

The following document is based on the summary of the annual PRC Chairs Meeting held on 25 February 2015, which was discussed by SISB (now NERC Science Board) on 16 April 2015. The document includes an update on the actions as at the end of September 2015.

Summary of Annual PRC Chairs meeting and Report to Science & Innovation Strategy Board (SISB)

PRC Chairs Meeting held on 25 February 2015 and SISB meeting held on 16 April 2015

Attendance:

- (College Chairs) Jonathan Bamber, Andrew Binley, Lucy Carpenter, Kevin Fowler, Angela Hatton, Karen Heywood, Xavier Lambin, Michael Ritchie,
- (Swindon Office) Andy Adams, Avril Allman, Emma Devine, Iain Gillespie, Kirsty Grainger, Katie Tearall, Amy Vitale

Apologies

- Steve Banwart , Peter Cawood, Christopher Thomas.

Aims of the Meeting

- To review issues raised in the PRC chair reports received following the 2014 panel meetings and agree feedback to SISB at their April 2015 meeting;
- To discuss any changes to the terms of reference of the group and any points of clarification;
- To share best practice and facilitate continuous improvement.

Background

1. The college chairs group reports to the NERC director of science and innovation on discovery science funding policy and process matters. Each chair provides a panel report of each panel that they are involved in; these are reviewed at the group's annual meeting. The group also has a role in providing advice to SISB on strategic issues relating to discovery science on an annual basis. This paper sets out the group's annual update to SISB.
2. The peer review college chairs held their annual meeting at the end of February 2015, with the NERC director of science and innovation. The meeting reviewed discovery science activity in the previous 12 months (calendar year 2014), and picked up on any items of note that it wished to raise with the office and highlight to SISB. The following summarises those key points.

Panel grades

3. Proposals in all schemes were considered to be of a continuing high quality. However, the chairs have highlighted the continuing reticence of panel members to award the top score of 10. Only one fellowship proposal and no research grant proposals were scored 10 across last year's discovery science panel meetings. To address this issue, both the chairs and the office

will reiterate the full use of the scoring range at the panel meetings and via the panel guidance.

Update September 2015: Following the PRC chairs meeting, at the next set of standard and new investigator grant moderating panels in June, two proposals were given a score of 10 (on different moderating panels). Two large grant proposals were also scored 10 for research excellence at the panel meeting in March.

4. The number of standard grant proposals being scored 9 has increased from the previous year (thirty five proposals in 2014 compared to eighteen in 2013). Those graded fundable (grade 7 or above) by panels was 195 (58%) in 2013 and 283 (44%) in 2014; panels are now seeing all proposals following the removal of the internal sift mechanism. The percentage of large grants scoring 7 or over was 88%. One proposal scored nine and three scored eight.
5. During 2014 moderating panels operated a system of 'pre-scores' for standard grants; with panel members providing initial scores for proposals ahead of the meeting. The pre-scores are used to decide which proposals go forward to full panel discussion. This process is considered to be working well. In addition, there has been a change in approach in the way proposals are discussed at panel meetings. Introducers and readers now provide comments and have an initial discussion before disclosing their pre-score. This new approach came out of the recent unconscious bias training and has been endorsed by both chairs and panel members, and has improved the panel meeting process.

Panel Descriptors

6. The chairs group agreed that the descriptors for the moderating panel areas should be reviewed by the office within the next six months. The problem with the current descriptors has been underlined since the change from office allocation of proposals to panels, to investigator panel choice. In particular, panels D and E (covering genomics, ecology, genetics) descriptions are considered ambiguous which is creating uneven workload between the two panels. There is also a need to clarify which panel has responsibility for palaeoscience proposals, in particular palaeoclimate and palaeoceanography, as these are currently falling within both panel A and panel B's descriptors. The office will recommend revisions to the panel areas, to be discussed and approved by the relevant PRC chairs.

Update September 2015: Further analysis by the office has not determined a suitable alternative approach to splitting the proposals across five panels and improving the clarity over panels D, E and palaeoscience proposals. Given the expected reduction in standard grant proposals, due to implementation of the demand management measures from the July 2015 round, there has been some further analysis around moving to three panel areas (which appears to provide a clearer split and similar numbers across the three panel areas). The potential move to three panels will be discussed by the PRC chairs at their next meeting.

Reviews

7. As in previous years, the quality and return rate of reviews from PRC members were generally felt to be good and valuable to the panel and the chairs were very keen that good performance is highlighted. There remain a small number of members who persistently provide inadequate reviews and new performance management of PRC members will be introduced to reward members who both provide consistently excellent reviews and to highlight members who are consistently providing poor reviews (or not responding to review requests).
8. The chairs group expressed confidence that NERC staff are ensuring a good level of peer review. Concern was raised about the increasing amount of effort NERC staff are having to make to ensure sufficient numbers of reviews per proposal; with response rates to review requests ranging from 1/4 to 1/8.
9. Since the announcement of the new demand management measures, there has already been an increase in the amount of reviewer declines, and apparent increased unwillingness for members of the community to engage with discovery science e.g. through membership of the PRC.
10. Proposal "Pathways to Impact" were still considered to vary in quality; although the office are ensuring that proposals are not funded until a satisfactory Pathway to Impact is in place. Concerns were also expressed regarding the impact on international review return rates as the assessment of Pathways to Impacts is a mandatory requirement in the assessment form. The chairs group recommended that for discovery science schemes, the focus of external peer review should be on research excellence and that Pathways to Impact should only be assessed at the panel meeting.

