FCT Fundação para a Ciência e a Tecnologia MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR



Guide for Peer Reviewers

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FCT Fundação para a Ciência e a Tecnologia ministério da ciência, tecnologia e ensino superior

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1. Introduction

About FCT

Fundação para a Ciência e a Tecnologia, I.P. (FCT), the Portuguese foundation for science and technology, is the public agency responsible for implementing the Portuguese government's Science and Technology policy.

FCT started its operations in August 1997, succeeding the previous equivalent agency, JNICT, created in the 1980s.

FCT's mission is to continuously promote the advancement of scientific and technological knowledge in Portugal, exploring opportunities to attain the highest international standards in the creation of knowledge, in any scientific or technological domain, and to stimulate the diffusion of that knowledge and its contribution to improve education, health, the environment, and the quality of life and well-being of citizens.

This mission is mainly accomplished through the funding, subsequent to peer review, of applications submitted by institutions, research teams or individuals, in public calls. Funding is also awarded through cooperation agreements and other forms of support, in partnership with universities and other public or private institutions, in Portugal and abroad.

FCT's main roles are:

- To promote, finance, monitor and evaluate science and technology institutions, programmes, projects and training of human resources;
- To promote and support infrastructure for scientific research and technological development;
- To promote the diffusion of scientific and technological culture and knowledge, especially when relevant for educational purposes in close collaboration with the *Ciência Viva* agency;
- To stimulate the updating, interconnectivity, strengthening and availability of science and technology information sources.

FCT funds all areas of knowledge, including exact, natural and health sciences, engineering, social sciences and humanities.

Joint Activities Programmes (PAC)

Funding of Joint Activities Programmes is based on peer review of applications that have been submitted online, in an open call. Applications were submitted in the four scientific domains corresponding to the Scientific Councils of FCT:

- Life and Health Sciences;
- Exact Sciences and Engineering;







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- Natural and Environmental Sciences;
- Social Sciences and the Humanities.

Applicants identified, from the provided list (<u>OECD's revised Field of Science and Technology - FOS, adapted to Portugal</u>), the primary and secondary scientific areas of the programme. The applicants also indicated four keywords that most accurately reflect the scientific content of the proposed programme.

The call was launched by Portugal 2020 (www.portugal2020.pt) through a public announcement (Notice of the Call – Aviso Nº 03/SAICT/2015) outlining the required features of the applications and the evaluation criteria to be applied. The rules governing the applications and the accepted programmes are specified in the public document "Regulamento Específico do Domínio da Competitividade e Internacionalização (RECI)", published through Portaria n.º 57-A/2015, 27 February, modified by Portaria n.º 181-B/2015, 19 June and Declaração de Retificação n.º 30-B/2015, 26 June.

FCT is responsible for the evaluation of the scientific merit of the programme proposals submitted to this call. The respective Managing Authority (COMPETE2020 or relevant regional authority) is responsible for the final decision. **Evaluation of the applications will be performed by a multidisciplinary panel**.

2. Framework and Identification of Goals and Priorities of PAC

This call aims to support Joint Activities Programmes (PAC), involving investments of structuring dimension, of thematic and multidisciplinary nature, submitted by consortia of at least three entities of the Portuguese R&I system established for this purpose. The applications are expected to contribute to address specific societal challenges or, if appropriate, to address gaps in the scientific and technological system, either at national or regional levels.

These Joint Activities Programmes should be organised as a set of coherent and concerted actions in line with the priorities identified in the R&I strategy for Smart Specialisation (RIS3). The Work Plans are not restricted to any scientific domain as long as they are in accordance with the priority domains associated to the national and/or regional strategies of R&I for Smart Specialisation (national and regional RIS3).

The PAC should build on existing expertise among the applicants, creating new synergies that contribute to the advancement of knowledge in specific scientific areas or domains.

This call covers the following regions in mainland Portugal: North, Centre, Lisbon, Alentejo and Algarve.







