

Established by the European Commission

# **European Research Council (ERC) Frontier Research Grants**

## **Guide for Peer Reviewers**

Applicable to the ERC Starting and Consolidator Grants (ERC Work Programme 2021)

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#### **IMPORTANT TO NOTE**

This Guide for Peer Reviewers is based on legal documents setting the rules and conditions for the ERC frontier research grants, in particular:

- the <a href="ERC Work Programme 2021">ERC Work Programme 2021</a>, which defines the objectives and principles of the ERC funding as well as the main features of the Calls for Proposals for the ERC Starting and Consolidator Grants including the call deadlines and the call budgets. It also specifies that a two-step peer review procedure will be applied following a single submission of a full proposal, and sets the framework for budgetary implementation, and the evaluation criteria;
- the European Research Council Rules of Submission, and the related methods and procedures for peer review and proposal evaluation relevant to the specific programme implementing Horizon Europe (hereinafter the <a href="ERC Rules of Submission and Evaluation under Horizon Europe">ERC Rules of Submission and Evaluation under Horizon Europe</a>), which establishes the rules applying to the submission of proposals and the related evaluation process, selection and award procedures relevant to the Specific Programme of Horizon Europe the Framework programme for Research and Innovation (2021-2027);
- the <u>Contract</u><sup>3</sup> or <u>Letter of Appointment</u><sup>4</sup> for ERC experts, which defines the relationship between the ERC Executive Agency (ERCEA) and the experts, and use of personal data by the ERCEA.

This document complements and does not supersede the aforementioned documents, which are legally binding and prevail in case of any discrepancies. This guide specifies in more details the peer review evaluation process, its inputs and outputs, and the responsibilities of the participating reviewers in the process.

The European Commission, the ERC Executive Agency or any person or body acting on their behalf cannot be held responsible for the use made of this document.

#### **Abbreviations**

**AC** - Associated Country

**CoG** - Consolidator Grant

**ERC** - European Research Council

**ERC WP** - ERC Work Programme

F&T portal – <u>Funding & Tenders</u> <u>Portal - Single Electronic Data</u> <u>Interchange Area (SEDIA)</u>

HI - Host Institution

PI - Principal Investigator

PM - Panel Member

**PEV** - Panel Evaluator

**SEP** - <u>Submission and Evaluation of</u> Proposals Sys<u>tem</u>

RR - Remote Referee

ScC - ERC Scientific Council

**StG** - <u>Starting Grant</u>

<sup>&</sup>lt;sup>1</sup> European Commission Decision C(2021) 930 of 22 February 2021

<sup>&</sup>lt;sup>2</sup> ERC Rules of Submission and Evaluation under Horizon Europe

The model expert contract was adopted by the European Commission Decision C(2017)1392 of 7 March 2017.

<sup>&</sup>lt;sup>4</sup> See Annex B of the ERC Rules of Submission and Evaluation under Horizon Europe.

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#### 1. EVALUATION OF ERC STARTING AND CONSOLIDATOR GRANT PROPOSALS

The ERC has the mandate to implement a bottom-up, investigator-driven approach to frontier research funding. The selection of proposals for funding by the ERCEA is a result of a panel-based, peer review evaluation with excellence as the sole criterion. The principal objective of this peer review system is to select the best science, independent of its discipline and of the particularities of the review panel structure.

The purpose of the ERC Starting and Consolidator Grants schemes is to empower individual researchers at different stages of their career and to provide the best setting to foster their creativity. These grant schemes support projects carried out by individual teams, which are headed by a single Principal Investigator.

Principal Investigators must demonstrate the ground-breaking nature, ambition and feasibility of their scientific proposal. The ERC research proposals are expected to take risks. It remains important, however, that the risk and how it will be managed be well thought through and addressed in the proposal.<sup>5</sup>

#### 1.1 PEER REVIEWERS

In the ERC Panel-based system, high-level scientists and scholars assess proposals and make recommendations for funding with the assistance of external specialists called Remote Referees. The evaluations are guided by the <u>Code of Conduct for ERC Evaluators</u>. The relationship between the ERCEA and the peer reviewers is defined by a signed expert contract for Panel Members, Panel Chairs and PEVs and a letter of appointment for Remote Referees (see <u>Contract</u> and <u>Letter of Appointment</u> for ERC Remote Referees of the ERC Rules of Submission and Evaluation under Horizon Europe).

#### CONFLICT OF INTEREST AND CONFIDENTIALITY RULES FOR PEER REVIEWERS

Peer reviewers should not be put in a situation in which their impartiality may be questioned, or where suspicion could arise that recommendations are affected by elements that lie outside the scope of the review. To that effect, a clear set of conflict of interest rules are in place<sup>6</sup>. Furthermore, peer reviewers should not engage in any contact with applicants and Host Institutions about the evaluation that they are participating in (neither during nor after the evaluation is over). Confidentiality is a contractual obligation and its breach can lead to the termination of the contract. The conflict of interest rules for Panel Members and Remote Referees are outlined in their expert contract and letter of appointment respectively (see <a href="Contract">Contract</a> and <a href="Letter of Appointment">Letter of Appointment</a> for ERC Remote Referees of the ERC Rules of Submission and Evaluation under Horizon Europe).

