



ASSESSMENT PANEL GUIDANCE NOTES FOR THE CONSIDERATION OF DISCOVERY SCIENCE (RESPONSIVE MODE) LARGE GRANT OUTLINES

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1. Introduction

Discovery Science (responsive mode) is the funding stream that supports excellent research in response to unsolicited ideas from research groups, consortia or individuals in any area relevant to NERC's remit. Discovery Science (responsive mode) funding can cross remit boundaries between Research Councils and, where this is the case, a co-funding agreement will have been considered. NERC promotes unrestricted and innovative thinking; as such, proposed research can be pure, applied or policy-driven, technology-led and/or multi-disciplinary, but must seek to address—or provide the means to address—clearly defined science questions.

Large Grants are intended to support adventurous, large-scale and complex research tackling big science questions that cannot be addressed through other NERC funding opportunities. Research funded via this scheme is expected to have the potential to be world-leading. Proposals will often involve multidisciplinary approaches via inter- or intra- institutional collaboration, although this is not a requirement. Large Grants can address any area of science within the NERC remit, including NERC strategic priorities or new curiosity-driven research challenges.

2. Conflicts of Interest

NERC maintains a [conflicts of interest policy](#), available at **Annex A**. We ask that you make yourself familiar with the policy and let us know as soon as possible if you have – or are unsure whether you have - any conflicts of interest with the proposals to be discussed that have not already been identified in the documentation. **Please make these known to the panel secretary as soon as possible, particularly if you are an introducer or reader so that the proposal can be reassigned to an alternative panel member.**

For any proposal where panel members have been identified to have a conflict of interest they will be required to leave the room whilst discussions are taking place. During the ranking process any panel member who is named as a PI or Co-I on a proposal will be required to leave the room whilst their proposal is ranked. Panel members may remain in the room for the remainder of the ranking but must not make any comments during discussions for proposals where they have a conflict of interest.

If there is doubt as to whether the member should be asked to leave, the Chair may discuss this with the rest of the panel and the NERC executive. The NERC executive have the final decision in any case where there is debate about whether a conflict of interest exists at all stages of the peer review process.

3. Panel Confidentiality

Research grant proposals are submitted to NERC in confidence and may contain confidential information and personal data belonging to the applicant. NERC undertakes to the applicants to keep proposals confidential and not to use or disclose them except as required for the peer review/funding decision process or as is required under the Data Protection Act 1998 or the Freedom of Information Act 2000 (or any other law or regulation to which NERC is or may become subject).

Panel members may not disclose the fact that any of the enclosed grant proposals have been submitted to NERC or any of the information contained in any of the proposals to any person outside the Panel or otherwise involved in the peer review/funding decision process. Nor may they disclose or use the information in the grant proposals for any purpose other than as part of NERC peer review/funding decision process.

The Panel's comments on and scoring of these proposals will be recorded by NERC staff at the meeting at which they will be discussed. NERC will not use these minutes or scores, nor disclose them to any person or body except:

- as is necessary to record the decisions of the Panel and to inform any other person or body within NERC or any other body that may be co-funding the proposals as part of the funding decision process;
- to the applicant as part of NERC feedback to successful and unsuccessful applicants; or
- as may be required under the Data Protection Act 1998 or the Freedom of Information Act 2000 (or any other law or regulation to which NERC is or may become subject).

NERC will not attribute any comments that are disclosed under the Data Protection Act 1998 or the Freedom of Information Act 2000 to any individual panel member, but the fact that you are a member of the one of the Panels is publicly available information.

All personal data collected by NERC will be handled in accordance with the UK Data Protection Legislation and as set out in the [UKRI Privacy Notice](#).

4. Assessment Process

For the [Large Grants scheme](#) NERC requires an outline proposal to be submitted in the first instance. These outlines are not sent out to review; they are assessed by the Large Grant outlines cross remit assessment panel, comprising multidisciplinary members of the Peer Review College, plus independent experts as needed.