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3. Type of Projects and of Application

The partnerships set up for the current call are required to incorporate institutions belonging to R&D Units, with mandatory relevant roles in the work programmes, built around a consistent and coherent approach that should not, in any way, overlap with the strategic activity plans of the R&D Units, already supported by FCT (these are available to the reviewers).

Each consortium will need to involve R&D Units of, at least, 3 distinct proponent¹ institutions (this will be verified by FCT).

4. Specific Recommendations of this Call

The projects to be funded in this call should meet the following specific admittance conditions:

- a. Involve a total investment equal to or greater than 1 million euros and less than or equal to
 2.5 million euros;
- b. Have a maximum duration of 36 months;
- c. Be carried out by R&D Units graded "Good" or higher in the Evaluation Exercise of R&D Units, concluded in 2014, by FCT. One of the R&D Units needs to have been graded as "Excellent" or higher (to be verified and validated by FCT);
- d. The grades of the R&D Units composing the consortia are not evaluation criteria, being only used for eligibility purposes.
- e. Do not overlap with the strategic activity plans of the R&D Units, funded by FCT in the scope of the call <u>Evaluation Exercise of R&D Units concluded in 2014</u> or with the Integrated Programmes funded by POCI and/or by PO Lisbon;

5. Selection Criteria

Scoring of the project proposals, towards their selection and ranking, is based on the indicator **Merit** of the Project (MP), which is determined by the following criteria:

- A. Quality of the Project
- B. Impact of the Project (to be assessed by FCT)

The Merit of the Project is calculated as MP = 0.7 A + 0.3 B.

¹ A proponent institution is the lead institution of the research unit specified in the Evaluation Exercise of R&D Units concluded in 2014 by FCT.









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Criteria A and B are scored using a 5-point scale system (1 – minimum; 5 – maximum). The final score of MP is rounded to two-decimal places.

For a proposal to be eligible, the following minimum scores are required:

Criterion A – 3.00 points;

Criterion B -3.00 points;

MP - 3.00 points

6. Evaluation Criteria

As indicated in Section 5, scoring of the proposals towards their selection and ranking is based on the calculation of the Merit of the Project (MP = 0.7 A + 0.3 B), where **A** is the **Quality of the Project** and **B** is the **Impact of the Project**.

A. Quality of the Project

This criterion aims to assess the scientific and technological merit of the proposal and of the team, the reasonableness of the budget and the management and implementation capacity, through the following sub-criteria:

- A1 Scientific and technological merit of the proposal
- A2 Scientific merit of the research team
- A3 Quality of the work plan
- A4 Reasonableness of the budget

The **Quality of the Project** is calculated as:

A = 0.35 A1 + 0.30 A2 + 0.20 A3 + 0.15 A4

Please note that, although a 5-point scale is used for scoring criterion A, due to a limitation of the platform a 50-point scale is available for scoring the four sub-criteria (A1, A2, A3 and A4). Therefore, values between 10 (minimum) and 50 (maximum), with 5-point increments, should be used in the respective scoring boxes.

According to item e. (Section 4, above), proposals submitted to this call may not overlap with the strategic activity plans of the R&D Units, already funded by FCT in the scope of the call Evaluation Exercise of R&D Units, concluded in 2014. For this reason, information regarding these strategic activity plans will be made available to reviewers. In case of considerable overlap of the proposed programme with the strategic activity plan of the respective R&D Units, the application should not be proposed for funding.







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The application of above sub-criteria (A1 to A4) shall take into account, among other considerations, the following:

A1. Scientific and technological merit of the proposal

- Relevance and originality of the proposed project (based on the state-of-the art of a given scientific area and previous work performed by the applying team);
- ii.) Methodology adopted for carrying out the proposed project;
- iii.) Expected results and their contribution to scientific and technological knowledge;
- iv.) Extent to which the programme brings and combines expertise from the members of the consortium in a coherent approach;
- v.) Resulting publications and articles;
- vi.) Contribution towards promoting and disseminating science and technology;
- vii.) Production of knowledge that can contribute to benefits to society or to the business sector.