A list of conflicts of interests (see below) will be displayed in the on-line evaluation system, and the experts will be asked to confirm absence of conflict of interests when accepting to review and when submitting their individual review. Based on the information available, the Panel Chair shall avoid assigning proposals to reviewers who have a conflict of interest. Please note that it is the responsibility of the expert to declare the conflict of interest.

 $<sup>^{\</sup>rm 5}$  The personal data are processed in accordance with Regulation (EU) No 2018/1725.

<sup>&</sup>lt;sup>6</sup> The actions that the ERC might put in place in order to ensure the strict impartiality of evaluations are either to exclude the expert from participating in the peer review evaluation of the proposal concerned ('out of room' conflict of interest) or, if necessary, of all competing proposals ('out of call' conflict of interest), in accordance with the Code of Conduct annexed to the Expert Contract and the Letter of Appointment annexed to the ERC Rules of Submission under Horizon Europe.

#### A list of conflicts of interests displayed in the on-line evaluation system:<sup>7</sup>

I am PI or team member in the proposal (or any other proposal submitted to the same call).

I was involved in the preparation of the proposal (or any other proposal submitted to the same panel).

I would benefit directly should the proposal (or any other proposal submitted to the same panel) be accepted or rejected.

I am employed or contracted by the host or partner institutions of the proposal - or have been so in the past 3 years.

I am involved in the management of the host or partner institutions of the proposal - or have been so in the past 3 years.

I am collaborating scientifically - or have done so in the past 5 years - with the PI.

I have (or have had) a mentor/mentee relationship with the PI.

I have family ties or close personal relationship with the PI (or any PI submitting a proposal to the same panel).

I have family ties or close personal relationship with anyone who was involved in the preparation of the proposal (or any other proposal submitted to the same panel).

I have family ties or close personal relationship with anyone who would benefit directly from the proposal being granted (or from any other proposal submitted to the same panel being granted) or rejected.

I am (or was) in a relationship of scientific rivalry or hostility with the PI.

I am a National Contact Point or working for the Enterprise Europe Network (EEN).

I am a member of a programme committee.

I am in any other situation that would preclude the impartial review of the proposal or that could appear to do so.

#### **ROLES OF THE ERC PEER REVIEWERS**

ERC Panels An ERC Panel consists of a chairperson and between 11 and 16 Members. In exceptional and duly justified situations, the size of the Panels can be increased, for example in order to better balance the workload in areas with many submitted proposals and/or to appropriately cover all areas of research in a Panel. Evaluation Panels may be split at any stage/step of the evaluation in case of high number of applications. The Panel Chair and the Panel Members are selected by the ERC Scientific Council (ScC) on the basis of their scientific reputation and following the criteria set up by the ERC ScC Standing Committee on Panels. They have specialist as well as generalist competence and should not act as representatives of a single discipline or of a particular line of research. ERC Panels are expected to work as entities, reflecting broad visions embracing emerging fields, interand multi-disciplinary research.

<sup>&</sup>lt;sup>7</sup> Please note that the above-mentioned briefly outlined examples of the conflict of interest situations are fully described in the Code of Conduct annexed to the EU Experts Contract and to the Letter of Appointment for ERC Remote Referees.

**Panel Chairs and Panel Members** make a significant commitment of their time to the ERC peer review evaluation process, working individually and as a group. Each Panel meets twice to carry out a two-step review of proposals. The Panel as a whole takes decisions on the proposals recommended for funding and it is therefore crucial for the quality of the evaluation process that Panel Members are fully available for both Panel meetings<sup>8</sup>.

Panel Chairs and Panel Members perform the following tasks:

- 1. Familiarisation<sup>9</sup> with proposals of their Panel in preparation for the Panel meetings.
- 2. Individual remote review by electronic means of a subset of those proposals in preparation for the Panel meetings.
- 3. Participation in the Panel meetings.

ERC Panel Chairs and Panel Members are expected to contribute to the evaluation process by delivering concise and substantial reviews on the basis of their specialist expertise as well as their generalist competence, which should reflect openness to inter- and multi-disciplinary research perspectives, and by actively participating in the Panel meetings. Panel Chairs and Panel Members are also expected to review upon request proposals submitted to other Panels, if their expertise is sought. The Panels may decide to assign each proposal to a Panel Member having the special role of 'Lead Reviewer'. During the Panel meetings, the Lead Reviewer is in charge of introducing the proposal to the Panel for discussion and is responsible for drafting the panel comment at the end of the meeting.

**Panel Chairs** have additional tasks and responsibilities, while working in close collaboration with the ERCEA Scientific Officers of the concerned Panel:

- 1. To chair the Panel meetings.
- 2. To attend the Initial Panel Chairs' meeting in order to assess the response to the call for proposals and plan the work of the Panel accordingly.
- 3. To (re)allocate proposals to Panels. Although the initial allocation is based on the expressed preference of the applicant, when necessary, owing to the expertise required for their evaluation, proposals may be reallocated to different Panels at the beginning of the evaluation. This reallocation should be done by the agreement of the two Panel Chairs concerned in the interest of the applicant to ensure a competent and fair evaluation of the proposal.
- 4. To assign proposals to Panel Members (and to Remote Referees) for individual reviewing. Panel Chairs will pay particular attention to the rules on conflict of interest and exclusion of experts.
- 5. To ensure that the Panels produce all necessary deliverables of the required quality standards by the end of the Panel meetings, including the ranked lists and feedback to applicants.
- 6. To select experts for remote evaluation<sup>10</sup>.
- 7. To attend the Final Panel Chairs' meeting.

