

**MODERATING PANEL GUIDANCE FOR THE CONSIDERATION OF DISCOVERY SCIENCE ‘PUSHING THE FRONTIERS OF ENVIRONMENTAL SCIENCE RESEARCH JULY 2022’ PROPOSALS**

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**1. Introduction**

The Pushing the Frontiers funding opportunity invites proposals from our best environmental research teams to be truly adventurous, ambitious and enable them to pursue curiosity-driven, high-risk, high-reward projects that push the frontiers of environmental science. Up to £26 million is available to fund projects at a maximum cost per grant of £1 million FEC

This scheme will support researchers’ curiosity and imagination to enable discoveries that unlock new knowledge with a degree of adventure previously unrealised. We are seeking to invest in our best environmental researchers to be truly adventurous and ambitious in the pursuit of curiosity-driven, high risk, high reward projects. We welcome, and are increasingly supporting, multi- and interdisciplinary research, designed, supported, and delivered in partnership with other research funders and research users.

This funding opportunity has a different structure to the long-standing NERC Discovery Science Standard Grant scheme, with which you may be familiar. NERC have implemented a streamlined application process, as part of the UKRI-wide approach to support less bureaucratic demands of the research community. Thus, the proposed transformational research description is shorter (5 pages), we ask for information about the applicants’ skills and capability to deliver, demonstrating the ability of the team to conduct ground-breaking, innovative research and that they have the capability to successfully execute the project. This should be a narrative, drawing on the [Royal Society’s Résumé for Researchers](https://royalsociety.org/topics-policy/projects/research-culture/tools-for-support/resume-for-researchers/), explaining the team’s suitability to undertake and deliver high quality, innovative science. A detailed costing is not required until a proposal is being considered for funding. **As such, reviewers should understand that some detail typical of a longer application may not be included and look beyond this,** focusing on whether the proposed research will push the frontiers of knowledge, and consider the applicants’ ideas and contributions, relative to career stage, to their field of science, the wider research and innovation community and users of research and not be solely based on metrics (publications, income, etc.).

**2. Conflicts of Interest**

NERC maintains a [conflicts of interest policy](https://nerc.ukri.org/funding/application/assessment/conflict/), 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. Pushing the Frontiers proposals only have a named PI, not any named Co-Investigators. However, the PI may mention potential collaborators within the case for support and the NERC office will try to take those into account when determining conflicts.

**Please make these known to the Panel Secretary as soon as possible, particularly if you are a lead introducer so that the proposal can be reassigned to an alternative panel member**.

For any proposal where introducers have been identified to have a conflict of interest, they will then be required to leave the (virtual) room whilst discussions are taking place. Introducers may remain in the room for 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).

Introducers 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 introducer, 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](https://www.ukri.org/about-us/privacy-notice/).

**4. Role of the Panel**

All proposals submitted to the Pushing the Frontiers call have been subject to expert review.

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

The moderating panel will receive the full proposal documents, all reviewers’ comments, and any applicant’s responses to reviewers’ assessments as appropriate. Using this information for reference, all moderating panels are responsible for:

• providing scores for the Research Excellence of each proposal presented to them, further details can be found in section 7.1,

• providing scores for the teams Capability to Deliver of each proposal presented to them, further details can be found in section 7.2,

• producing a final ranked list of these proposals,

• satisfying themselves that the financial resources requested for proposals in the funding frame are reasonable to meet the project objectives and recommending any areas of budget adjustment where necessary; and

• providing a summary of the panel’s discussion of the proposal which will be used as feedback to the applicant(s) and the submitting Research Organisation’s Administration Office and as a record of the justification for the panel scores and decisions.

All proposals submitted to the Pushing the Frontiers scheme are subject to expert review, and the PI has the opportunity to respond to the reviewer comments received. At least two moderating panel members, who have been nominated as introducers, then consider the available evidence. Not all proposals can be discussed in detail at the moderating panel meeting and NERC asks panel members to identify at the beginning of the discussion if the proposal has received consistently low scores and negative comments from the reviewers. This, together with your pre-scores and accompanying comments, allows the Panel Chair and Deputy Chair to prioritise proposals for more in-depth discussion. This is increasingly important as numbers of proposals in some panels have increased significantly, so realistic and appropriate scores are needed to make the business of the panel manageable, by allowing effort to be focused on excellent proposals with a realistic chance of funding or those where there are significant discrepancies in opinion. The discussion is led by the lead introducers and a final score and rank is agreed by the panel. All proposals will receive feedback and a score out of 3 for both research excellence and capability to deliver. A ranked list will also be published.