A2. Scientific merit of the research team

- Scientific productivity of the team, evaluated according to criteria that are internationally accepted by the different scientific communities (ranging from references to publications and citations of published work, as used by the exact, natural and engineering sciences, to performance and artistic work in the arts, or monographs and books in the humanities and social sciences);
- ii.) Abilities and skills to adequately execute the proposed project (team configuration);
- iii.) Ability to involve young researchers in training;
- iv.) Degree of internationalisation of the team;
- v.) Degree of success of the team members in previous projects.

A3. Quality of the work plan

- i.) Organisation of the project in terms of the proposed objectives and resources (duration, equipment, size of the team, institutional and management resources);
- ii.) Organisation and work environment, with special focus on the adequacy of the research team's critical mass to perform the proposed objectives.
- iii.) Nature of the institutional commitment of the several participants to support the programme (e.g., recruitment and hiring of researchers with experience in the areas of the programme; acquisition of equipment that is crucial for the activities of the programme; provision of laboratory space or other similar resources, specifically dedicated to the proposed activities of the programme).







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A4. Reasonableness of the budget

- i.) Adequacy of the proposed budget to accomplish the proposed objectives;
- ii.) Institutional resources (technical-scientific, organisational and managerial) of the participating entities.

7. Evaluation Process and Procedures

General Information

- The Quality of the Project (criterion A) will be assessed by a multidisciplinary evaluation panel and remote reviewers, appointed by the FCT Board of Directors.
- Each application will be remotely and individually evaluated by two remote reviewers and three panel members. One of the panel members will be appointed as the first reader of the application.
- All experts will be of acknowledged competence in the scientific areas of the applications to be evaluated, and cannot be affiliated with Portuguese institutions or have current or scheduled collaborations with any Portuguese institution.
- The panel is headed by the Panel Chair and its composition will be published on the FCT website after the panel meeting.
- The identities of the remote reviewers will not be made public.
- Distribution of the applications to panel members will take into consideration any Conflict of Interest, as well as the matching of scientific competences.
- The first time a reviewer logs into the evaluation web page, he/she has to sign a Confidentiality Statement.
- Prior to accessing each application, the reviewer has to declare whether or not a conflict of interest is identified for that particular application.
- During the panel meeting, all applications shall be discussed. A ranked list and a panel evaluation report (for each application) will be produced.
- The panel will issue a panel meeting report on its activities.
- There is an allocated FCT team for the evaluation panel, which will act as the contact point for the reviewers.







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Evaluation Stages

Evaluation of the research applications involves the following stages:

Constitution of the Evaluation Panel

- The constitution of the evaluation panel will take into consideration the number of applications for each research area/sub-area, a good gender balance and a fair geographic and institutional distribution of evaluators.
- A chair will be invited to head the evaluation panel. The panel chair will be in charge of the
 quality control of the individual and panel evaluation reports, steering of the panel
 meeting and communication of the results of the discussions to the Board of Directors of
 FCT. The chair is asked to keep the evaluation process within the defined timeframe and
 contact panel members in case of any delays. Should a Conflict of Interest be identified
 during the evaluation process, the panel chair is expected to support the FCT team in its
 resolution.
- The panel members might be asked to give support to FCT during the period spanning the evaluation meeting and the final decision (*e.g.*, analysis of potential appeals of scientific nature presented by applicants).

Pre-Meeting Activities (Individual Reviews)

- Each application will be remotely and individually evaluated by **three panel members** and **two remote reviewers**.
- Each of the five reviewers must submit and lock an individual evaluation for each assigned application in the Individual Evaluation Form.
- For each application, one of the panel members will be designated as **first reader**. Based on the five individual reviews, the first reader will prepare the **Compilation (Pre-Consensus) Report** of the application before the panel meeting. This report must be submitted and locked up to two weeks before the panel meeting.
- Reviewers must submit their assessment for each proposal in the **Individual Evaluation Form**, including:
 - The rating and comments for each of the four evaluation sub-criteria (A1, A2, A3 and A4);
 - A summary of the evaluation;
 - A comment on the total and Human Resources requested budgets;
 - Confidential comments to other panel members, if necessary.







