

SOCIETAL IMPACTS OF NATURAL HAZARDS

SPECIFICATION FOR A REVIEW

Background

1. At the Living With Environmental Change (LWEC) Partners' workshop in Reading in November 2007 partners identified *extreme events* as their second priority topic after *improvements in climate science and predictions of climate impacts and their consequences*. The UK Collaborative on Development Sciences (UKCDS) has identified 'Disaster Research' as a current work stream and has identified a number of opportunities to add value to existing or planned research investments.
2. Preliminary discussions with some Partners, other funders and experts have indicated that:
 - a. LWEC Partners and other funders are currently following their own strategic plans in addressing research needs concerning natural hazards and their impact.
 - b. There are a number of international or other country led initiatives on natural hazards, extreme events and disaster research that are relevant to UK funders. There is poor understanding of the scope and content of these initiatives and their relevance to UK research and policy.
 - c. Some of the international initiatives have UK expert input but there is no formal two-way feedback process to UK funders, for example, the UK currently has two experts on the Integrated Research on Disaster Risk (IRDR) programme board and 7 experts on the Intergovernmental Panel on Climate Change (IPCC) Special Report "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation".
 - d. A comprehensive overview of existing UK and international research activity is not available. Some mapping has focused on particular aspects of whilst other information is fragmented and uncoordinated.
3. To ensure future UK or international research programmes have maximum value, UK funders have agreed that existing research must be taken into account and there must be a full understanding of the context of any UK research programme proposals in the international research landscape.
4. An international review is required for several reasons:
 - a. To clarify where there are key research programme gaps and needs
 - b. To inform where there may be opportunities for collaborative/aligned activities at the UK and international level
 - c. To investigate how existing research has influenced policy and 'made a difference' in situations where natural hazards occur
 - d. To inform UK and international research funding strategies
 - e. To describe the types of funding and their governance available to UK and international researchers.
5. The outputs would be used to inform future research funding priorities in the UK and internationally and to assist funders' review or refresh their funding strategies. The work could lead to the commissioning of, for example, the production of a number of systematic reviews or new research activities. The UK would also be better informed enabling a stronger voice in its contributions to international initiatives and in lobbying DG Research on future programmes in FP8.

Definitions and Scope

6. A high-level programmatic review of UK and international research funders, their historical, current and planned programmes of research, their implementation and evaluation to identify broad content and outcomes is required. The value, timescale and type of investment should also be identified.
7. The funders do not wish to impose a tight definition of natural hazards or their impacts as a broad overview is required at the initial stage of this work. We are concerned with the causes, location, severity, and frequency of natural hazards and how they affect human livelihoods, vulnerability and resilience, infrastructures and environment. For example, acute hazards such as flooding, earthquakes, tsunamis, volcanic eruptions, wildfire, hurricanes are of interest, as will be chronic, slow-onset hazards such as long term drought caused by adverse climatic conditions and possibly exacerbated by the upstream damming of a river.
8. In order to provide a full picture the review should cover organisations, their strategies and research programmes supported by the UK, international funders and other leading countries who fund research on natural hazards and their impacts. Other relevant national research should not be excluded, especially if led by countries that are impacted by the natural hazard.
9. The review must consider in particular, people and communities who are the poorest and in highly vulnerable situations and thus least able to respond or adapt to natural hazards, for example, research programmes around major disasters such as hurricane Katrina would be of interest and others where lessons learnt would be important.
10. Research programmes that have identified historical records of natural hazards and their impacts and the responses should also be documented and the potential to learn from these historic events considered. There is no limit on the time period during which events might be considered, but the focus is expected to be on research with the greatest potential to inform future learning.
11. Hazards which are caused exclusively by anthropogenic factors such as conflict, terrorism, pollution or chemical contamination or hazards to human beings not necessarily related to the physical environment, such as infectious disease, will not be of immediate focus. However, any relevant research activity identified during the review should be highlighted for possible investigation in the future.
12. The review should consider the breadth of natural hazard research programmes, e.g. from managing uncertainty research on climate/ disaster extremes through to humanitarian action/recovery/reconstruction for example, but not exclusively:
 - a. Improved prediction of extreme events
 - b. Development of early warning systems for communities and businesses likely to be affected.
 - c. Improved resilience to events, including work on evacuation procedures, primary health care, provision of temporary social provision and the protection of cultural /historical heritage
 - d. Preparedness for dealing with the longer term economic, physical and mental health, economic, cultural and social consequences of extreme and high impact events.
 - e. The differing issues and needs of urban, coastal and rural areas and the

differing impacts on a range of environments and land use.