If a Panel Chair is unable to attend the Initial Panel Chairs' meeting, this task can be delegated to the Deputy Panel Chair<sup>11</sup>.

The names of the Panel Chairs are publicly available before the submission deadline of the call. The names of the Panel Members are published on the ERC website after the evaluation process is concluded and the final results have been communicated to all applicants.

<sup>&</sup>lt;sup>8</sup> Panel meetings may take place at ERCEA premises in Brussels or remotely, using teleconferencing IT tools.

<sup>&</sup>lt;sup>9</sup> Reading and assimilating briefing documents (including webcast briefings).

The ERC Scientific Council mandates the Panel Chairs. See footnote 32 of the ERC rules of Submission and Evaluation under Horizon Europe. The Panel Chair signs the list of experts nominated for remote evaluation. The approval by the Panel Chair is required before any remote expert is contacted and appointed.

<sup>&</sup>lt;sup>11</sup> At the beginning of the evaluation process, Panel Chairs appoint a Deputy Panel Chair among the Panel Members.

Panel Evaluators (PEVs) are Panel Members of other ERC calls and/or Panels and can be involved in both steps of the evaluation process. Panel Evaluators help the Panel Members at the step 1 remote evaluation, if their expertise is needed or in case of a large number of submitted proposals. When involved in the step 2 remote evaluation, they have been selected by the Panel due to their close expertise to the proposal, hence they act as specialists similarly to the Remote Referees. Panel Evaluators do not participate in panel meetings. Their remote reviewing work is remunerated.

**Remote Referees** In addition to the Panel Members (who act as generalists) and PEVs, the ERC evaluations rely on input from Remote Referees (usually two to five per proposal). They are scientists and scholars who bring in the necessary specialised expertise.

Remote Referees are non-paid experts who deliver their individual assessments by electronic means and do not participate in the panel meeting. Normally their involvement is limited to the step 2 of the evaluation process. Due to the specialised nature of the work, the demands on the time of individual Remote Referees are comparatively smaller (typically, they are asked to evaluate one to three proposals). The names of all Remote Referees are made public once a year for all ERC calls, after the final results have been communicated to all the applicants.

The assignment of Remote Referees to proposals is carried out under the responsibility of the Panel Chair in collaboration with the Panel Members and with the support of the ERCEA Scientific Officers. Any researcher of the international scientific community can act as a Remote Referee, subject to the approval and accreditation of the person in question and their acceptance of the conditions regarding confidentiality and conflict of interest.

All the reviews will then form the basis for the panel discussions.

#### Exclusion of independent experts at the request of an applicant 12

Applicants submitting proposals may request that up to three specific persons would not act as peer reviewers in the evaluation of their proposal. Such a request is made in the administrative forms at the time of proposal submission. If the persons identified for exclusion are independent experts participating in the evaluation, they may be excluded from the evaluation of the proposal as long as the ERCEA remains in the position to have the proposal evaluated by qualified experts. Such a request will be treated confidentially by the authorised staff of the ERCEA and the concerned Panel Chair. If the excluded expert is a Member of the Panel, they will be informed in confidence about the request concerning them. In the case of exclusion of the Panel Chair, the authorised staff of the ERCEA may consult the Deputy Panel Chair accordingly.

#### PANEL MEETING OBSERVERS

**ERC Scientific Council** may delegate its Members to attend panel meetings. The role of these delegates is to monitor the evaluation process, and ensure and promote coherence between panels<sup>13</sup>.

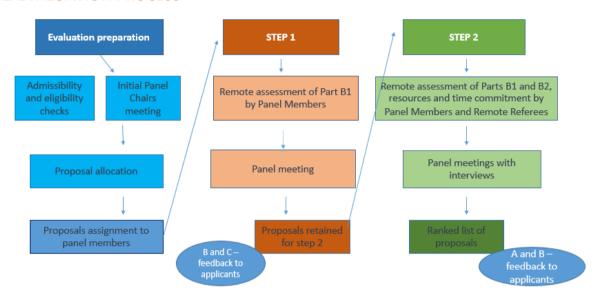
In conformity with the mandate of the ERC Scientific Council to carry out the scientific governance of the ERC, and in line with the role of the ERC Scientific Council foreseen in the ERC WP, ERC Scientific Council Members will abstain from influencing the results of the peer review evaluation process.

<sup>&</sup>lt;sup>12</sup> See section 3.3 of the <u>ERC rules of Submission and Evaluation under Horizon Europe.</u>

<sup>&</sup>lt;sup>13</sup>https://erc.europa.eu/sites/default/files/document/file/Rules Procedure and Code Conduct ERC Scientific Council.pdf

**Independent observers** Independent external experts may be appointed as observers to examine the peer review evaluation process from the point of view of its working and execution. The independent observers are external to the ERCEA and to the ERC Scientific Council. Their function and role is described in section 3.4 of the ERC Rules of Submission and Evaluation under Horizon Europe.

