

# A pilot study on the quality of Climate Change research in Responsive Funding 2007 Management Response

## Introduction

1. This document provides a management response from the Director of Science and Innovation to the pilot study on the quality of climate change research in responsive funding 2007. The report and response were considered and accepted by SISB at their May 2007 meeting.
2. The evaluation panel's findings are given in italics below, followed by the response.

## The effectiveness and value of Responsive Funding

3. Management welcomes the conclusion that Responsive Funding is making a significant contribution to the health of disciplines and to the sustainability of the research base. It is encouraging to see evidence of Responsive projects that are outstanding in the quality of their research outcomes, scientific linkages and knowledge transfer outputs. The interpretation that can be placed on this finding is, however, limited by the bias introduced through the selection of projects to evaluate.
4. The very small sample size for new investigator, small and consortium grants is a concern and it is questionable whether any general conclusions can be drawn from the sample. The suggestion that small grants may be delivering proportionally less value for money (report **para.12**) should be regarded with caution. The small grants scheme is designed to address small discrete projects, proof of concept work and pump-priming exercises that often underpin future work. As a consequence, the outcomes of small grants may, at least in part, be realised through a subsequent research grant. It was a specific recommendation of the 2006 Blue Skies Review to capture and publicise the purpose of the different schemes and to promote the small grants scheme for proof of concept studies to help manage risk. In implementing these recommendations, the purpose of the small grant scheme will be considered in more detail and the comments made in this report will be taken into account.
5. The report appears to support the current structure of Responsive schemes (as did the Blue Skies Review) but makes a suggestion (report **para. 37**) that past achievement and productivity could form the basis of a scheme to help the best research groups maintain their capability. In response to the RCUK Peer Review Project, all Research Councils are considering ways to consolidate research awards at research group level to improve the efficiency of peer review. The added benefits of consolidated funding, such as sustainability, will be taken into consideration.

## 2. Responsive Funding criteria

6. Management agrees that the criteria for assessing Responsive Funding work well in most respects but also recognises that improvements are needed in some aspects of the assessment. The Blue Skies Review recommended that '*NERC should review its pre-award assessment criteria for Responsive funding and the way in which panels apply them*'. It was recommended in particular that '*NERC should improve the processes used to assess risk*' and that '*better guidance should be provided to reviewers and panels on ...how to assess the value of KT potential*'. A further driver for change has emerged in the recommendations of the Worry Report on Increasing the Economic Impact of the Research Councils which recommended that economic impact should be a component of the assessment criteria for Responsive Funding.

7. The need to support policy-relevant work is fully accepted by Management and it is disappointing that this evaluation has concluded that some policy-relevant work is being marked down by Responsive panels (report **para. 34**). Equally, it is of concern that the leverage delivered by international collaboration is not always being fully recognised (report **para. 35**). These are both aspects of the assessment process that must be reviewed.
8. It is NERC's intention systematically to review the assessment criteria and the guidance provided to moderating panels for Responsive schemes. This work, which will address all the issues mentioned above, will proceed in parallel with Research Council process harmonisation in the transition to a Shared Service Centre.

### **Knowledge transfer**

9. Management acknowledge that recipients of Responsive Funding do not generally deliver well in knowledge transfer. This shortcoming is actively being addressed following Council's decision that all Responsive grants must include a KT plan. The way in which such plans will be assessed and how additional support might be provided for KT in Responsive funding is being considered in the wider context of NERC's KT strategy and as a component of the overall suite of assessment criteria for Responsive grants (see above).
10. The suggestion (report **para. 40**) that financial provision for KT in individual grants may have only a limited effect is noted and will be taken into account when considering the most appropriate mechanisms for supporting KT in Responsive Funding. The possibility that KT support and dissemination could be directed at the major research group level is interesting and offers possibilities that will be looked at as part of the work to explore consolidation of Responsive Funding for successful research groups. This is being explored as part of the RCUK Peer Review project (see above).

### **The evaluation process**

11. Management welcomes the panel finding that 'the sample undoubtedly served the purpose of providing excellent evidence of what Responsive Funding can achieve at its best and of the scheme's vital importance for UK science' (report **para. 48**). Equally the panel identified shortcomings in the methodology. As a pilot study new methods were being tested and it is accepted that lessons can be learnt and improvements made for future evaluations.
12. This evaluation did not attempt to assess the overall performance of Responsive Funding, but rather sought to concentrate on picking out highlights. It is acknowledged therefore that the sampling for this study was not random. Where future Responsive Funding evaluations will seek to address overall performance, the panel's advice on random sampling is accepted. We will clearly define criteria for selection at the outset.
13. Since this pilot study was made Council has approved a new evaluation strategy which sets out new evaluation processes and methods. This is being done in the context of the Funding Allocation and Budgeting (FAB) project implementation and the development of a new NERC business performance management framework. Central to the new approach is for evaluation to be more 'evidence-needs driven', such that a programme of evaluations will sit within an overall performance management framework to address the evidence needs for NERC's strategic management processes.
14. The new approach to evaluation offers greater flexibility to pick up some of the panel's recommendations for different lines of enquiry. For example, NERC is about to commence a

citations analysis which will seek to compare Responsive Funding performance with the Directed and Core Strategic mechanisms.

15. The panel specifically recommends that NERC should carry out at least one more evaluation of Responsive Funding based on a random sample of grants in a different field to address overall performance. If this is considered a priority then one option might be an evaluation of fellowships. This can be picked up in a timetable of future evaluations currently being constructed.
16. The panel noted that the record of publications on the NERC Research Outputs Database (ROD) was incomplete and the relevance to grants of some papers was questioned. From October 2006 NERC has required that all publications from grants must be recorded on a dedicated publications e-repository. This will provide a future means to cross-check data on ROD, where data quality issues are known. The citations analysis also has the potential to address quality issues of performance data held by NERC.
17. Management accepts the panel suggestion that ‘valuable additional light could be shed on research achievements by starting at the outcome end of the process, using expert knowledge to identify paradigm-shifts and then looking to see what work had given rise to them and how it was funded’ (report **para. 48**). There is a delivery plan target to implement a systematic approach for the collation, recording and dissemination of the impacts of NERC science. This should have the functionality to improve the recording of successful case study information. The new evaluation strategy offers more flexibility in the kinds of evaluation tools used, and the use by NERC of impacts-based studies can be explored.