The outline assessment panel's role is to assess and rank the proposals according to the assessment criteria Potential for Research Excellence and Fit to Scheme (see below). NERC will then use the panel's ranking to decide how many applicants will be invited to submit a full proposal.

NERC does not expect to invite more than the top ten highest ranked outlines to submit a full proposal. Any outline scoring 1 or below for Fit to Scheme will be rejected. Proposals graded 4 or below in terms of the criteria Potential for Research Excellence by the outline panel are also unlikely to be invited to submit a full proposal, depending upon the competitive context.

5. Assessment Criteria

Based upon the information in the outline proposal the panel is asked to assign a score of between 0 and 6 (highest) to each proposal for its Potential for Research Excellence and a score between 0 and 3 (highest) for its Fit to Scheme. The scoring systems are show below.

5.1 Potential for Research Excellence

Research funded via this scheme is expected to have the potential to be world-leading. The panel should consider:

- i. the potential rewards of the project: the significance and quality of the work, and the scientific impact it will have in terms of enhancing or developing insights, developing the field and adding to knowledge or understanding in the area to be studied in a national or international context;
- ii. the extent to which the research questions, issues or problems that will be addressed through the work are stated and their importance and appropriateness specified; and
- iii. the appropriateness, effectiveness and feasibility of the proposed research methods and/or approach.

Score	Potential for Research Excellence
6	<p>Outstanding</p> <p>The proposed work has the potential to meet outstanding standards in terms of originality, quality and significance and aims to address extremely important scientific questions or could enable them to be addressed through technological development.</p> <p>The highest priority for working up into a full proposal.</p>
5	<p>Excellent</p> <p>The proposed work has the potential to meet excellent standards in terms of originality, quality and significance and aims to address highly important scientific questions or could enable them to be addressed through technological development.</p> <p>A high priority for working up into a full proposal.</p>
4	<p>Very Good</p> <p>The proposed work has the potential to meet high standards of originality, quality and significance and aims to address important scientific questions or could enable them to be addressed through technological development.</p> <p>A medium-low priority for working up into a full proposal, dependent on the competitive context</p>
3	<p>Good</p> <p>The proposed work is of merit, meets satisfactory standards of originality, quality and significance and addresses reasonably important scientific questions or will enable them to be addressed through technological development.</p> <p>Demonstrates some potential for excellence but is not a priority for working into a full proposal.</p>

2	<p>Not Competitive/ Modest The proposed work is potentially of some merit but overall is of inconsistent quality, significance and originality but could result in some useful knowledge.</p> <p>Not suitable to be invited to submit a full proposal.</p>
1	<p>Unfundable/ Poor The proposed work is unsatisfactory in terms of originality, quality and significance and is unlikely to advance the field.</p> <p>Not suitable to be invited to submit a full proposal.</p>
0	<p>Non-Scoring For special cases e.g. flawed in scientific approach, subject to serious technical difficulties, sufficiently unclearly written that it cannot be properly assessed, success depends on the project student or is duplicative of other research.</p> <p>Not suitable to be invited to submit a full proposal.</p>

5.2 Fit to Scheme

As detailed above, Large Grants are intended to support adventurous, large-scale and complex research tackling big science questions that cannot be addressed through other NERC funding opportunities. Multidisciplinary approaches via inter- or intra-institutional collaboration are encouraged, appropriate management arrangements are required. The Justification for a Large Grant approach should clearly explain why a Large Grant is necessary and more appropriate than multiple Standard Grants.