#### 1.2 EVALUATION PROCESS



#### **ADMISSIBILITY AND ELIGIBILITY CRITERIA OF ERC PROPOSALS**

The assessment of admissibility and eligibility<sup>14</sup> of submitted proposals is carried out by the ERCEA. Nevertheless, if an expert considers a proposal to be potentially inadmissible or ineligible during the evaluation process, they should report the case immediately to the ERCEA's Scientific Officers. In some rare cases, proposals may be declared inadmissible or ineligible during or even after the peer review evaluation process, as their non-compliance to admissibility and eligibility criteria can only be confirmed with some delay.

#### **INITIAL PANEL CHAIRS' MEETING AND BRIEFINGS OF EXPERTS**

Soon after the Call deadline and at the start of the proposals evaluation process, Panel Chairs are invited to the **Initial Panel Chairs' meeting**, where they are briefed on all relevant aspects of the evaluation processes and procedures, and assign the proposals to evaluators with the support of ERCEA Scientific Officers. Consequently, at the start of each Panel meeting, Panel Chairs and Panel Members are briefed by their ERCEA Scientific Officers on different aspects related to the evaluation rules and procedure.<sup>15</sup>

#### A TWO-STEP EVALUATION

The Starting and Consolidator Grant calls foresee a single submission of full proposals followed by a two-step evaluation, including interviews with the applicants.

<sup>&</sup>lt;sup>14</sup> For admissibility and eligibility criteria see p. 23 of ERC Work Programme 2021.

<sup>&</sup>lt;sup>15</sup> See section 3.6.1 – 'Briefings of the panels' in the <u>ERC Rules of Submission and Evaluation under Horizon Europe</u>.

At both evaluation steps, two main elements of the proposal are evaluated: the **Research Project** and the **Principal Investigator**. Each evaluation step includes a remote evaluation phase where individual reviewers work independently (see Section 2 – Individual Review) and deliver the reviews for each proposal assigned to them. The remote evaluation phase is performed through an online evaluation system, SEP Evaluation (see Section 3. Electronic tools used in evaluation).

After the remote phase, the panel meetings are organised. During these meetings, all the proposals assigned to this panel are discussed, scored and ranked. Each proposal is assigned to a Lead Reviewer (see Annex 2 – Role of the ERC Peer Reviewers), who introduces the proposal to the panel for discussion and is responsible for drafting the panel comment. The panels assess, score and rank the proposals on the basis of the individual reviews received and on the basis of the panel's discussion. At step 2, the assessment by the panels will also take into account the interview with the applicant.

The deliverables of any panel meetings include the following documents:

- 1. Ranked list of proposals
- 2. Panel comments approved by the panel (see paragraph below)
- 3. List of approved Remote Referees (only at step 1)
- 4. Panel report
- 5. Panel Recommendations (feedback and suggestions from the panel to the ERC Scientific Council)

The panel comment is the key element of the information provided to the applicants at the end of the evaluation. Once the scores and the ranked list of the proposals are decided, Lead Reviewers draft panel comments reflecting the main points of the panel discussion, and the Panel agrees in a plenary upon their final version. The panel comment details the decision taken by the panel based on the individual reviews, the panel discussion on the proposal and, at step 2, the interview with the applicant. The panel comment should clearly explain the reason(s), respecting the ERC evaluation criterion, which make the proposal to succeed or fail in the evaluation. Panel Members should also ensure that scientific recommendations made to applicants (which may or may not be taken into account) are clearly distinct from their budget recommendations to the ERCEA (which are binding). At each step, a number of proposals that achieved reasonable or good quality will be rejected. Such proposals may typically have positive comments from individual reviewers. However, they do not gather enough support from the panel when taking into account the budgetary constraint that determines the number of proposals that can be passed to the next step or funded. In such cases, the panel comments may reflect this aspect. In some cases, the panel may take a position that is different from what could be inferred from the comments/marks of the individual reviewers. For example, if the panel discussion reveals an important weakness in a proposal, the panel comment should document its reasons. The panel comment is a conclusive comment approved by the panel and should clearly explain the decision adopted by the panel.

Besides the recommendations on fundable proposals and their ranking, the most important output of the panel meetings is the feedback to applicants. The **Evaluation Report** of each evaluated proposal contains:

- 1. Recommendation of the Panel (A, B or C score) and the ranking range
- 2. Panel comment
- 3. Individual reviews (see Section 2)

#### STEP 1 Remote phase and Panel meeting

At step 1, Panel Members acting as generalists review remotely **Part B1 only** (the extended synopsis together with the PI's track record and CV)<sup>16</sup>. Panel Members write individual reviews for each proposal they have been assigned. These reviews are part of the evaluation report sent to the

 $<sup>^{\</sup>rm 16}$  If necessary, they can be assisted by Panel Evaluators - PEVs.

applicants with B- or C-scores<sup>17</sup>.