To assist in the prioritisation process, introducers will be assigned, in advance of the meeting, the role of lead introducer, second introducer or reader for individual proposals. The roles of both introducers and readers are described below.

**4.1 Role of Introducers**

To assist in the assessment process, panelists are nominated as lead introducer, second introducer. and reader. For each proposal, two panel members are nominated as lead and second introducer and two panel members are nominated as readers.

The introducers’ role is to submit pre-scores and accompanying comments ahead of the panel meeting and lead the discussion of the proposal at the moderating panel meeting. As well as the proposals they have been allocated to as introducer and reader, panelists 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 at the meeting. The running order will detail which proposals you have been assigned to as introducer. **The role of the Introducers is to submit pre-scores and comments prior to the panel meeting (see details in Section 5 below). It is the responsibility of the Lead Introducer to lead the discussion at panel and provide feedback to proposals that are brought to the assessment panel meeting.**

**4.2 Role of Readers**

The role of reader is not as comprehensive as that of the introducers. Readers are expected to be familiar with the proposals to which they have been assigned so that they can provide a verbal summary and score for Research Excellence and the team’s Capability to deliver, in cases where the two introducers fail to agree. The running order will detail which proposals you have been assigned to as reader.

**5. The pre-score process**

All proposals submitted to the Pushing the Frontiers of environmental research scheme are subject to expert review, and the PI has the opportunity to respond to the reviewer comments received. At least two panellists, who have been nominated as lead and second introducer, then consider the available evidence. Not all proposals can be discussed in detail at the moderating panel meeting and NERC asks Introducers to submit pre-scores for Research Excellence prior to the meeting. Due to technical limitations within Je-S NERC is unable to capture two pre scores (Research Excellence and Capability to Deliver), therefore only one pre score for Research Excellence should be submitted. **Please note that introducers must also pre-score and prepare comments on the capability to deliver documents in preparation for discussion at the panel meeting**.

**Introducers must submit their pre scores by the agreed deadline, you will have received notification of the agreed deadline in the panel invite.**

This allows the Panel Chair and Deputy Chair to prioritise proposals for discussion. **This is increasingly important as numbers of standard grant proposals in some panels have increased significantly, so realistic and appropriate pre-scores are needed to make the business of the panel manageable, by allowing effort to be focussed on only those excellent proposals with a realistic chance of funding**. Based on the pre-scores, those proposals with the potential to be judged as being of excellent quality and those proposals that have received differing introducer pre-scores for Research Excellence will be discussed in further detail at the moderating panel meeting. Those proposals that have received consistently low pre scores for research excellence will only be briefly discussed at panel, to agree final scores and key points for feedback. No proposals will be rejected at the pre score stage. The discussion is led by the introducers and final scores and rank are agreed by the panel.

It is the responsibility of the introducers to:

* identify any possible conflicts of interest with proposals not identified by NERC, please notify the panel secretary as soon as possible so the proposal can be reassigned to another panel member if needed.
* consider all the proposal material including the reviewer comments and PI response.
* moderate comments made (being careful not to introduce any new information which the applicants have not had a chance to respond to).
* submit appropriate pre-scores and comments for Research Excellence based on the NERC criteria.
* prepare appropriate scores and comments for Capability to Deliver based on the NERC criteria, in preparation for the meeting discussions.

Your moderation of the reviewer’s comments and PI response should consider:

* the potential rewards of the project: 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?
* does the team demonstrate appropriate expertise and the capability to successfully execute the proposed project?
* has the team made an outstanding contribution to the generation of new understanding and demonstrated the key skills required to do this?

Please note that any technical assessments, detailed costings, and quotes will be assessed by NERC should the proposal be deemed to be fundable by the moderating panel. Please note that letters of support from Project Partners were not required.

