Standard Grants reviewer guidance for proposals with no Pathways to Impact

GEN1: General

These notes are intended to provide reviewers with specific guidance for the completion of the reviewer form. They should be read in conjunction with the reviewer principles. Specific guidance is available for each individual section of the report you are completing. A full justification for your assessment of the proposal should be provided. The prompts are given as a reminder of those issues that are likely to be most significant in determining the overall merit of a proposal. Please provide as full a response as you believe you are qualified to. You should note that your review will be sent back, unattributed, to the investigator, who will then be allowed the opportunity to comment on any factual errors and answer any specific queries you have raised.

We are committed to support the recommendations and principles set out by the San Francisco Declaration on Research Assessment (DORA). 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 purpose 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.

GEN2: Assessment methodology

You are asked to assess the proposal/report against a number of criteria. These criteria may vary according to the scheme or call that the proposal has been submitted to. Prompts are provided as a reminder of those issues that are likely to be most significant in determining the overall merit of a proposal. A full justification for your assessment of the proposal should be included in each section: please provide as full a response as you believe you are qualified to.

You are asked throughout to assess “the proposal” but please be clear that this means the ideas, concepts and approaches contained therein not the specific form of the document itself. The clarity of presentation may help or hinder your ability to review a proposal, so a comment to this effect would be appropriate, but this should not become in any form a competition in stylish writing. Elegance of presentation is not of itself an assessment criterion for an EPSRC grant!

There is no set way for answering questions on the form. However, prioritisation meetings generally find reviews most useful where they explicitly identify the main strengths and weaknesses in the proposal, while also giving a clear view on which should be accorded the greater significance and why. It is also a helpful technique to raise issues or concerns with the
proposal in the form of explicit questions for the applicants. This makes it easier for the panel to assess how complete and convincing the applicants' responses are.

**GEN3: Ethics**

It is important that EPSRC funds are used ethically and responsibly but this is mainly assured by requiring that universities have in place and operate appropriate ethical approval processes. Ethical considerations should not therefore normally be an assessment criterion and you should not take these into account when making your assessment.

If the proposal is in a subject or area that causes you serious personal concern, to the extent that you feel you cannot provide an objective review, then you should decline to review the proposal giving the reason as other, and stating “ethical issues” in the comment box. If you have a concern that the proposal raises ethical issues that have not been clearly identified or addressed, then you should raise this directly with EPSRC who will need to make a policy decision on how the proposal should be treated.

**GEN4: Linked proposals**

Where two or more proposals have been formally linked to form a single research project, you are requested to submit a single review covering the project as a whole.

**GEN5: Web links in the proposal**

The proposal you are asked to review includes a case for support. In some instances, the case for support may include a link to a web site containing information on the research proposed. Reviewers are not required to consider this additional information when providing comments on a proposal. If you do choose to look at this information, it is possible that your anonymity to the applicant will be compromised.

**EXC1: Quality/Excellence**

**Primary Criterion**

There is no simple definition of excellence. Proposals may build directly on prior work or 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.

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. Normally you might expect to see a plausible hypothesis with some basis within the published literature, and some clearly identified objectives that sensibly test that hypothesis. 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 their proposal in context 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, and the extent to which it would provide the UK with a unique capability. Note that the existence of competing groups elsewhere should not of itself be seen as a reason for downgrading a proposal.

The application should clearly demonstrate the methodology the applicants intend to use to attain their stated objectives, and you should comment on how clearly, they are described, how appropriate they are for the planned activity and their scientific or technical feasibility.

For multi-disciplinary applications please state which aspects of the application you feel qualified to assess.

Reviewers are requested to comment on the degree of research excellence of the proposal, making reference to:

1) The novelty, relationship to the context, timeliness and relevance to identified stakeholders;

Applicants are asked to set their proposal in context, in terms of the current state of knowledge and other work under way in the field.

The reviewer should consider:

- How competitive the proposed work is and how it compares to related international activity.
- Whether the applicants show how their research fits with activities elsewhere in the world; Whether they demonstrate an awareness of the context/landscape within which they operate.
- To what extent the research will provide the UK with a unique capability.
- Whether the applicant has presented the academic, industrial, policy, societal, or other relevant context clearly.
- Whether the applicant has demonstrated that the research is timely. What would happen if they didn’t undertake this research now?
- Whether the applicant has identified potential stakeholders and stated the relevance and possible benefits to the stakeholders.

2) The ambition, adventure, transformative aspects or potential outcomes;

There is no one format to an excellent research programme: the research could directly build on previous work, or it could take a leap forward; the applicant could present a programme where they are moving into a new discipline; or, the programme could bring together expertise and approaches from different disciplines, and in partnership with external organisations.

The reviewer should consider:

- Whether the proposal contains a clear vision, addresses a specific challenge or makes a step-change in its field.
- The progress this programme will deliver beyond current state-of-the-art.
- The intended outputs of the programme e.g. new ideas, tools, techniques, discoveries, and whether these are ambitious, but realistic.
- Whether the proposal details potential outcomes and clearly identifies any potential impacts.