Concurrently, the reviewers are asked to suggest additional scientists/scholars (Remote Referees) who could assess the proposals, if passed to step 2, as specialists. They are nominated on the basis of their expertise for the specific proposal; any researcher from anywhere in the world can be nominated. The Panel Chairs are mandated by the Scientific Council to select independent external experts for remote evaluation on the basis of the specific expertise required by each proposal.

After the remote evaluation phase, the Panel Members take part in the step 1 meeting to discuss all proposals assigned to the panel and to establish the panel ranking. The proposals are ranked by the panel on the basis of the comments and panel scores received (A, B or C) and the panel's overall appreciation of their strengths and weaknesses. Each proposal receives one of the following panel scores:

Score A – the proposal is of sufficient quality to pass to step 2 of the evaluation;

Score B – the proposal is of high quality but not sufficient to pass to step 2 of the evaluation;

**Score C** – the proposal is **not of sufficient quality** to pass to step 2 of the evaluation.

Applicants whose proposals receive a **B** or **C** score in **step 1** of the evaluation may be subject to resubmission restrictions in future calls if specified in the applicable ERC Work Programme<sup>18</sup>.

Based on the Step 1 evaluation outcome, proposals within the budgetary cut-off up to three times the panel's indicative budget are retained for step 2.

At the end of the step 1 panel meeting, the Panel Chair examines all proposals passed to step 2 (A scored) and decides on the assignment of proposals to experts. ERCEA contacts the remote reviewers selected by the panel chairs for a more in-depth review during the step 2 remote evaluation.

Applicants who receive an **A** score are invited for an interview to present their proposal at the step 2 Panel meeting. Each panel decides on the exact format of its interviews (duration; number of slides allowed, if any; time allocated to the presentation and to the questions and answers session).

For each rejected proposal (**B** or **C** scored), a panel comment explaining the panel decision is written. The panel comment summarises discussion on the proposal among Panel Members at the step 1 meeting.

The applicants whose proposals have been rejected at step 1 receive an information letter, together with an Evaluation Report including the final panel score, the ranking range of their proposal among the proposals evaluated by the panel, the panel comment and the individual reviews given by each reviewer.

Applicants whose proposals are retained for the step 2 evaluation do not receive a step 1 Evaluation Report.

#### **STEP 2 Remote phase and Panel meeting**

At step 2, Panel Members and Remote Referees remotely and individually review the complete

<sup>&</sup>lt;sup>17</sup> The individual reviews may be subject to mild editing by the ERCEA, without altering their intended message, in order to remove any inappropriate, irrelevant or polemic remarks, remove information that would disclose the peer reviewer's identity, misleading recommendations, etc. These individual reviews may not necessarily be convergent - differences of opinion about the merits of a proposal are legitimate among evaluators, and it is potentially useful for an applicant to be informed of the various views.

<sup>&</sup>lt;sup>18</sup> See Restrictions on submission of proposals under "Admissibility and eligibility criteria" of the <u>ERC WP 2021</u>.

version of the retained proposals - Parts B1 and B2, the resources (including the budget table) and the time commitment extracted from Part A - providing generalist and specialist reviews respectively. After this remote evaluation phase, the panel meets for the step 2 panel meeting, at which interviews with the applicants take place. The assessment by the panels will take into account the interview, as well as the individual reviews and the panel discussion. At the end of the meeting, the panel establishes the final panel ranking and each proposal receives one of the following panel scores:

- Score A the proposal fully meets the ERC's excellence criterion and is recommended for funding, if sufficient funds are available<sup>19</sup>;
- **Scored B** the proposal meets some but not all elements of the ERC's excellence criterion and is **not recommended for funding**.

#### Review of the proposal budget

At step 2, the panel analyses the budget, its justification and the requested contribution of the proposals, which are being considered for funding. Recommendations for reduction of the requested grant may be made if some expenses (excluding salary costs) are not considered fully justified or needed (the analysis is done case-by-case, cuts across-the-board are not allowed). Such recommendations must be documented and explained in the panel comments for each proposal concerned, based on an analysis of the resources requested and necessary to carry out the work.

After the step 2 meetings have finished for all panels, the results from the different panels are consolidated into one call ranking list based on the 'normalised accumulated budget'<sup>20</sup>. The highest ranked **A** scored proposals are invited for grant preparation until the entire call budget is spent. The remaining proposals recommended for funding may be funded by the ERC if more funds become available.

All applicants whose proposals have been evaluated at step 2 receive an information letter, together with an Evaluation Report including the ranking range of their proposal among the proposals evaluated by the panel, the panel score, the panel comment and the individual reviews given by each reviewer.

#### **RANKING METHODOLOGY**

Panels may decide to start going through a process of successive elimination stages, where the depth of discussion increases as the number of proposals in competition decreases. Panels may also decide to discuss the proposals in a neutral or random order.

#### THE POSSIBLE USE OF A VOTING SYSTEM

While consensus decisions are strongly preferred, panels may expedite their ranking process by the use of a voting system (e.g. a majority vote on one or more proposals, with each Panel Member having one vote per proposal being considered). A Panel Chair/ Member can neither be involved in a discussion nor vote for a proposal if under a conflict of interest.