## How to complete pre-scores via Je-S

The process for completing and submitting pre-scores in [Je-S](https://je-s.rcuk.ac.uk/JeS2WebLoginSite/Login.aspx) is very similar to the process for completing and submitting a review, although please note only the lead panel member form will be visible in Je-S. The proposal documents will not be visible in Je-S, and will need to be accessed via the Extranet:

* When you are required to provide pre-scores through Je-S then you will receive an email notification that you have assessments pending. To see the details, log in to Je-S in the normal way.
* The introducer forms are in the document menu, under ‘Other’. Clicking on the Introducer Assessment link will take you through to the Introducer Form. You will be sent a single combined document in which you will be able to record your scores for all the proposals that you are introducing. Exceptionally, you may receive a second document, but this will only happen if we ask you to introduce a further proposal after the initial document is issued. As noted above, the introducer forms do not contain any links to the proposal documentation. This will need to be accessed separately through the Extranet.
* The first section of the form (introducer details) will contain details of the introducer and the meeting name, meeting date and the assessment due date. The Research Grants section will contain details of all the proposals that require scoring. Each proposal assessment can be accessed by selecting the ‘Edit’ link. You should then add an appropriate score and some brief comments on the scores provided. **Please do not use decimals when submitting your score – our system will not accept these, and your score will be rounded up to the nearest whole number.**
* Each proposal assessment must be saved separately, using the ‘Save’ function on the top tool bar. There is a limit of 4000 characters for the free-text box. **Please do ensure that you provide some comments justifying your score for each proposal where you are providing a pre-score.** These are vital to assist the Chairs in making final decisions regarding which proposals should be discussed in depth by the panel at the meeting. **Note that any text comments provided WILL NOT be fed back to the applicants. The text comments will only be used by NERC and the meeting Chairs to provide context for the scores given.** If you do experience any problems saving your scores/comments, then please refer to the instructions on the front page of the Je-S website.
* Once all your proposal assessments have been completed and saved, please submit your lead introducer form to NERC by selecting the ‘Submit Document’ button, which will appear in the top tool bar. This button will not be visible until all your proposal assessments have been entered and saved successfully, and your pre-scores will not be sent to NERC unless this button has been pressed. Once this button has been pressed your pre-scores and comments will be returned to NERC via Je-S. Your submitted pre-scores will then be sent to the Chair and Deputy Chair before the meeting.

If you have any comments or concerns on a specific proposal then please contact NERC directly, at [college@nerc.ukri.org](mailto:college@nerc.ukri.org).

**6. The Panel Meeting**

**6.1 Before the Panel**

It is the responsibility of all panel members to:

* identify any possible conflicts of interest with proposals not identified by NERC, please notify the Panel Secretary as soon as possible so the proposal can be reassigned to another panel member if needed.
* consider all the proposal material including the proposal, the reviewers’ comments, the PI response, and the host organisation letter of support.

We are committed to the [San Francisco Declaration on Research Assessment](https://sfdora.org/read/). You should not use journal-based metrics, conference rankings and metrics such as the H-index or i10-index when assessing UKRI grants. 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-career investigators.

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.

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.

UKRI acknowledges that it is a challenge for applicants to determine the future impacts of COVID-19 while the pandemic continues to evolve. Applicants have been advised that their applications should be based on the information available at the point of submission and, if applicable, the known application specific impacts of COVID-19 should be accounted for. Where known impacts have occurred, these should have been highlighted in the application, including the assumptions/information at the point of submission. Applicants were not required to include contingency plans for the potential impacts of COVID-19.

When undertaking your assessment of the research project you should assess the project as written, noting that any changes that the project might require in the future, which arise from the COVID-19 pandemic, will be resolved as a post-award issue by UKRI if the project is successful. Potential complications related to COVID-19 should not affect your assessment or the score you give the project, and you should disregard any comments made by reviewers that go against the guidance supplied by UKRI.

**6.2 The Panel Meeting**

During the meeting, the Chair will invite the assigned lead introducer to lead the discussion by summarising their comments and referring to reviewers’ comments and any PI responses. The second introducer will then be invited to make any additional comments beyond those already made by the lead introducer. The discussion will then be opened to the readers and then the rest of the panel by the chair and final scores for Research Excellence and the team’s Capability to Deliver agreed. **Panel members are asked NOT to introduce information to the discussion that has not been previously raised by the reviewers unless a serious issue has been identified.** This is primarily because the applicant will not have had an opportunity to respond to the additional information, and its introduction may raise serious risks of prejudicing the decision made by the panel. It also ensures that all proposals are treated on an equal basis.

