Smith informed Council that a task and finish advisory group had been established which had approved the plans and that the intention was to establish a governance function to oversee activity under the theme.
- 10.6 Gideon Henderson welcomed the overview of this important theme and commented that, whilst the environment was included in the sub-themes, more was needed on inclusion of assessment of chronic risks related to climate adaptation. Christopher Smith responded that it would be important to ensure there were no gaps or overlaps between the themes and explained that the UKRI Strategy Committee had oversight of activity across the themes to address this.
- 10.7 Council commented that it would be useful to consider further the environmental issues which were wide ranging in their impact on the population such as drought, air quality, soil quality and the impact of climate change when looking at resilience. Christopher Smith acknowledged that there was a wide spectrum of issues and agreed that it was useful for Council to provide a steer on the areas they wished to see under the theme and that it would be important to undertake a prioritisation exercise.
- 10.8 Council asked whether the focus of the theme was national or international in scope. Christopher Smith responded that, whilst the intention was to be international, delays with association to Horizon Europe and limited ODA funding were obstacles.
- 10.9 Duncan Wingham thanked Christopher Smith for his attendance at NERC Council and

agreed to discuss co-working under this theme with Christopher Smith outside of the meeting.

[Gideon Henderson left the meeting]

11. NERC Council Finance Report December 2022 (NERC 22/39)

- 11.1 Nigel Bird introduced this item and advised Council that NERC had a balanced budget in financial year 2022/23. He informed Council of an additional £7.5 million of capital which had been awarded to NERC to be spent on research centre infrastructure.
- 11.2 Nigel Bird highlighted that there remained some foreign exchange pressures which UKRI had provided additional funding for.

12. Review of the NERC Top Risks at December Council 2022 (NERC 22/40)

- 12.1 Nigel Bird introduced this item and highlighted two new risks related to foreign exchange/ inflationary pressures and supply chain resilience.
- 12.2 Council asked whether any consideration had been given to reducing UKRI office space. Nigel Bird responded to say that UKRI would be reducing its footprint in Swindon by a quarter from April 2023 and was also moving its London office, however, as UKRI did not own its office space, there was little benefit to core budgets from these changes. He added that the research centres were also investigating reconfiguring their space and informed Council that, as NERC remained the landlord for NOC and the UK Centre for Ecology and Hydrology (UKCEH), a reduction in their footprint would not necessarily reduce costs for NERC. He reminded Council that a further discussion on estate was scheduled for discussion in 2023.

13. Minutes of the NERC Assurance Board meeting (NERC 22/41)

- 13.1 Nick Folland reminded Council that the NERC Assurance Board (NAB) was responsible for 'supporting the Executive Chair in providing assurance as required by the main UKRI Audit, Assurance and Performance Committee (ARAPC), in relation to land and buildings owned by UKRI at NERC strategically funded institutes' which was one of NERC Council's responsibilities which was reviewed as part of the annual self-assessment exercise.
- 13.2 Nick Folland highlighted some of the items which had been discussed at the October meeting of NAB including:
 - risk governance framework
 - risk management review
 - assurance overview
 - annual report from NERC/BAS Operations and Safety Assurance and Advisory Group
 - cyber security
- 13.3 Council asked whether consideration of governance issues, such as whether NERC should be investing in, for example, ships or submarines, would take place at NAB or at Council level. Nick Folland responded that NAB would be responsible for ensuring the ships were being operated safely and had good oversight rather than taking the decisions on investments. Duncan Wingham clarified that NAB provided the function of the previous NERC audit committee and its focus was on risk and assurance.

14. Agenda and unconfirmed minutes of Science Committee (NERC 22/42)

14.1 Graham Underwood introduced this item to update Council on the last meeting of Science Committee (SC) which had been held in October 2022 at UKCEH, Lancaster. He reminded

Council that this would be his last meeting and extended his thanks to Susan Waldron, Sarah Turner, Gemma Davies and the wider team for their excellent support over the past three years.

- 14.2 Graham Underwood informed Council that the last SC meeting had reviewed the Highlight Topic submissions and ranked and shortlisted ten proposals from the 56 submitted. He added that the budget for Highlight Topics had been increased to £5 million (from £4 million) and that the pre-announcement had now been issued. He assured Council that the Highlight Topic model was working well with strong community engagement.
- 14.3 Graham Underwood commented that SC had also reviewed the recommendations for the 2023 Centre for Doctoral Training focus areas and recommended that the Mineral Resources for Energy Transition case was suitable for an Announcement of Opportunity. He added that SC had also provided advice on the outline proposal for round 2 National Capability Multi-Centre Science (Hydro-JULES) which would return to SC in January 2023 for further discussion.
- 14.4 Graham Underwood informed Council that SC had made some suggested amendments to its Terms of Reference which Council was asked to approve. It was agreed to provide a paper for the March 2023 Council meeting for formal approval of the revised SC Terms of Reference.

Action: Science Committee to provide a paper on revising its Terms of Reference for consideration by Council in March 2023

14.5 Finally, Graham Underwood thanked NERC Council for its support and wished the new Chair of Science Committee every success in his new role.

15. Rolling programme of business (NERC 22/43)

15.1 Helen Page reminded Council members that this item provided an opportunity to raise items for discussion at future Council meetings and that items for discussion might also be submitted to her at any point.

16. Any Other Business (Oral)

- 16.1 There was no further business.
- 16.2The meeting was closed.