Terms of Reference for the NERC Proposals Review Group

Context

To increase the quality of proposals being submitted to avoid future restriction on numbers, this review group aids in the support of bids. Other NERC calls may also require a level of review, depending on their nature.

Scope

- To provide support to academics applying to NERC's responsive mode rounds by peer-reviewing proposals prior to submission.
- To provide support to academics applying to other NERC calls that may require or benefit from a level of management/quality review.
- To recommend amendments and additions to proposals with a view to maximising success by increasing quality and level of 'research excellence'.
- To make decisions on behalf of the Cross-College Research Proposals Review Group (CCRPRG) with regard to ensuring Imperial does not breach any institutional limit put in place by NERC.

Membership

- Professor Ralf Toumi (Chair)
- Cross-Faculty representatives from Earth Science and Engineering (Dr Ian Bastow, Dr Fred Richards), School
 of Public Health (Prof Matthew Fisher), Civil and Environmental Engineering (Dr Ana Mijic), Physics (Dr
 Jacqui Russell) and Life Sciences (Dr Cristina Banks-Leite).
- Dr Dania Grant-Serroukh, Funding Strategy Manager, Research Office (Convenor and Secretary)

Method of Working

- The Group will meet twice a year in line with NERC responsive mode rounds.
- Members may be asked to participate in additional bespoke review processes at other times of the year for other NERC calls requiring a level of management, as identified by the Research Office Funding Strategy Team in consultation with others as appropriate.
- The Research Office Funding Strategy Team (Dr Dania Grant-Serroukh) will take the role of Group convener, acting as Secretary and providing all administrative support.
- Prospective PIs will provide the case for support and the lay summary for proposed bids to the Funding
 Strategy Team ahead of the meeting. It is expected and strongly advised that prior to this point, the PI will
 have engaged with any Departmental review/support processes available, which is considered best practice
 by this Group.
- Prior to the meeting, each member will receive collated paperwork for all proposed bids from the Funding
 Strategy Team. Members will not be expected to have expertise in the science of all bids. Each bid should be
 considered with reference to the 'research excellence' and 'capability to deliver' criteria (see below) that
 NERC reviewers and panel members use, specifically, how well the proposal demonstrates meeting these
 criteria and where the evidence could be strengthened or made clearer.
- At the meeting, members will discuss each bid and agree on recommendations to be returned to the PI to support and further strengthen their bid. These recommendations should focus on how the proposal can be enhanced to more strongly/clearly demonstrate the NERC research excellence criteria and the ability to communicate scientific ideas to non-specialists.
- Where the quality threshold of proposals (i.e. likely to be fundable) is not met, members will also decide which bids should be asked to not submit or to postpone their submission until a later round.
- For bids being submitted, a Group member should identify themselves or propose a Departmental colleague as a designated 'buddy' to aid the PI in further bid developments related to the internal review process.
- The Research Office is responsible for informing applicants, Research Services Managers and Heads of Departments of the recommendations made at the meeting.

Conflict of interest

Where a member of the Group is conflicted by virtue of being directly linked (e.g. PI/Co-I/collaborator) to a bid, they should not review that bid.

Research Excellence Criteria (NERC criteria)

Comments on research excellence should consider to what extent:

- does the proposed research address an important environmental challenge, and involve objectives that are ambitious and beyond the state-of-the-art (e.g. novel concepts and approaches or development between or across disciplines)?
- does the proposal push the frontiers of knowledge and have the potential to lead to ground-breaking, high-risk, high-reward, innovative scientific discovery?
- is the outlined scientific approach feasible, bearing in mind that the proposed research is high risk/high gain?

A proposal that demonstrates excellence can be characterised by terms such as: novel, ambitious, timely, exciting, at the international forefront, adventurous, elegant, or transformative but need not demonstrate all of them. Proposed work obtaining the highest priority for funding is described as "...world-leading, at the forefront of the field internationally. It meets outstanding standards in terms of the initiation of ground-breaking, high-risk, high-reward, innovative scientific discovery and/or the development of technology or methodology, to address an important environmental challenge".

NERC also expects applicants to have explored the following from the outset of their proposal:

- Who could potentially benefit from the proposed research over different timescales?
- How might the potential beneficiaries benefit?
- What will be done during and after the project to increase the likelihood of the research reaching the identified beneficiaries and maximize the likelihood of the identified benefits being achieved?

Capability to Deliver (NERC criteria)

Comments on capability to deliver should consider to what extent:

- has the team made an outstanding contribution to the generation of new understanding and demonstrated the key skills required to do this?
- does the team demonstrate appropriate expertise and capability to successfully execute the proposed project, including evidence for capacity to support and mentor researchers involved as appropriate?
- does the team demonstrate capability to contribute to the wider research community, for example contributions to improving research culture or advocacy for better research integrity?
- does the team demonstrate capability to contribute to broader society, for example through engagement?

It is the team's capability to deliver the proposal and not the excellence of individual applicants that is being assessed.

Outstanding grades are given when "The team has made an outstanding contribution to the generation of groundbreaking new ideas, demonstrates visionary expertise and excellent capability to successfully execute the proposed project. The team demonstrates a strong capability to contribute significantly to the wider research community and broader society. The team has illustrated an outstanding capability to deliver ground-breaking research through this project."