<sup>19</sup> Additional funds can become available in cases such as the failure of the granting procedure to projects, the withdrawal of proposals, budget savings agreed during the granting procedure, or the availability of additional budget from other sources.

<sup>&</sup>lt;sup>20</sup> The recommended normalised accumulated budget (NAB) for every Panel is calculated by summing the normalised budget (recommended budget divided by panel's indicative budget) of each proposal from the top position down to the actual position of the given proposal. Thus, the NAB takes into account the position of the proposal in its panel ranking, the recommended budget of the proposal and of all proposals ranked higher in the same panel and the indicative budget of the panel.

#### 2. INDIVIDUAL REVIEW

#### 2.1 EVALUATION CRITERION

**Scientific excellence is the sole criterion of evaluation** and is at the core of the peer review evaluation process. It is applied to the evaluation of both the ground-breaking nature, ambition and feasibility of the Research Project, and the intellectual capacity, creativity and commitment of the Principal Investigator.

The feasibility of the scientific approach is assessed at step 1. The detailed scientific approach (methodology, timescales and resources included) is assessed at step 2. The detailed elements applying to the excellence of the Research Project and the Principal Investigator(s) for each step and their interpretation are described in the applicable <a href="ERC WP">ERC WP</a>. In evaluating the applicant's track-record preprints, properly referenced and with the DOI or linked to a preprint, may also be taken into consideration. All assessments on proposals must be made against the evaluation criterion and its detailed elements alone.

No other criteria than the evaluation elements applying to the Evaluation Criterion defined in the ERC Work Programme must be considered when evaluating a proposal. Evaluation questions are listed in Annex 1.

<u>Please note that the incorrect application of the evaluation criterion or the application of inexistent or irrelevant criteria for the step concerned is considered a procedural error, which may justify a re-evaluation of the proposal.</u>

#### 2.2 HOW TO EVALUATE A PROPOSAL – DOS AND DON'TS

Individual reviews are written prior to step 1 and 2 panel meetings. The <u>ERC Rules of Submission and Evaluation under Horizon Europe</u> require that each proposal shall be reviewed by at least three peer reviewers.

During the individual remote review evaluation, **reviewers evaluate and mark** the proposals according to (1) Research Project and (2) Principal Investigators as follows:

- Providing a succinct explanatory comment for the **Research Project**.
- Indicating to which extent the reviewer agrees with the statements related to the excellence
  of the Principal Investigator and providing an optional explanatory comment for the
  Principal Investigator.
- Awarding marks for the two main elements of the proposal the Research Project and the
  Principal Investigator. Please note that Remote Referees award a qualitative three-option
  funding recommendation on the proposal: highly recommended, recommended, or not
  recommended.



#### Marks

The marks should be consistent with the comments. While comments are critically important, the individual numerical marks are input to the panel meeting and may serve as a starting point for the panel discussions if the Panel so decides. Marks are awarded in integers or halves, ranging from 1 (non-competitive) to 5 (exceptional). The use of the full range is, in general, recommended. These numerical marks are not communicated to the applicants; only the final panel score expressed as A, B or C is provided in the Evaluation Report.

#### Quality standards of individual reviewers' comments

All the individual reviewers' comments are included in the Evaluation Report and therefore reproduced in the feedback to applicants. Reviewers should therefore take care about the formulation of comments in their individual assessments.

Please note that the individual reviews should be of good quality, genuine, succinct but substantial. They should also be impeccably polite. Comments should take the form of a statement and explanation of key strengths and weaknesses of the proposal, in light of the evaluation criterion.

#### Reviewers are obliged to observe the following guidelines:

- Provide substantial, explanatory comments; avoid comments that merely give a description or a summary of the proposal.
- Use dispassionate, analytical and unambiguous language.
- Use grammatically correct, complete, clear sentences with no jargon.
- Critical comments should be constructive.
- Make sure that comments are in line with the marks/funding recommendation given, and avoid referring to them in the comment's narrative.
- Avoid self-declaration of insufficient expertise (personal or panel) or non-confidence in the proposal.
- Avoid reference to the applicant's age, nationality, gender, or personal matters.
- Avoid dismissive statements about the Principal Investigator, the proposed science, or the scientific field concerned.
- Be aware of unconscious bias and gender issues: do not penalise applicants that have not followed conventional research career path (e.g. mobility, independence, career breaks...)<sup>21</sup>.
- Avoid any comments on PI's past, current or future Host Institution; its standing is not an ERC evaluation criterion.
- Note that societal impact is not an ERC evaluation criterion.
- Avoid any direct comparison with any other proposals.
- Avoid any reference or comparison with previous assessments (in case of a resubmitted proposal).
- Avoid copy-paste from the proposal and/or from individual reviews of other experts.
- Avoid comments on the ethical aspects of the proposal. Ethical clearance is performed by the ERCEA for all fundable proposals.
- Avoid recommendations on budget at step 1 evaluation (assessment of budget is done at step 2 evaluation).
- Avoid recommendations on salaries (they depend on national and institutional rules and customs, and are eligible costs).
- Provide proper justification in case a budget cut is recommended (assessment of proposal's budget at step 2 evaluation).

