

**CALL FOR SR&TD PROJECTS
UNDER THE COOPERATION AGREEMENT BETWEEN
PORTUGAL AND THE
EUROPEAN LABORATORY FOR PARTICLE PHYSICS
(CERN) – 2019**

Guide for Peer Reviewers

August 2019

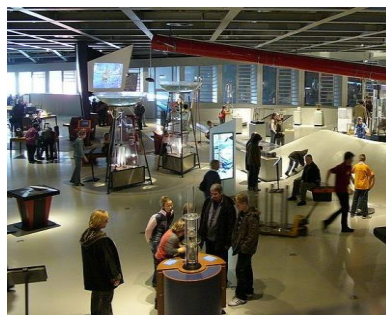


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ABOUT FCT

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 on Science and Technology policy.

FCT started its operations in August 1997, and succeeded 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.

FCT pursues its mission by funding fellowships, studentships and research contracts for scientists, research projects, internationally competitive research centres and state-of-the-art infrastructures, via competitive calls with international peer-review. FCT ensures Portugal's participation in international scientific organizations, fosters the participation of the scientific community in international projects and promotes knowledge transfer between R&D centres and industry. Working closely with international organisations, FCT coordinates public policy for the Information and Knowledge Society in Portugal and ensures the development of national scientific computing resources.

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 infrastructures 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.

THE 2019 CALL FOR SR&TD PROJECTS - CERN

The Public Announcement of the Call is published on the FCT website.

This Call aims to finance SR&TD projects in the field of the High Energy Physics, and other relevant fields for the Portuguese participation in the European Laboratory for Particle Physics (CERN), with scientific collaborations recognized by CERN, as well as technology-based projects in applied sciences with collaborations in activities supported by the same Laboratory.

Priority should be given to the projects with long-term collaborations with CERN or with the use of its experimental facilities.

It should also be privileged projects that foster the technology transfer generated at CERN, or actions that promote the execution of research and experimental development projects with the participation of companies, in collaboration with CERN.

SUBMISSION

Applications are submitted online via a specially designed [FCT Web application](#).

The Principal Investigator (PI) should indicate up to 4 keywords which characterise the proposed scientific activity. This will facilitate the assignment of applications to specific reviewers.

It is important to underscore that:

- Each PI may only submit, in that quality, one application for this call. This condition is administratively verified by FCT
- Identify a co-responsible for the project, the Co-Principal Investigator (Co-PI), that will replace the PI when he/she is unable to fulfil his/her duties;

MAIN RULES

According to the Regulations governing access to funding of Scientific Research and Technological Development projects:

- The content of the application **should be written in English**, and a version in Portuguese of the Title and the Summary is also required.
- Have a maximum duration of **24 months** (extendable for a maximum of 12 months, if justified)
- Involve a maximum total eligible investment of **€240.000,00**.

- The projects will be funded by National funds through the Ministry of Science, Technology and Higher Education. A budget allocation **€2,5 million of national state budget** is foreseen and, if justifiable, FCT may strengthen this budget.
- The recipient entities and the PI must agree to comply with the applicable national and European community norms, namely as regards competition, environment, equal opportunity and gender, and public contracting whenever applicable. In cases of projects involving:
 - Animal experimentation - the PI must vouch for the research team's compliance with EU directives and the relevant Portuguese laws regarding the protection of animals used for experimental and other scientific purposes;
 - Regarding the donation, procurement, testing, processing, storage, distribution and preservation of human tissues and cells, the PI must vouch for the research team's compliance with EU directives and the relevant Portuguese laws on standards of quality and safety;
 - The dissemination strategy of research outputs of the projects, including considerations of open access, shall be taken into account in the evaluation.
- Considering the art.8º of the [FCT Projects Regulation](#), the following items in SR&TD projects are eligible for funding:

a) Direct costs:

- **Expenses with Human Resources** dedicated or related to the development of R&D activities with regard to the project's execution in all mandatory components by the applicable labour legislation, including expenses with grant holders and working contracts directly supported by the beneficiaries.

With regard to employment contracts, human resources expenses are based on the costs incurred in carrying out the project, based on the monthly base salary declared for the social protection of the worker, which may be increased by the mandatory social food allowance and occupational accident insurance under legally defined terms. The basic salary shall be the set of all remunerations of a permanent nature subject to taxation and declared for the purpose of social protection of the worker.

Grants within SR&TD projects may be of the following types:

- BCC – Visiting Scientist Fellowship (**up to 12 months**);
- BI – Research Fellowship only for graduate's or master's holders.