Score	Fit to Scheme
3	<p>Excellent Excellent alignment with the Funding Scheme's objectives and requirements.</p>
2	<p>Good Good alignment with the Funding Scheme's objectives and requirements.</p>
1	<p>Poor Poor alignment with the Funding Scheme's objectives and requirements.</p> <p>Not suitable to be invited to submit a full proposal.</p>
0	<p>Non-Scoring Not aligned with the Funding Scheme's objectives and requirements.</p> <p>Not suitable to be invited to submit a full proposal.</p>

In addition to providing the two scores for Potential Research Excellence and Fit to Scheme, the Large Grant outlines assessment panel is asked to provide any comments they have on the following aspects:

Project and Data Management

Appropriate management is an important component of Large Grant assessment and success. The panel should comment on the appropriateness of the proposed project and Data Management plans to the work outlined and highlight any issues.

Project Partner Involvement

NERC seeks to increase collaborative research and encourages joint research activities between academic researchers and partners in public or private sector organisations. When project partners are named, Value Added should be assessed. Value may be added through: tangible input by named partners, e.g. cash or in-kind contributions; timeliness of the research; or increased potential impact and benefit to the research as a result of the partnership.

Resources

As a public funding organisation, NERC must ensure that funding is allocated on a basis that ensures best value for money. Large Grant outlines assessment panel members should provide comments on whether the estimated resources indicated in the outline proposal are appropriate to the research proposed.

6. Role of the Panel

The primary role of the assessment panel is to review the grant proposals assigned to it by NERC.

The Large Grant outlines assessment panel will receive the completed proposal form and four page case for support for each proposal submitted. No other information is provided for this call. Using this information, the assessment panel is responsible for:

- i. providing scores for the Potential for Research Excellence and Fit to Scheme of each proposal presented to them; and
- ii. producing a final ranked list of these proposals.

To assist in the prioritisation process, panel members will be assigned, in advance of the meeting, to act as introducers or readers for individual proposals.

We are committed to the [San Francisco Declaration on Research Assessment](#). You should not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an investigator's contributions, or to make funding decisions.

For the purposes of research assessment, please consider the value and impact of all research outputs (including datasets, software, inventions, patents, preprints, other commercial activities, etc.) in addition to research publications. You should consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice.

The content of a paper is more important than publication metrics, or the identity of the journal, in which it was published, especially for early-stage investigators. Therefore, you should not use journal impact factor (or any hierarchy of journals), conference rankings and metrics such as the H-index or i10-index when assessing UKRI grants.

We encourage you to challenge research assessment practices that rely inappropriately on journal impact factors or conference rankings and promote and teach best practice that focuses on the value and influence of specific research outputs. If you are unsure about DORA, please speak to the panel convener or the panel chair.

7. Role of the Panel

7.1 Role of Introducers

For each proposal, two panel members will be nominated as introducers. Their role is to lead the discussion on the proposal. As well as the proposals that have been allocated to an introducer, panel members should read as many of the other proposals as possible (time permitting). This allows them to put the proposals on which they are speaking into context with the rest of those submitted and ensures a full discussion of each proposal at the meeting. However, NERC acknowledges that many of the proposals will not be within a panel members' direct expertise.

Proposals allocated to panel members nominated as first introducer are likely to be close to their main expertise in most cases, but not necessarily their main area of research. For second introducers, the proposals should be in their broad area of science. However, due to the cross-remit nature of the scheme, excluding PI/Co-Is named in the round, availability of Peer Review College members and conflicts of interest this may not always be the case.

7.2 Role of Readers

To assist in the prioritisation process, panel members will be assigned, in advance of the meeting, to act as readers for individual proposals. Due to the cross-remit nature of the scheme it is highly unlikely that the applications will be in the readers' area of expertise.

The role of reader is not as comprehensive as introducer. Readers are expected to have read and be prepared to provide provisional grades for Potential for Research Excellence and Fit to Scheme, for those outlines to which they have been assigned.

Readers are not expected to contribute to the written summary (unless their input is particularly pertinent to the assessment of the outline), but simply to be familiar with the proposals to which they have been assigned and be able to provide an opinion on these if called upon to do so. This is particularly useful in cases where the two introducers fail to agree. The running order will detail which proposals you have been assigned to as Reader.