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- The assessment should take into account the following guidelines:
 - The strengths and weaknesses for each sub-criterion must be identified;
 - The <u>explanatory comment</u> for each sub-criterion should be <u>succinct but substantial</u>; this comment should address the relative importance of the criterion and the extent to which the application actually meets the criterion;
 - <u>Comments</u> should also be impeccably polite; if so decided by the panel, the comments may be reproduced totally or partially in the feedback to applicants.
 - The <u>overall comment on the proposal</u> should be a global judgement of the reviewer on the application, stating conclusions regarding the research work and the organisation of the project;
 - Confidential comments to the evaluation panel may be provided.
- Both ratings and comments are critically important. The individual review ratings and comments are the starting point for the panel discussions and for the panel final rating.

Meeting Activities (Panel Evaluation)

- At the panel meeting, all applications and respective evaluation reports will be available to all panel members.
- During the panel meeting all applications shall be discussed.
- It is the duty of the evaluation panel to:
 - Prepare a **Panel Evaluation Report** for each application (to be conveyed to the applicants) based on the Compilation (Pre-Consensus) and Individual reports and panel discussions;
 - Produce a **Ranked List** of all evaluated applications;
- Prepare a **Panel Meeting Report** with a summary of the meeting activities and comments regarding the evaluation process.
- The applications' final ratings and comments to be made available to the applicants are discussed and decided by the evaluation panel during the meeting, and included in the Panel Evaluation Report by the first reader.







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- The first reader should submit the panel assessment (comments to be conveyed to the applicants) in the **Panel Evaluation Form**, including:
 - The rating and comments for each of the four criteria (A1, A2, A3 and A4);
 - Strengths and weaknesses of the application;
 - Recommended amount for funding to be conveyed to the applicant;
 - Confidential comments to FCT, if necessary.
- The final panel assessment should take into account the following guidelines:
 - All comments should take the form of a statement with respect to the criterion under evaluation; the overall comment should provide a global point of view on the quality of the project;
 - Panel members shall:
 - Avoid comments that give a description or a summary of the application;
 - Avoid the use of the first person or equivalent: "I think..." or "This reviewer finds...";
 - Always use dispassionate and analytical language: avoid dismissive statements about the team, the proposed science, or the scientific field concerned;
 - Avoid asking questions, since the applicants will not be able to answer them;
 - Evaluate the work that is being proposed, and not work that the reviewers consider should have been proposed;
 - Avoid providing guidance for potential future submissions.
 - The **Panel Meeting Report**, with a summary of the meeting activities, should address (but not be limited to) the following issues:
 - Working methodology adopted by the panel;
 - Identification of Conflicts of Interest and their resolution at any time along the process.

This report should be signed by all panel members.

- The Panel may prepare an additional document with **Recommendations to FCT** on the various aspects of the evaluation process that may help FCT to improve procedures in future calls. This document may include, among other issues considered to be important:
 - Comments and critiques on the application form, with suggestions for possible improvements;







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- Comments on the material available to panel members, in particular the Guide for Peer Reviewers;
- Strong and weak aspects of the FCT team;
- Strong and weak logistic aspects (travel, hotel, meeting).

FCT Evaluation Webpage

Individual credentials will be sent to each reviewer, which give access (through https://sig.fct.pt/evaluation/) to the list of applications, as well as to the evaluation form for each application assigned to the reviewer. After logging in, instructions are available at the top of the menu.

For each application, the following is available:

- A statement on Conflict of Interest;
- A PDF file containing all information submitted in the application form;
- Files containing information regarding the strategic activity plans of the R&D Units, funded by FCT in the scope of the Evaluation Exercise of R&D Units, concluded in 2014;
- The Individual and Compilation (Pre-Consensus) Report Forms;
- The possibility to SAVE the submitted evaluation report the uploaded information will be kept for future revision;
- The LOCK button to submit the evaluation report the reviewer will no longer be able to modify the uploaded information.