**Final scores cannot be changed once assigned so the panel should consider this process carefully.**

Feedback will be provided for every proposal discussed at the moderating panel meeting. It is the responsibility of the lead introducer to provide a summary of the panel’s discussion of the proposal 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 lead introducer should record the key points using the template document provided in **Annex B**. Second introducers, readers and other panel members should be prepared to provide the lead introducer with inputs if requested. NERC will, if possible, provide time as part of the meeting for attendees to complete their feedback comments and expects panel members to use any available time to prepare feedback or agree the arrangements for coordinating feedback with other members.

Care should be taken to present the feedback constructively; it should not be a list of strengths and weaknesses as in a review. It 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 higher scores. New information not raised by the reviewers should not be included in the feedback and comments should not be made that could reveal reviewer identities or scores. Lead introducers should ensure that the feedback provided is of a sufficient length so that it provides an appropriate level of detail to enable the applicant to be clear as to why their proposal received the score it did and so that they can see how it could be improved. If the panel recommends any changes to resources as part of their discussions, then lead introducers should ensure that this is included on the feedback form (for NERC office only) including full details of why any changes in resources has been recommended.

**6.3 Overall scores and ranking process**

Once the panel have agreed final scores for each of the two assessment criteria for each proposal, the panel secretary will calculate weighted, combined overall scores for all proposals for the purposes of ranking proposals. To calculate the overall score, the primary criterion, Research Excellence (RE), will be weighted twice as much as the Capability to Deliver (CtD) criterion. A combined score out of a potential maximum of 9 will be calculated for each proposal (RE score x 2 + CtD score). **These weighted calculations will be used for the ranking process only and will not be published**. The panel will then be asked to rank proposals based on these combined scores. **The rank position of proposals can only be changed within the weighted score bands**.

The final ranked list will be used by NERC to inform a funding decision based on available budget.

**6.4 After the Panel**

The lead introducer should send the feedback to the Panel Secretary by e-mail as soon as possible and within one week of the meeting date.

**7. Proposal Scoring**

Reviewers have been asked to provide a score for Research Excellence (primary criterion) and Capability to Deliver on a 1-3 scoring system (3 being highest) and these should be used to guide the panel in their final grading and ranking of the proposal. Individual reviewers’ scores should not be summed or averaged by the panel but treated as distinct scores. For each proposal, panels should agree a final overall score for each of the two assessment criteria.

At this stage, the panel can also assign a score qualifier of high, medium, or low to aid the panel discussion and the prioritisation of similarly scored proposals at the end of the meeting.

**A score cannot be changed once assigned so the panel should consider this process carefully.**

Panel members should base their assessment and scores (1-3) on the following criteria:

**7.1 Research Excellence Criterion**

There is no simple definition of Research Excellence. Proposals may build directly on prior work, or they may involve a speculative leap forward. It may involve progress along an established research direction or a tangential switch into a new or different area or may bring together expertise and approaches from different discipline areas. All these approaches could demonstrate excellence, so your judgement should not simply be based on which approach has been adopted.

Proposals do not need to be hypothesis-driven and may instead focus on an exploratory approach or the development of a new technology. Pushing the Frontiers may require risky research and so we would not consider risk to undermine a proposal if it is in pursuit of ground-breaking new discovery. **The streamlined application process may limit detailed process description, and this too should not undermine a proposal.**

Panel members should assess Research Excellence by considering 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?

Upon consideration of this assessment criterion, a score of between 1 and 3 (highest) should be awarded according to the scoring system below.

|  |  |
| --- | --- |
| **Score** | **Research Excellence (Primary Criterion)** |
| **3** | **Outstanding**  The proposed work is of excellent scientific quality. It is 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.  **High priority for funding** |
| **2** | **Good**  The proposed work is of high scientific quality (possibly with aspects of excellence). It is internationally competitive, at the forefront of the field nationally. It meets high 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. **Fundable** |
| **1** | **Interesting/non-competitive**  The proposed work has insufficient merit to be considered ground-breaking and innovative and/or is not addressing an important environmental challenge and/or is not considered feasible. **Not a priority for funding/not fundable** |

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. Often you might expect to see a plausible hypothesis, with some basis within the published literature, and clearly identified objectives that sensibly test that hypothesis. However, proposals do not need to be hypotheses driven and may instead focus on an exploratory approach or the development of a new technology. Certainty of outcome is not an indicator of excellence, but neither is an incremental approach necessarily an indicator that a proposal lacks excellence.