For all grants, the monthly amount to be paid to the grant holder is fixed and established by FCT. Furthermore, these grants are tendered and contracted by the beneficiary entities in the context of the supported projects;

- **Missions** (travel, accommodation, registration fees, etc.) in Portugal and abroad, and directly attributable to the project;
- **Acquisition of scientific and technical tools and equipment**, indispensable to the project if used within the project during their useful lifetime;

- **Amortization of technical and scientific tools and equipment** indispensable to the project and of which the useful lifetime falls within the execution period, but does not end within that period;
 - **Subcontracts** directly related to the project scientific task's execution;
 - Expenses related to the national and international registration of **patents, copyrights, utility models and designs, national models or trademarks**, when associated with other forms of intellectual protection, namely fees, state-of-the-art searches and consulting expenses;
 - **Expenses with the demonstration, promotion and disclosure of the project's outputs**, such as publication fees in order to meet the national policies for the Open Access, including activities to promote the scientific culture and exhibitions;
 - **Adaptation of buildings and facilities**, when essential to the development of the project, namely for environmental and security reasons, provided **that these costs do not exceed 10% of the total eligible cost** of the project;
 - **Acquisition of other goods and services** directly related to the project's execution, including costs with **consultants that** do not establish subcontracts.
- b) **Indirect costs**, with a **flat rate of 25% of eligible costs** with exclusion of subcontracting. The percentage bound in this item is automatically checked by the submission tool. Applications cannot be locked if this condition is not verified.

For the present Call, the non-eligible costs are the ones stated in the art.9º of the [FCT Projects Regulation](#).

Salaries of public servants are not funded under this call.

The PI, co-PI, the remaining core elements of the applications, as well as the remaining elements of the research team, are responsible for submitting an updated version of their **CV in English**, and keep the information updated until the time of the application's submission.

EVALUATION CRITERIA

Scoring of the project proposals, towards their selection and ranking, is based on the **Merit of the Project (MP)**, to be calculated according to the following formula:

$$\text{MP} = 0.50 \text{ A} + 0.20 \text{ B} + 0.10 \text{ C} + 0.20 \text{ D}$$

The evaluation and selection process is based on the following main four review criteria:

- A. Scientific merit and innovative nature of the project from an international standpoint in the scientific area and within the goals of the call;
- B. Scientific merit of the research team;
- C. Feasibility of the work plan and reasonability of the budget;
- D. Contribution to the body of knowledge in the field and improvement in the competence of the scientific community and potential economic value of the technology.

The four main criteria are scored using a 9-point scale system (1 – minimum; 9 – maximum) and each of the four criteria is rated using this scale with whole numbers only (decimal ratings are not allowed). The final score of MP is presented without rounding, that is, to one-decimal place.

For a proposal to be eligible for funding, the following **minimum score** is required:

- MP = 5.0 points.

For the purpose of selection and decision-making regarding funding, projects will be ranked by score obtained in the review process in decreasing order. In case of equal ratings, the locking date of the proposals in the FCT's electronic system will be taken into consideration for the ranking list.

In situations where the information provided in the application does not allow a sustained score of a given evaluation criterion, a score of 1 (one) should be given.

Criterion A:

This criterion aims to assess the scientific merit and innovative nature of the project, among other considerations, the following:

- i.) Relevance and originality of the project proposed (based on the state-of-the art in a given scientific area and previous work done by the proposing team) in the scientific area and within the goals of the call;
- ii.) Methodology adopted for carrying out the project;
- iii.) Expected results and their contribution to scientific and technological knowledge;
- iv.) Resulting publications and articles;
- v.) Contribution towards promoting and disseminating science and technology;
- vi.) Production of knowledge that can contribute to benefits to society or to the business sector.

Criterion B:

The present criterion is intended to evaluate the scientific merit of the research team, through the following dimensions:

- i.) Scientific productivity of the team evaluated according to criteria accepted internationally by the different scientific communities (ranging from references to publications and citations in published works as used by the basic 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, PI's qualifications);
- iii.) Ability to involve young researchers in training;
- iv.) Availability of the team and non-duplication of objectives in relation to other projects underway;
- v.) Degree of internationalization of the team;
- vi.) Degree of success in previous projects of the PI (in the case of young PIs, this requirement must be assessed based on the potential revealed by the PIs curriculum vitae in the absence of prior concrete accomplishments);
- vii.) Level of commitment of any companies participating in the project (if applicable).¹

Criterion C:

This criterion is intended to evaluate the feasibility of the work plan and reasonability of the budget, considering the following aspects:

¹ The application overview has the indication if a participating entity is a for profit organization.

- i.) Organization of the project in terms of the proposed objectives and resources (duration, equipment, size of the team, institutional and management resources);
- ii.) Institutional resources of the participating entities, in particular of the Principal Contractor (PC) (technical-scientific, organizational and managerial and, where appropriate, co-funding capacity on the part of companies);
- iii.) Reasonability of the budget.

Criterion D:

This criterion is intended to evaluate the contribution to the body of knowledge in the field, considering the following aspects:

- i.) Contribution to the body of knowledge and competence of the National Science and Technology System (expected effects and results) and potential economic value of the technology (if appropriate), namely in terms of its impact on the competitiveness of the national socio-economic system.