Update September 2015: SISB approved the changes to the review of Pathways to Impact. The peer review forms and guidance were amended in time for the peer review of proposals submitted to the July 2015 standard and new investigator grant round. Reviewers are asked to focus on providing comments on research excellence rather than Pathways to Impact. The moderating panel guidance for the meetings in December has been amended to emphasis the panel role in reviewing Pathways to Impact for those proposals recommended for funding (based on research excellence).

PRC Recruitment

11. A new recruitment call is required to recruit two additional chairs to help cover for the strategic research highlight topics and large grant schemes. There is also a need to replace members who have left the PRC during 2014 and also recruit in areas of specific expertise that need enhancing. Strategic research highlight topics will also use PRC resource so there is an additional need to recruit core members to cover this additional work.
12. Recruitment panels were composed during the 2013 recruitment exercise to select the new member roles. The membership of these panels consisted mainly of a mixture of college chairs and NERC heads of disciplines. The panels assessed each application and each panel recommended the new members who should be recruited. The same process is

recommended for the 2015 exercise with the addition of SISB members taking part in the recruitment panels where possible.

Update September 2015: SISB agreed the use of a similar approach for 2015, but then given the potential reduction in the future number of standard grant proposals the NERC office recommended postponing the PRC member recruitment in summer 2015. The use of PRC members for the first highlight topic call was also more limited than planned, due to the limited numbers with the required expertise and conflicts of interest. The SISB Chair agreed that the full PRC chairs meeting in early March 2016 would be used to discuss proposed changes to the number and remit of panels. In the meanwhile, rather than recruiting further permanent PRC Chairs, experienced PRC Chairs or core members could be asked to chair the next large grant or highlight panel.

Demand Management and New Investigators

13. With the recent demand measurement measures being introduced concerns remain over the unintended consequences of the measures being introduced. The group highlighted two further issues:
 - (i) The impact on New Investigators. Following a discussion the group recommended the (re)introduction of a separate New Investigator funding scheme.
 - (ii) The reduced ability of Research Organisations to be able to recruit new members of staff (or conversely the increased potential to lose members of staff) who wish to be able to apply for NERC funding. Where Research Organisations are capped at 1 application per round, recruitment of staff will be difficult and the likelihood of the UK losing the diverse range of research organisations involved in the environmental sciences increases.
14. The NERC office will undertake further analysis related to New Investigators and provide a paper to SISB at their September meeting, by which time data from the first round under the new demand management regime should be available.

Update September 2015: Science Board (previously SISB) discussed support for New Investigators at their September meeting. They agreed that, currently there was no statistical evidence to show a difference in success rates between New Investigators and other applicants, so no changes are required to the New Investigator scheme at the current time. They agreed that success rates should be monitored and that further consideration of support for New Investigators should be made in the broader context of the health of the research community.

Conflicts of Interest

15. The chairs discussed additional guidelines for the NERC conflicts of interest policy, and recommended that this is used for all funding assessment panels at NERC.

Update September 2015: SISB approved the [guidance](#). This has been published on the NERC website and is being added to reviewer and panel guidance and PRC training material.

Cost Effectiveness and Proposal Costs

16. At a specific working group meeting in October 2014, a sub-group of the chairs discussed (re)introducing a 'cost effectiveness' secondary criteria and strengthening consideration of costs for NERC's discovery science schemes. The following recommendations were endorsed by SISB:
- Changes to the PRC/external reviewer guidelines to encourage comments on whether the proposal has sufficiently justified costs. In particular: justification of human resources (PI time, number of postdocs); and other directly incurred costs.
 - Strong reminders to panels (and chairs) that resource justification should be considered for each proposal scoring at least 8, and that cuts can be recommended. Parallel message to the community that NERC have given this strong steer i.e. all elements must be justified.

Update September 2015: The peer review forms have been amended to ask reviewers for comments on resources requested and whether items have been justified. The peer review guidance has been updated to indicate what resources the reviewers might comment on and which they should not comment on. Panel guidance is also being updated and sufficient time will be factored into moderating panel agendas to enable the panel to discuss resourcing and Pathways to Impact for proposals ranked in the funding frame.

Defining Discovery Science

17. College chairs discussed the need, or otherwise, to redefine NERC's discovery science schemes in light of changes to other funding streams (particularly Strategic Research).

Update September 2015: At their April meeting, SISB discussed the need for different communication around Discovery Science to make clear that there is a continuum across Discovery Science and Strategic Research, and commented that the strength is often at the interface between them. It is also important to emphasise that Discovery Science supports ambitious and risky science. SISB agreed with the PRC Chairs that there should be no restrictions or priority areas in the Discovery Science scheme. SISB suggested the following line should be removed from the Large grant description 'Although supported through Discovery Science funding, the size and nature of these awards will mean that they will often have a strong strategic element'. This has now been done.