Applicants are asked to set the context of their proposal in terms of the current state of knowledge and other work under way in the field. You should comment explicitly on this aspect of the proposal and, where possible, give your view of where this work would sit in relation to related activity internationally. Note that the existence of competing groups elsewhere should not be a reason for downgrading a proposal, unless the work proposed is a direct duplication of other work already being undertaken.

When considering multidisciplinary proposals (those which cross disciplines both within and between council remits), please be aware that reviewers may have only been able to comment on particular areas of the proposal. Reviewers will have been selected to try and cover all the proposed research between them. Do not be tempted to lower your score because you do not think that the research fits fully within the NERC remit as Discovery Science funding can cross funder responsibilities.

Panel members should not be looking at the funding requested in any detail. The limit for projects is £1M at 100% FEC, but there is a mechanism by which a case can be made to exceed this limit. All proposals being considered by the panel which are requesting funding in excess of the £1M limit have prior agreement from NERC.

* 1. **Capability to deliver criterion**

The Capability to Deliver document should be a narrative which explains how the team’s relevant experience and expertise demonstrates their ability to successfully deliver the proposal. Applicants should draw on the [Royal Society’s Résumé for Researchers](https://royalsociety.org/topics-policy/projects/research-culture/tools-for-support/resume-for-researchers/) when completing their Capability to Deliver statement.

The panel should assess Capability to Deliver by considering 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 the capability to successfully execute the proposed project, including evidence for capacity to support and mentor researchers involved as appropriate?
* does the team demonstrate the 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 the capability to contribute to broader society (for example, through engagement)?

**The assessment process will consider applicants’ ideas and contribution relative to career stage, acknowledging that not all team members will have evidence against all criteria.**

We have not been prescriptive on how much space should be allocated to addressing each of the questions above, as this will vary depending on the relevant expertise of each team and the focus of the proposed work.

Panel members should bear in mind that it is the team’s Capability to Deliver the proposal and not the excellence of individual applicants that is being assessed. Panel members should not be tempted to lower their score where the applicants do not have a long-standing track record in the particular research area (e.g., early career researchers, a discipline-hopping proposal, cutting-edge research areas) as long as sufficient evidence of suitable support mechanisms have been provided. Base your assessment on the proposal and not on your previous knowledge of, or the reputations of, the applicants or their host organisations. Please be careful to avoid any unconscious bias in your assessment on the grounds of a protected characteristic, such as age or gender.

Upon consideration of this assessment criterion, a score of between 1 and 3 should be awarded according to the scoring system below.

|  |  |
| --- | --- |
| **Score** | **Capability to Deliver** |
| **3** | **Outstanding**  The team has made an outstanding contribution to the generation of ground-breaking 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. |
| **2** | **Good**  The team has made a contribution to the generation of ground-breaking new ideas, demonstrates appropriate expertise and capability to successfully execute the proposed project. The team demonstrates the capability to contribute to the wider research community and broader society. The team has illustrated the capability to deliver ground-breaking research through this project. |
| **1** | **Has potential / Not competitive**  The team has shown insufficient evidence of contributing to the generation of ground-breaking new ideas, appropriate expertise and/or capability to successfully execute the proposed project. The team has not demonstrated the capability to contribute to the wider research community and broader society. The team has insufficient capability to deliver ground-breaking research through this project. |

While this criterion should be scored for the overall capability of the team, we provide here additional guidance on how panels’ expectations of a strong capability to deliver could be adjusted to take consider individual team members’ career stage.  This list is by no means exhaustive, nor is it expected that every team member will be able to illustrate each example.