13. The review should also address UK and international funding of natural hazard research to:
 - a. provide a broad overview and mapping of UK and international funders of natural hazard research and their impacts
 - b. identify the types of research funding opportunities available e.g. rapid response, systematic reviews, research to policy, translational, action research etc.
 - c. include research on the costs effectiveness of funding programmes
 - d. identify eligibility criteria (e.g. is the funding untied and open to all researchers or restricted to certain groups?)
14. Proposers should describe their methodology for the review, especially with respect to how they will identify research programme gaps.

Programme Management and Reporting Requirements

15. The review manager will report to a steering group of funders and independent international experts who will be appointed by the funders. He/she will be required to liaise informally on a regular basis to update on the methodology and findings of the review and ensure appropriate time allocations in the costings.
16. The review manager will be expected to liaise closely with complementary initiatives including the LWEC/Environment Research Funders Forum parallel review on flooding, the IPCC work on "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation", the Wellcome Trust's investigations of disasters and health and the activities of IRDR . The steering group will provide links to other relevant organisations such as the Research Council UK offices in China, India and the USA, the FCO/BIS Science and Innovation Network and the Belmont Forum. Organisations such as these should be consulted at the commencement of the review and at draft report stage (see Para 21) to ensure comprehensive information is gathered.
17. It is anticipated that this review will be undertaken by the review manager, who will subcontract to ensure appropriate expert inputs, alternatively, it may be undertaken by a group of experts in collaboration with each other, nominating from amongst-themselves a review manager to act as spokesperson. Proposals should describe how the review will be delivered and which experts will be involved. Funding may also be used for research assistant(s). If required, UKCDS will provide a venue and refreshments for an expert workshop at the Wellcome Trust and also provide secretariat assistance for its organisation.
18. The ideal applicant(s) will:
 - have a broad knowledge of UK Research Council and other UK/International natural hazards research and facilities and current activity
 - be personable and proactive, and willing to engage with stakeholders
 - be familiar with gap analyses, horizon scanning and other relevant tools
 - be experienced in report writing and editing
19. The study outputs should comprise:

- a. the final report
 - b. two short summaries, one in 'policy brief' style (no more than 1,000 words) and one of 150-200 words suitable for a web-page feature
 - c. a searchable database e.g. in Excel of all sources of information included in the review
20. The outputs must be made freely and publicly available and will be posted on the LWEC, UKCDS and funder websites. Additionally, we strongly encourage the use of outputs and derived papers for publication in peer review journals. Proposals should suggest mechanisms for dissemination of the findings.

Timescale

21. Provisional milestones:

14 May 2010	Call for tenders
7 June	Closing date
9 June	Appoint expert(s) to deliver work
30 September	Preliminary report
1 October	Initial recommendations to Steering Group
13 October	Present initial findings at the UN's International Day for Natural Disaster Reduction
29 October	Experts' workshop to finalise report
30 November	Final report

22. It is intended that preliminary findings of this review are launched at the UN's International Day for Natural Disaster Reduction (13 October 2010) at an event that UKCDS and others are currently planning. The review manager will be expected to be present at this. Feedback from this event, and from other experts will enable contractors to produce a final report

Funding

23. A total budget of £55k is available for this review. The costs of the launch venue on October 13th 2010 will be met by a separate budget. Please note that the upper limit is not an indicative figure and all costs must be fully justified within the approach to the work proposed. Proposals should specify how all monies will be spent.

Procurement Process

24. This opportunity is open to all at legitimate Higher Education Institutes, Research Organisations or limited companies who are able to provide technical support consultancy services.
25. The principal selection criteria will be:
- Fit to and understanding of requirements
 - Appropriateness of approach
 - Track record of the applicant(s)



- Cost effectiveness

26. Tenders should be submitted to NERC as an attachment via e-mail to **Sasha Leigh** snbl@nerc.ac.uk by **12 noon on the closing date 7 June 2010**.

Format and Content of Tenders

27. The Review proposal should be no longer than 4 sides of A4 and include:

- Proposed approach tackling the review requirements
- Proposed approach to consulting and engaging the community
- Proposed milestones/Gantt chart summarising the work plan and effort
- Detail and justification of resources (and how VAT will be handled if applicable) including: travel and subsistence, staff day rates.

A separate curriculum vitae/track record of up to 1 side of A4, summarising relevant skills and expertise should also be submitted.

28. Proposals must be completed in single-spaced typescript of minimum font size 11 point with margins of at least 2cm. Applicants referring to websites should note that the selection panel may choose not to use them.

29. Tenders should be valid for 90 days

Contact Details

30. Queries may be directed to Sasha Leigh (snbl@nerc.ac.uk, Tel:01793 442634)

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