7.3 Before the Panel

Prior to the panel meeting, introducers and reader are asked to consider the documentation provided, assign their provisional scores taking into account all supporting documentation, and provide written comments on a Panel Feedback Form for each proposal they are introducing.

The Panel Feedback Form requires you to provide the following information:

- i. score for Potential for Research Excellence and the panel's justification for this;
- ii. score for Fit to Scheme and the panel's justification for this;
- iii. comments and/or recommendations made by the panel, on resources etc;
- iv. any additional comments pertinent to the assessment of the proposal.

7.4 At the Panel

The two introducers will be invited to lead the discussion by summarising the strengths and

weaknesses of the outline proposal and how suitable it is for the Large Grant scheme. In most cases the first introducer will be the person whose general expertise most closely matches the proposal, with the second introducer providing a supporting role in the same science area, and the readers providing a non-specialist opinion. The discussion will then be opened up to the readers and then the rest of the panel by the chair and overall scores for Potential for Research Excellence and Fit to Scheme will be agreed. All panel members should judge the proposals based on what is in the paperwork in front of them, not what the panel member thinks about the proposal or its applicants.

7.5 After the Panel

Feedback will be provided for every application discussed at the panel meeting. It is the responsibility of the first introducer for each proposal to provide a summary of the **panel's** discussion of the proposal (i.e. the comments from both introducers and any points that arise during the panel discussion), as feedback to the applicant(s) and as a record of the justification for the panel scores and decisions. The same feedback will also be copied to the applicant's Research Organisation Administration Office.

The first introducer should make notes of the panel discussion and record these using the template document provided in Annex B. Second introducers, readers and other panel members may also provide the first introducers with comments for any proposals they have read. The first introducer should then send the feedback to the Panel Secretary by e-mail as soon as possible and within one week of the meeting date.

Care should be taken to present the feedback constructively; this should not be a list of strengths and weaknesses like a review but should give context to the key factors that led to the proposal getting the score it did and should explain how the applicants could have achieved a higher score. Introducers should ensure that the feedback provided is of a sufficient length to ensure that it provides an appropriate level of detail so that the applicants are clear as to why the proposal received the score it did and can see how it could be improved.

8. Proposal Prioritisation

Once all the proposals have been scored, the assessment panel is then asked to place them in priority order. A ranked list of the proposals will be compiled based on the scores assigned to each proposal for Potential for Research Excellence and Fit to Scheme.

Within an Excellence score, proposals will be ranked according to the Potential for Research Excellence initially and then on Fit to Scheme. Rejected outlines i.e. those scoring 1 or below for Fit to Scheme will not be included in the ranked list.

All panel members will be present during proposal prioritisation (ranking), but those with conflicts will not be allowed to contribute to discussions when a proposal for which they were conflicted is being compared with another proposal. If any member of the panel would prefer not to be present for any part of the proposal prioritisation process, then they can of course leave the room. However, for any members of the panel who are also PIs and Co-Is from the round being considered, it will be mandatory for them to leave the room.

Following the meeting the NERC office will decide where the cut-off point for those being invited to submit full bids will be, so it may be a week or two before successful applicants are informed. However, unsuccessful applicants (ie. rejected proposals) will be notified as soon as practicable after the meeting.

Remit

Discovery Science (responsive mode) funding can cross remit boundaries and, where this is the case, a co-funding agreement will have been considered. Do not therefore be tempted to lower your score because you think that the research project fails to fit fully within the NERC remit.

Risks

Excellent research is often to be found at the cutting edge of science, which is inherently risky. You should not be afraid of recommending innovative, speculative and adventurous proposals.

9. Funding for International Collaborations

We work internationally with other funding organisations to help support excellent research collaborations. Agreements exist with priority funders to allow researchers to submit a single collaborative proposal. These agreements help minimise the risk of double jeopardy - instead of being reviewed by both funders, each collaborative submission is reviewed by a single panel, avoiding duplication of effort for applicants and peer reviewers. These agreements do not represent additional funding, their aim is to make routes to collaboration as 'normal business' as possible.