3) The suitability of the proposed methodology and the appropriateness of the approach to achieving impact.
The applicant should have provided appropriate methodology to deliver the research and impact programme.

You should comment on how clearly this is described, how appropriate it is for the planned activities, their scientific and technical feasibility. As impact should be an embedded activity in the research programme, you should also assess the suitability and appropriateness of the methodology to realise impact in the proposal. Impact can take many forms over widely varying timescales. It might involve developing a commercial product or service, or creating a new technology, but could also be about improved medical or health care, contributions to national planning or social policy or engaging the public in the outputs of research.

Planning for activities that maximise the likelihood of any identified impacts occurring is a vital part of research. It is expected that most proposals will have the potential to deliver some form of non-academic impact.

The reviewer should consider:

- The ideas, concepts and approaches proposed and any particularly strong or weak examples within the programme.
- Whether the applicant has provided clear aims and objectives for the technical programme, and how they will monitor their achievements.
- Whether the research programme and associated impact activities have been co-designed with external stakeholders or users.
  - Does the proposal include objectives for impact related activities and are they appropriate to the research?
  - If not, is there a clear and realistic plan to target potential beneficiaries of the outputs and outcomes?
- Whether the proposal articulates a clear understanding of the context and needs of users
  - Does the proposed research programme consider how these needs will be met?
  - Does the proposal specify routine and novel ways to engage end users or partners to help realise impacts?
- Whether the applicant has considered Responsible Innovation in their research programme

The applicant is not expected to predict the impact of their research in terms of value, reach or significance, therefore assessors should not:

- Take the relative importance of identified impacts into account.

Seek to assess tangibility of deliverables, direct return on investment or detailed routes to exploitation. Impact is not synonymous with early exploitation.

**IMP1: Importance**

**Secondary Major Criterion**

Drawing upon what the applicant has said, reviewers should comment on:
• How the proposed research contributes to, or helps maintain the health of other research disciplines, contributes to addressing key UK societal challenges, contributes to current or future UK economic success and/or enables future development of key emerging industry(s)

• The extent to which the research proposed has the potential to meet national strategic needs by establishing or maintaining a unique world leading research activity (including areas of niche capability)

• How the research fits with and complements other UK research already funded in the area or related areas, including the relationship to the EPSRC portfolio and our stated strategy set out in “Our Portfolio”.

The extent to which each bullet point is addressed will depend on the nature of the research proposed. Reviewers should comment on how the research relates to EPSRC’s research areas and strategies (many projects will be relevant to more than one EPSRC research area) and complements EPSRC’s current portfolio. Information on the portfolio is available through the EPSRC’s Grants on the Web (GoW).

The reviewer form asks reviewers to:

please comment on the national importance of the research. Include how the research:

• Contributes to, or helps maintain the health of other disciplines contributes to addressing key UK societal challenges and/or contributes to future UK economic success and development of emerging industry(s)

• Meets national needs by establishing/maintaining a unique world leading activity

• Complements other UK research already funded in the area, including any relationship to the EPSRC portfolio

**PAT4 Removal of Pathways to Impact**

This secondary criterion has been removed as it will no longer be a separate assessment criterion on applications submitted after 1st March 2020.

**Proposals submitted before 1st March 2020**

If a Pathways to Impact document is present [either as separate document or, in exceptional circumstances, as an additional 2 pages to the case for support] reviewers should provide comments in the Impact section of the review form ] - following the old EPSRC guidance at [https://epsrc.ukri.org/funding/assessmentprocess/review/formsandguidancenotes/](https://epsrc.ukri.org/funding/assessmentprocess/review/formsandguidancenotes/)

**Proposals submitted after 1st March 2020**

If the proposal has been submitted on or after 1st March 2020 there will no longer be a separate Pathways to Impact section (either as a separate attachment or in exceptional cases as an additional 2 pages to the case for support) and impact activities should have been embedded within the case for support. Reviewers should assess the proposal using this new guidance, assessing:

• **The suitability of the proposed methodology and the appropriateness of the approach to achieving impact** as part of the EXC1 Quality criterion above.

• **Balance of skills of the project team, including collaborators** as part of APP7 Applicants and Partnerships criterion above.
Any resources requested for activities to either increase impact, for public engagement or to support responsible innovation as part of RES1 Resources and Management criterion above.

Reviewers should write ‘NOT REQUIRED’ in the Impact section of the reviewer form.

RES1: Resources and Management

Secondary Criterion

Applicants are required to identify all resources required to undertake the project, and to clearly justify the request. You should comment on how well this has been done and on the appropriateness of the resources requested. You should explicitly consider the amount of time being allocated to the project by the applicant(s) in this assessment.

You are asked to comment on the project plan and management arrangements which should be proportionate to the scale and complexity of the activity proposed.