**Please remember that the streamlined application process may limit detailed capability to deliver narratives and full track records for all team members cannot be expected.**

|  |  |
| --- | --- |
| **Early career** | **Established career** (in addition to those indicated for early career) |
| * has an ability to generate new ideas, technologies, or methodologies, with examples of previous breakthroughs, the initiation of ground-breaking discovery, or advancements in a relevant field of environmental science research * has an ability to deliver and communicate excellent research, with examples of relevant outputs that are considered of international quality, such as open data sets, publications, conference presentations, policies, patents etc. * has a high level of expertise, with examples of the previous application of relevant key skills or training received, or evidence that they are, or have capability to become, a recognised leader in the field. * has capability to successfully execute the project, with examples, relevant to the needs of the proposed research, of effective project management, team leadership and collaborative relationships * understands the importance of the development of team members and demonstrates the capacity and experience for supervision, training, teaching, or mentoring, including students and post-doctoral researchers. * shows evidence of engagement with the wider research community, including contributions to improving research culture and integrity, with examples of peer review commitments, committee memberships, and positions of community responsibility * shows evidence of engagement with broader society and knowledge exchange across sectors, with examples of public outreach, or contributions to policy development, new practices, or business innovation | * has made a significant contribution to the generation of new ideas, technologies, or methodologies, with examples of previous breakthroughs, ground-breaking discovery or advancements that have transformed a field of environmental science research * has delivered and communicated excellent research, with examples of a significant volume of contributions that are of international quality that has widely influenced the research agenda * has a very high level of expertise, with examples of contributing to the advancement of techniques or training given, or evidence that they are recognised as a world-leader in the field. * has capability to successfully execute the project, with examples of effective project management, visionary leadership in shaping the direction of a team or organisation, or significant collaborative networks * has made significant contributions to the support and development of other researchers, recognised as a role model for the community * shows evidence of significant engagement with the wider research community, with examples of advocacy roles for research culture and integrity, utilising influence to shape broader policy across the research and innovation landscape. * shows evidence of significant engagement with broader society and knowledge exchange, with examples of public advocacy roles, championship, engagement with high-level policy makers, or business community |

# 8. Proposal Prioritisation

Once all the proposals under discussion have received two scores at the meeting (one for research excellence and one for capability to deliver), the panel is then asked to place them in priority order based upon the weighted scores given (RE score x 2 + CtD score). A ranked list of the proposals will be compiled. If the panel assigned a qualifier of low, medium, or high at the point of scoring the proposal these will be used in forming an initial ranking to aid the comparison of similarly scored proposals. *The score qualifiers can be discounted during the ranking if the panel conclude that they* do not accurately reflect the comparative excellence of the proposal within a scoring band.

Applicants will receive the final scores for both Research Excellence and Capability to Deliver, which will also be published on the [NERC Outcomes](https://www.ukri.org/what-we-offer/what-we-have-funded/nerc/board-and-panel-outcomes/) webpage, anonymised for those who are not awarded funding.

The NERC executive will use the ranking to inform the final outcomes but will have the final decision on who will be funded.

# 9. Consideration of Resources Requested

The panel are responsible for satisfying themselves that the financial resources requested for proposals in the funding frame are reasonable to meet the project objectives and recommending any areas of budget adjustment where necessary.

## Full Economic Costing

All research proposals submitted for consideration are expected to present the full economic cost (FEC) of the project. Proposals must include the funds for the investigators’ effort and the overheads supporting the research activity. Proposals are composed of four summary fund headings, as follows:

* **Directly Incurred Costs** – Costs that are explicitly identifiable as arising from the conduct of a project, are charged as the cash value spent and are supported by an auditable record.
* **Directly Allocated** – The costs of resources used by a project that are shared by other activities (including the costs of estates). They are charged to projects based on estimates rather than actual costs and do not represent actual costs on a project-by-project basis.
* **Indirect Costs** – non-specific costs charged across all projects, based on estimates that are not otherwise included as Directly Allocated costs.
* **Exceptions** – Directly Incurred costs that are funded at 100% of FEC, subject to actual expenditure incurred, or items that are outside FEC.

For any proposals in the funding frame, the panel is asked to consider and comment upon the resources requested.

## Exceptional Permission to Exceed the Standard Grant Limit

The limit for projects to the Pushing the Frontiers call is £1 million at 100% FEC. There is a mechanism by which a case can be made to exceed this limit, which is detailed in section B of the Grants Handbook. All proposals being considered by the panel which are requesting funding more than the £1 million limit have agreement from NERC. Any proposals submitted without this approval are office-rejected.