#### The efficiency of meetings and preparation

The ERC aims to have high efficient panel meetings. For this reason, preparatory work is carried out in advance of each meeting by electronic means:

- Panel Members assess a subset of proposals evaluated in the panel.
- Panel Members familiarise themselves with all proposals in the panel in order to make high-quality recommendations.

<sup>&</sup>lt;sup>21</sup> Unconscious bias apply equally, regardless of whether the evaluators are male or female. Whereas possible gender biases may be rooted in the institutions or the community where the applicants may come, a wealth of evidence points at possible introduction of unconscious biases in evaluation processes (https://www.youtube.com/watch?v=g978T58gELo). Experts are requested to be vigilant and aware so such elements are not introduced in the evaluation process.

- Before the Step 2 meeting, Panel Members prepare for the interviews by identifying the proposals' strengths, weaknesses and concerns raised in the individual reviews delivered prior to the Step 2 meeting.

#### **Expected Reviewers' confidentiality**

During the individual remote review process, there shall be no discussions of the proposals between reviewers. Moreover, during the remote evaluation of proposals (i.e. before panel meetings), Panel Members should not disclose the proposals assigned for their evaluation to other experts. When a Panel Member considers that they have insufficient expertise to evaluate any of the assigned proposals from a generalist perspective, they should immediately inform the ERCEA Scientific Officers and the Panel Chair, so that the proposal can be reassigned to another reviewer.

#### 2.3 APPROACH TO INDIVIDUAL PROPOSALS

Research proposals of a multi- and interdisciplinary nature are strongly encouraged throughout the ERC's research grants. Proposals of this type are evaluated by the ERC's primary panels, which are per se multidisciplinary, with the appropriate external expertise where necessary.

The initial choice indicated by the applicant when submitting their proposal is paramount in determining the panel under which a proposal is evaluated. The broad definition of the panels allows many interdisciplinary proposals to be treated within a single panel (mainstreaming of interdisciplinarity). During the evaluation process, potentially interdisciplinary proposals are flagged as such, and the panel may request additional reviews from appropriate members of other panel(s). An applicant who considers their proposal as interdisciplinary (i.e. cross-panel or cross-domain) can also explicitly indicate a second panel in the application form. The responsibility to ensure that cross-panel/cross-domain proposals receive equal and fair treatment primarily rests with the panels to which they are allocated.

#### 3. ELECTRONIC TOOLS USED IN EVALUATION

At both step 1 and step 2 remote evaluation, experts work individually using the on-line Commission's Evaluation tool (SEP).

Useful information on SEP are reported below:

Quick Guide on SEP Evaluation tool can be found here:

https://ec.europa.eu/research/participants/data/support/expert/expert\_evaluation\_user\_manual.pdf

Detailed how-to procedures and instructional video presentations on the usage of the SEP evaluation tool are available on the following location under 'Expert Evaluation of Proposals': https://webgate.ec.europa.eu/funding/display/ECResearchGMS/Experts

Information on EU Login is available here

 $\frac{https://webgate.ec.europa.eu/funding/display/ECResearchGMS/Logging+in+to+the+Evaluation+Tool+through+EU+Login}{+through+EU+Login}$ 

#### **ANNEX 1 – EVALUATION FORM**

#### 1. Research Project

#### Ground-breaking nature, ambition and feasibility

#### **Starting and Consolidator**

#### Ground-breaking nature and potential impact of the research project

To what extent does the proposed research address important challenges?

To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development between or across disciplines)?

To what extent is the proposed research high risk-high gain (i.e. if successful the payoffs will be very significant, but there is a high risk that the research project does not entirely fulfil its aims)?

#### Scientific Approach

To what extent is the outlined scientific approach feasible bearing in mind the extent that the proposed research is high risk/high gain (based on the Extended Synopsis)?

To what extent are the proposed research methodology and working arrangements appropriate to achieve the goals of the project (based on the full Scientific Proposal)?

To what extent does the proposal involve the development of novel methodology (based on the full Scientific Proposal)?

To what extent are the proposed timescales, resources and PI commitment adequate and properly justified (based on the full Scientific Proposal)?

#### 2. Principal Investigator

#### Intellectual capacity and creativity

#### **Starting and Consolidator**

To what extent has the PI demonstrated the ability to conduct ground-breaking research? To what extent does the PI have the required scientific expertise and capacity to successfully execute the project?

To what extend does the PI provide evidence of creative independent thinking?

#### ANNEX 2 – PANELS: ALLOCATIONS, INDICATIVE BUDGET AND STRUCTURE

#### **ALLOCATION OF PROPOSALS TO PANELS**

The applicant submits the proposal to the panel, which is most relevant for the evaluation of the proposed research ('primary review panel'). If the applicant considers the proposal cross-panel/cross-domain, they may indicate a second relevant panel ('secondary review panel'). In this case, the cross-panel or cross-domain nature of the proposal has to be explained and justified in Part B1. The applicant selects up to four ERC keywords according to the <a href="ERC Panel Structure">ERC Panel Structure</a> to best describe the field(s) of research covered by their proposal.

The initial allocation of proposals to panels is based on the expressed preference of the applicant. However, proposals may be reallocated to a different panel with the agreement of both Panel Chairs concerned. This is done when necessary and solely due to the expertise required for the evaluation. Such decisions are finalised at the Initial Panel Chairs' meeting.