8. Confidentiality and Conflict of Interest

Confidentiality

The confidentiality of written applications must be protected. All reviewers involved in the evaluation are asked not to copy, quote, disclose or otherwise use material contained in the applications. All reviewers are requested to sign a statement of confidentiality relative to the contents of the applications and to the results of the evaluation.

The statement that needs to be accepted, which appears the first time the reviewer uses the individual credentials to access the evaluation area, is the following:







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STATEMENT OF CONFIDENTIALITY

Thank you for accepting to participate in the scientific evaluation of Research Projects submitted to the Portuguese Foundation of Science and Technology (*Fundação para a Ciência e a Tecnologia, I.P.*) – FCT.

The reader of this message pledges, on his/her honour, not to quote or using in any way, the contents of the project applications, nor to make available, other than to FCT or the evaluation panel, the results of the evaluation of project applications.

Conflicts of Interest (Col)

Reviewers that have submitted any **application to the present Call**, either as PI or team member, **have to decline** participating in the evaluation process. Reviewers with first-degree relationships, married to or cohabiting with the PI or any team member are also impeded from being a panel member or remote evaluator.

In the case of a disqualifying conflict of interest, panel members and remote reviewers cannot remotely evaluate the respective applications. Panel members are also not allowed to participate in the panel meeting discussion of these applications. Circumstances that could be interpreted as a **disqualifying conflict of interest** are laid down in the following criteria:

- 1. Life partnership, domestic partnership;
- 2. Personal interest in the application's success or financial interest by persons listed under no.1;
- 3. Current or planned close scientific cooperation;
- 4. Research cooperation within the last three years, e.g. joint publications;
- 5. Dependent employment relationship or supervisory relationship (*e.g.* teacher-student relationship up to and including the postdoctoral phase) within the last five years of the date of the call;
- The affiliation or pending transfer to any of the Institutions involved in the consortium;
- Researchers who are active in a council or similar supervisory or advisory board of the applying institution are excluded from participating in the review and decision-making process for applications originating from this institution;







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In the case of a potential conflict of interest, panel members should notify FCT and clarify if he/she is able to perform an unbiased evaluation or if the conflict should rather be considered as disqualifying. A potential conflict of interest exists in the following circumstances:

- 8. Relationships that do not fall under no. 1; other personal ties or conflicts;
- 9. Financial interests of persons listed under no. 8;
- 10. Participation in university bodies other than those listed under no. 7, e.g. in scientific advisory committees in the research environment;
- 11. Preparation of an application or implementation of a project with a closely related research topic (competition);
- 12. Participating in an on-going scientific or inter-personal conflict with the applicant(s).

Before the start of evaluation of each application, and in order to be able to access the evaluation form, each reviewer needs to complete a CoI Declaration, as follows:

Conflict of Interest Declaration

Please state:

- No, I have no conflict
- Yes, I have a strong conflict (see **Disqualifying Col**)
- It is possible that I have a conflict (see Potential Col)

Add any comments below.

The individual reviewer will not be able to proceed in case of a strong conflict of interest. In this case, the individual reviewer is required to inform the FCT team of this situation, so that the application may be reassigned. The final panel meeting report must mention all declared Col.







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9. Other Information

The size of the R&D Units is defined according to the number of integrated members registered with FCT in the scope of the Evaluation Exercise of R&D Units, concluded in 2014:

Size	Number of integrated members*
Small ("Pequena")	10 to 40
Medium (" <i>Média</i> ")	41 to 80
Large ("Grande")	more than 81

^{*}Members holding a PhD and fulfilling the minimum criteria defined for the R&D Units evaluation exercise.

The National Qualifications Framework (QNQ) refers to the Portuguese framework for education and includes the following levels:

Level	Qualifications
1	Years 5 and 6
2	Years 7 to 9
3	Secondary Education (Years 10 to 12)
4	Secondary Education with work experience
5	Secondary Education with credits to access Higher Education
6	Higher Education Degree
7	Masters
8	PhD