Agreements operate with the NSF division of environmental biology (DEB), the NSF directorate for geosciences (GEO) and the Research Council for the State of São Paulo, Brazil (FAPESP).

More information on [funding for international collaborations](#) can be found on the NERC website.

Any proposals submitted under these mechanisms should be assessed in the same way as other proposals submitted to this round. The panel should satisfy itself that the collaboration is well thought out, that it is an integrated part of the project and that it will add value.

Handling Conflicts of Interest in Peer Review - Guidance for NERC Reviewers and Panel Members

A conflict of interest occurs when an individual involved in the assessment of a proposal for funding has a personal, professional or organisational relationship with the applicants, affecting their ability to undertake their role in an objective and unbiased way. If you are asked to take part in NERC peer review, either to review a NERC proposal or be a member of a NERC moderating or assessment panel then you need to be aware of the [NERC policy on conflicts of interest for members of NERC boards, advisory groups and peer review panels](#).

The NERC policy defines a conflict of interest as being associated or involved in any way with:

- *An institution, department or individual that has submitted a funding proposal or would otherwise benefit from a decision*
- *and/or*
- *the development or implementation of proposals seeking NERC/UKRI funds or in the evaluation of research investments*

You will have connections and collaborations both formal and informal with a range of organisations and individuals. In order to help you interpret the broad definitions above, this advice aims to set clear expectations of the specific situations considered to represent a material conflict of interest, and when conflicts of interest need to be declared to NERC so that appropriate action can be taken. Definitions of the individuals that may be involved in a proposal (investigators, project partners etc) can be found in the [NERC Grants Handbook](#).

NERC will try to avoid asking you to review or introduce proposals where you have conflicts that can be identified from our own records, but many will not be obvious to us. The final responsibility for identifying and reporting conflicts of interest must therefore rest with the individual. Timing is very important as late notification is much more difficult to manage. A conflict for a panel member identified when the panel is being set up is straightforward to manage, the same conflict identified on the day of the meeting can create major problems, so please check the proposals assigned to you carefully as soon as you receive them.

What Constitutes a Conflict of Interest?

Due to the complexities of relationships between researchers it is challenging to provide definitive and exclusive definitions. Some cases will be clear cut, others will be less so and will require a judgement call. We expect researchers who work in the same field to know each other, and this doesn't bar you from commenting on their proposals. The test should be 'will a neutral observer have confidence in the impartiality of any advice provided' and in any case where there is significant doubt the relationship should be treated as a conflict. The NERC Executive have the final decision in any case where there is debate about whether a conflict of interest exists.

The following are examples of conflicts of interest considered material by NERC for a proposal you have been asked to review or introduce:

	Conflict	Action Required
1	You are a named investigator, staff member or project partner involved in the proposal or have signed a letter of support	NERC should identify these conflicts please tell us if an error has been made
2	<p>You have a formal affiliation to any Research Organisation or Project Partner organisation involved in the proposal.</p> <p>This generally means you are a current member of staff at the organisation. You also have a formal affiliation if you are a Professor Emeritus, or Visiting Professor, or have signed a contract of employment or receive personal remuneration in excess of £5,000 per annum from the organisation.</p> <p>For Fellowship proposals conflicts apply to both the organisation where the applicant is currently based and the organisation where the fellowship would be held.</p> <p>[Association with an organisation that has provided a letter of support but is not a Project Partner is not a conflict]</p>	<p>NERC should identify staff conflicts please tell us if an error has been made. Please inform us of other relationships e.g. visiting professor which may not be obvious to us.</p> <p>If you are moving to a new organisation please inform us as this will create new conflicts.</p>
3	You are directly involved in the work proposed and would benefit from it being funded and/or have assisted the applicants with their proposal for funding and/or have agreed to be a member of an advisory committee connected with the project.	Please inform us NERC may not have received complete information.
4	You have an existing business or professional partnership with any of the investigators or staff named in the proposal	Please inform us NERC does not hold this information.
5	You are a close relative - spouse, child, sibling or parent - of any of the investigators or staff named in the proposal.	Please inform us NERC does not hold this information.
6	You are a close personal friend of any of the investigators or staff named in the proposal and think that might affect your judgement or be seen as doing so by a neutral observer familiar with the relationship.	Please inform us NERC does not hold this information.
7	You are in close regular collaboration with any individuals named in the proposal, including investigators, research staff, collaborators, subcontractors and project partners, to an extent where you feel uncomfortable being involved in the discussion or you feel unable to give an unbiased opinion.	Please inform us NERC does not hold this information.
8	On Fellowship proposals: you have been the applicant's supervisor within the last eight years.	Please inform us NERC does not hold this information.
9	You have had any involvement in the development of the proposal, at any stage of its preparation, including providing comments or advice to the applicants.	Please inform us NERC does not hold this information.

Managing conflicts

Reviewers - NERC aims to avoid selecting reviewers where a conflict of interest is clear or applicants have requested that specific reviewers are not used. This will include anyone with a personal or organisational association with the proposal identifiable from the information available to NERC. In the peer review of funding calls with a specific research scope NERC will also avoid selecting reviewers that have submitted a proposal to the same call. Anyone asked to provide a review should check to ensure they have no other material conflicts, if so they should decline the request citing 'conflict of interest' as their reason. Please contact NERC quickly for advice if you are unsure. Where a material conflict is identified after a review is submitted that review will be classed as unusable and excluded from the process.

Panels - Panel members are reminded to identify any material conflicts of interest, especially with proposals they have been asked to introduce, as early as possible in advance of the meeting. Where a conflict of interest is identified, panel members' meeting papers will be edited to remove relevant information regarding the conflicted proposal and the member will be asked to leave the meeting room when it is discussed. The meeting record will note all instances where a conflict of interest was identified and managed at a panel. For some panels, particularly where these are interview panels, the standard practice of members leaving the meeting for a conflicted proposal may not be practical. However they will never participate in the discussion of that proposal, or be permitted to influence the final ranking of a proposal where such a conflict exists. In the peer review of calls with a specific research scope NERC will avoid appointing anyone to a panel that is a named investigator on any proposal to be considered by that panel. For Discovery Science panels, where the research scope can be broad, NERC will only involve applicants in panels when their expertise is critical, the meeting procedures will prevent them being able to influence or receive immediate information on the score or ranking of their proposal.

NERC staff

NERC staff may also have connections with applicants that constitute a conflict of interest. Although their opportunity to influence outcomes is limited, in such circumstances staff will not be involved in reviewer selection or any decision stage for proposals where a material conflict exists.

Panel Feedback Form

This form should be used to provide a description and justification of the panel’s assessment of research proposals. Comments included will be used as feedback to the applicant and as a record of the panel’s discussion for NERC. The same feedback will also be copied to the applicant’s Research Organisation Administration Office.

Please note:

- The first introducer for each proposal is responsible for completing this form and sending it to the Panel Secretary within one week of the meeting date.
- Please note, your comments will be fed back verbatim to the applicant and their Research Organisation Administrative Office.

Proposal details	
Introducer name	
Grant reference	
PI name	
Proposal Assessment details and feedback to applicant	
Panel Score for Potential for Research Excellence (0 – 6)	
Please detail the panel’s justification for this score.	
Panel Score for Fit to Scheme (0 – 3)	
Please detail the panel’s justification for this score.	
Please detail any comments and recommendations made by the panel on the resources etc.	
Additional comments. Please add any other comments pertinent to the assessment of this proposal at the panel meeting which have not been included above	