Proposals that fulfil the admissibility and eligibility criteria are evaluated by the panel to which they have been allocated. The Panel Chairs assign proposals to reviewers.

If the proposal is well within the panel's scope and no additional expertise is necessary, at step 1 it will be assigned for review only within the panel. However, if the panel considers that the proposal is cross-panel or cross-domain and additional expertise is necessary for its evaluation, it may request additional reviews by appropriate members of other panel(s).

#### **PANEL'S INDICATIVE BUDGET**

The <u>ERC WP</u> establishes that the call budget is split among the panels in proportion to the budgetary demand of the proposals allocated to each panel. This important principle ensures comparable success rates across the individual panels regardless of how many proposals each panel evaluates.

#### **ERC PANELS**

#### **Physical Sciences & Engineering**

- **PE1 Mathematics -** all areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics
- **PE2** Fundamental Constituents of Matter particle, nuclear, plasma, atomic, molecular, gas, and optical physics
- **PE3** Condensed Matter Physics structure, electronic properties, fluids, nanosciences, biological physics
- **PE4** Physical and Analytical Chemical Sciences analytical chemistry, chemical theory, physical chemistry/chemical physics
- **PE5 Synthetic Chemistry and Materials -** new materials and new synthetic approaches, structure-properties relations, solid state chemistry, molecular architecture, organic chemistry
- **PE6** Computer Science and Informatics informatics and information systems, computer science, scientific computing, intelligent systems
- **PE7** Systems and Communication Engineering electrical, electronic, communication, optical and systems engineering

- **PE8** Products and Processes Engineering product and process design, chemical, civil, environmental, mechanical, vehicle engineering, energy processes and relevant computational methods
- **PE9** Universe Sciences astro-physics/-chemistry/-biology; solar system; planetary systems; stellar, galactic and extragalactic astronomy; cosmology; space sciences; astronomical instrumentation and data
- **PE10 Earth System Science** physical geography, geology, geophysics, atmospheric sciences, oceanography, climatology, cryology, ecology, global environmental change, biogeochemical cycles, natural resources management
- **PE11** Materials Engineering advanced materials development: performance enhancement, modelling, large-scale preparation, modification, tailoring, optimisation, novel and combined use of materials, etc.

#### **Life Sciences**

- **LS1 Molecules of Life: Biological Mechanisms, Structures and Functions -** for all organisms: molecular biology, biochemistry, structural biology, molecular biophysics, synthetic and chemical biology, drug design, innovative methods and modelling
- LS2 Integrative Biology: From Genes and Genomes to Systems for all organisms: genetics, epigenetics, genomics and other 'omics studies, bioinformatics, systems biology, genetic diseases, gene editing, innovative methods and modelling, 'omics for personalised medicine
- **Cellular, Developmental and Regenerative Biology** for all organisms: structure and function of the cell, cell-cell communication, embryogenesis, tissue differentiation, organogenesis, growth, development, evolution of development, organoids, stem cells, regeneration, therapeutic approaches
- **Physiology in Health, Disease and Ageing** organ and tissue physiology, comparative physiology, physiology of ageing, pathophysiology, inter-organ and tissue communication, endocrinology, nutrition, metabolism, interaction with the microbiome, non-communicable diseases including cancer (and except disorders of the nervous system and immunity-related diseases
- **LS5** Neuroscience and Disorders of the Nervous System nervous system development, homeostasis and ageing, nervous system function and dysfunction, systems neuroscience and modelling, biological basis of cognitive processes and of behaviour, neurological and mental disorders
- **LS6 Immunity, Infection and Immunotherapy -** the immune system, related disorders and their mechanisms, biology of infectious agents and infection, biological basis of prevention and treatment of infectious diseases, innovative immunological tools and approaches, including therapies
- **LS7 Prevention, Diagnosis and Treatment of Human Diseases -** medical technologies and tools for prevention, diagnosis and treatment of human diseases, therapeutic approaches and

- interventions, pharmacology, preventative medicine, epidemiology and public health, digital medicine
- **LS8 Environmental Biology, Ecology and Evolution -** for all organisms: Ecology, biodiversity, environmental change, evolutionary biology, behavioural ecology, microbial ecology, marine biology, ecophysiology, theoretical developments and modelling
- **LS9 Biotechnology and Biosystems Engineering** biotechnology using all organisms, biotechnology for environment and food applications, applied plant and animal sciences, bioengineering and synthetic biology, biomass and biofuels, biohazards

#### **Social Sciences & Humanities**

- SH1 Individuals, Markets and Organisations economics, finance, management
- SH2 Institutions, Governance and Legal Systems political science, international relations, law
- **SH3** The Social World and its Diversity sociology, social psychology, social anthropology, education sciences, communication studies
- **SH4** The Human Mind and Its Complexity cognitive science, psychology, linguistics, theoretical philosophy
- SH5 Cultures and Cultural Production literary studies, cultural studies, study of the arts, philosophy
- SH6 The Study of the Human Past archaeology and history
- SH7 Human Mobility, Environment, and Space human geography, demography, health, sustainability science, territorial planning, spatial analysis