Reviewers are requested to comment on the effectiveness of the proposed planning and management making reference to:

a) Any equipment requested, or the viability of the arrangements described to access equipment needed for this project, and particularly on any university or third-party contribution;

You should draw attention to any request that in your view has not been justified or conversely, if something is required but has not been identified. You should also comment on the suitability of arrangements for accessing resources other than through the grant, such as by collaboration with external groups. Your assessment should be based solely on the resources sought and not on the costs derived from them.

b) Any resources requested for activities to either increase impact, for public engagement or to support responsible innovation.

Applicants are required to identify all resources required to successfully accelerate the creation of impact, and to clearly explain the need for these in the justification of resources.

Please consider:

• The project plan and management arrangements for impact, public engagement or Responsible Innovation. Aspects of the project including timing, personnel, skills, budget, deliverables and feasibility should be appropriate and proportionate to the scale and complexity of the activity to be undertaken.

• If there is clear responsibility for the delivery of each activity/task.

• Have appropriate resources to deliver the activities been requested and justified.

If mechanisms to monitor/evaluate the planned activities have been built in.

ANI1: Animal research and human participation
Where the applicants have ticked any boxes confirming that the proposal involves either animal research or human participation then you are asked to comment specifically on any ethical considerations and particularly on whether ethical approval procedures have been complied with. You should also comment on any potential adverse consequences for humans, animals or the environment and whether these risks have been addressed satisfactorily in the proposal. It is particularly important that resources relating to these aspects are explicitly justified in terms of need, scale and nature of resource, so for example for animal research you should comment specifically on the need to use animals, the choice of species, the number of animals it is intended to use.

**APP7: Applicant and Partnerships**

**Secondary Criterion**

Reviewers are requested to comment on the applicant's ability to deliver the proposed project, making reference to:

1. **Appropriateness of the track record of the applicant(s):**
   - Whether the proposal demonstrates that the applicants have the expertise and capabilities to deliver the project.
   - The applicant and wider team's ability to deliver the project through to the creation of impact.

2. **Balance of skills of the project team, including collaborators**
   - Existing engagements with relevant end users and the appropriateness of any partnerships.

Whether the roles and responsibilities of all members of the team

**ASS1: Overall assessment**

You should provide your overall assessment of the proposal. Think of this as your report to the prioritisation panel, highlighting the strengths and weaknesses you identified in the individual questions and then making a clear and explicit recommendation about whether or not you believe the proposal warrants funding.

Not all questions carry equal weighting. Research Quality (excellence) will always be pre-eminent and no proposal can be funded without clearly demonstrating this aspect. National Importance should also be a major consideration in making your assessment. The weighting between the remaining aspects will depend on the specific nature of the particular proposal. You should indicate those aspects that you accorded higher or lower priority and why.

The reviewer form asks reviewers to summarise their view of the application.

**ASS2: Overall Assessment - Part assessment**

It may be that you feel you can only comment with authority on some specific part or component of a proposal, for example with a multidisciplinary project, or perhaps where there is a strong user-led element. In such a case you should identify those aspects that you are able to comment on, and then give your review on just those aspects. Different reviewers will have been asked to cover those aspects you cannot and the panel will then have the job of integrating these different comments. It is particularly important therefore that the panel have
clear advice on the merits of each component. Your comments, scores and confidence level should explicitly reflect your views on those aspects you can assess, and you are asked not to moderate these in any way to reflect those areas you feel you cannot comment on.

A risk with part assessment is that it will miss the added value of the overall project (the whole ideally being greater than the sum of the parts) so even where you can only comment with authority on one aspect it will be helpful to the panel to have your views on how compelling the arguments for the overall proposal are. Other issues you might also comment on are the uniqueness (or otherwise) of the collaboration, the value of the contribution of the component you can judge, and the significance of this in terms of future potential development in your own field.

**ASS3: Overall Assessment - Overall score**

You should assign a score using the six-point scale provided. This should reflect your overall conclusion, and should be consistent with your comments on the individual sections of your review taking account of all the assessment criteria and the various weightings you applied.

The reviewer form asks the reviewer to score the proposal:

1. This proposal is scientifically or technically flawed
2. This proposal does not meet one or more of the assessment criteria
3. This proposal meets all assessment criteria but with clear weaknesses
4. This is a good proposal that meets all assessment criteria but with minor weaknesses
5. This is a strong proposal that broadly meets all assessment criteria
6. This is a very strong proposal that fully meets all assessment criteria

**ASS4: Level of confidence**

To assist the prioritisation panel in reaching their overall conclusion on the proposal, and to help EPSRC in monitoring the effectiveness of its reviewer selection procedures, you are asked to indicate your confidence with regard to this review. This should report your own confidence, or otherwise, in being able to make your assessment, not your confidence in the success of the proposal if it were funded. If, for any reason, you feel that you are not able to assess the proposal, please advise EPSRC accordingly.

The reviewer form asks reviewers to score their confidence as low, medium or high.