Please note that under full economic costing applicants can request all costs that they believe are necessary to undertake the proposed research and maximise the impact. It is not possible for NERC to set specific rates or limits (e.g., a maximum of two conferences per researcher or a maximum of £1200 per conference) as this goes against the principles of full economic costing. **Panel members should assess whether what has been requested is appropriate.**

If the panel recommends any changes to resources for proposals in the funding frame, then Introducers should ensure that this is included on the feedback form (for NERC office only) including full details of why any changes in resources has been recommended.

# 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), the Research Council for the State of São Paulo, Brazil (FAPESP) and Fonds National de la Recherche (FNR) in Luxembourg. There are more details on the arrangements for [international collaborations](https://nerc.ukri.org/funding/available/researchgrants/international/) 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.Annex A

**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.](https://nerc.ukri.org/about/policy/policies/conflict-interests-policy/)

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. 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](https://nerc.ukri.org/funding/application/howtoapply/forms/grantshandbook/).

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 | You have a formal affiliation to any Research Organisation or Project Partner organisation involved in the proposal.  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 more than £5,000 per annum from the organisation.  For Fellowship proposals conflicts apply to both the organisation where the applicant is currently based and the organisation where the fellowship would be held.  [Association with an organisation that has provided a letter of support but is not a Project Partner is not a conflict] | 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.  **If you are moving to a new organisation, please inform us as this will create new conflicts.** |
| 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 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.

# Annex B

**Panel Feedback Form**

**This form should be used to provide a description and justification of the moderating 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 lead 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** | |
| Lead Panel Member Name |  |
| Grant Reference |  |
| PI Name |  |
| **Proposal Assessment details and feedback to applicant** | |
| **Panel Score for Research Excellence (1 – 3)** |  |
| **Panel Score for Capability to Deliver (1 - 3)** |  |
| **Please detail the panel’s justification for this score** | |
|  | |
| **Please detail any comments and recommendations made by the panel (including any adjustments) regarding cost effectiveness and resources requested, including e.g., staff time, equipment costs etc.** | |
|  | |
| **Please detail any reviews that you consider to be excellent or substandard. Please include the reviewer reference and the reason for this.** | |
|  | |
| **Additional comments.** Please add any other comments pertinent to the assessment of this proposal at the moderating panel meeting which have not been included above | |
|  | |

# Annex C

***Assessment of Equipment Requests for items of equipment costing between £10k and £138k (£115k ex VAT)***

The threshold for individual items to be classed as equipment is £10,000 (inclusive of VAT). In line with changes under [Simpler and Better Funding](https://www.ukri.org/apply-for-funding/how-were-improving-your-funding-experience/), requirements will be detailed in the call documentation on the funding finder. For Discovery or Strategic research calls, where the assessment focus is on the research excellence, information may be requested for those applications in the funding frame only. NERC will pay 100% for equipment on the DS Pushing the Frontiers grants.

Panel members are asked to comment explicitly on the viability of the arrangements described to access equipment needed for this project, and particularly on any university or third-party contribution to new purchases.

***Equipment Requests for all items above the upper threshold value***

Successful grants requesting single items of equipment costing more than £138k (£115k ex VAT) will be asked to submit a business case (up to 2 sides of A4 outlining the strategic need for the equipment). NERC will assess the strength of the strategic business case and ask for further information if required prior to awarding the grant.

* Is the provision of this equipment essential to the completion of the proposed work i.e., is the proposal feasible without the requested equipment?
* Are the costs quoted sensible and justified?
* Are their suitable arrangements detailed for the ongoing support and maintenance of the equipment?
* Have the host institution and/or other third-party collaborators made appropriate contributions?
* Is this an appropriate location and user base for this investment?
* Does this represent a coherent and effective package across this institution?
* Does this proposal effectively build on and properly utilise existing inventory?
* Have effective arrangements been demonstrated for extending the user base i.e., is there evidence that this will be used for more than one project?

The panel should provide NERC with a recommendation as to whether the request should be funded, whether the proposed contribution level is appropriate, whether the planned work can proceed without the equipment and any points of clarification needed from the applicants. Business cases supported by the panel may be further assessed against other business cases recommended for funding if the capital budgets available are exceeded. The advice provided by the panel will inform this process.