EVALUATION PROCESS AND PROCEDURES

GENERAL INFORMATION

- **Applications will be assessed by an evaluation panel.**
- The evaluation panel, according with the Agreement between Portugal and CERN, consists of three members appointed by the CERN Director General and two by FCT, one of whom will chair the panel.
- The experts will be of recognized competence in the scientific areas of the applications to be evaluated.
- The panel is headed by the Panel Chair.
- The Panel Chair is identified in the internet FCT, I.P website up to the limit date to submit applications. The remaining panel members are identified after the assessment process conclusion.
- The identification of the reviewers external to the panel, if any, will not be made public.
- All panel members have to sign an acknowledgement of the Terms of Reference for the evaluation exercise.
- **Each application** will be remotely and individually evaluated by **two panel members**. One of the panel members will be appointed as the **first reader** for the application.
- Distribution of the applications to panel members, which is done by the Panel Chair, will take into consideration any Conflict of Interest, as well as the matching of scientific competences.
- Whenever a particular expertise is not covered by the panel members, external reviewers may be invited to provide an assessment of the application in consideration.
- The first time a reviewer logs in 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 meetings, all applications shall be discussed. A **ranking list** and a **panel evaluation report** (for each application) will be produced.
- The panel must 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.

STAGES OF EVALUATION

Evaluation of the research applications involves the following stages:

Setting-up Evaluation Panels

- The panel chair will be a regular member of the panel with the added duties of moderating the panel meeting and conveying the results of the discussions to the Board of Directors of FCT.
- The panel members might be asked to give support to FCT during the period spanning from the evaluation meeting to the final decision (e.g., review of eventual preliminary hearings comments presented by the PI).

Pre-Meeting Activities (Individual Reviews)

- After the assignment of all applications, panel members will receive **individual credentials** to start the evaluation process;
- Before accessing each application, the reviewer has to declare whether or not a **Conflict of Interest** is identified for that particular application;
- In case of a Disqualifying Conflict of Interest, the panel Chair should be informed and the application allocated to a different panel member;
- Reviewers must submit an **Individual Evaluation Report** with their assessment for each application assigned to them;
 - i. The **Individual Evaluation Report Form**, includes:
 - The score and comments for each of the three evaluation criteria;
 - An overall comment on the proposal evaluation;
 - Funding recommendation, without specifying the amount;
 - Confidential comments to the evaluation panel may be provided.
 - ii. The assessment should take into account the following **guidelines**:
 - The strengths and weaknesses for each criterion must be identified;
 - The comment for each criterion should be succinct but substantial; this comment should address the relative importance of the criterion and the extent to which the application actually meets the criterion. Suggestions that might help the project team to carry out the project activities may be provided;
 - The overall comment on the proposal should be a global appraisal of the reviewer on the application, stating conclusions regarding the research work and the organization of the project. It must be in accordance with the comments and scores given to each criterion;

- Comments should also be impeccably polite; if so decided by the panel, the comments may be reproduced totally or partially in the feedback to applicants.
- **Both readers must submit and lock their individual evaluation** for each assigned application in the Individual Evaluation Form;
- The panel member appointed as **1st reader** will only have access to the **Compilation Report Form**, for that particular application, after the submission of the two Individual Evaluation Reports;
- Based on the two individual reviews, the **1st readers** will prepare the **Compilation (Pre-Consensus) Report** for each application. **This report, whose structure is similar to the Individual Evaluation Report, must be submitted and locked up to two weeks before the panel meeting;**
- **Both scores and comments are critically important.** The Pre-Consensus review scores and comments are the starting point for the panel discussions and final panel score during the panel meeting;
- Whenever a reviewer has all her/his reports (Individual Evaluation Reports and Compilation Reports) locked, **panel credentials** will be sent, giving him/her access to all applications, as well as to all Individual and Pre-Consensus reports. Access to all the information will allow panel members to prepare for the panel meeting.

Meeting Activities (Panel Evaluation)

- During the panel meeting, **all applications must be discussed;**
- The **application's final scores** for each criterion, as well as the **comments to be made available to the applicants**, will be discussed and agreed upon by the evaluation panel and included in the **Panel Evaluation Report** by the 1st reader;
 - i. The **Panel Evaluation Report Form** includes:
 - The scores and comments for each of the three evaluation criteria;
 - An overall comment on the application;
 - Comments on the proposed budget;
 - Confidential comments to FCT, if necessary.
 - ii. 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 provide a mere description or summary of the application;
 - Avoid the use of the first person or equivalent: "I think..." or "This reviewer finds..."; alternatively, panel members are advised to use expressions such as "The panel considers..." or "It is considered...";

- Avoid asking questions, since the applicants will not be able to answer them;
 - Panel members must always use dispassionate and analytical language: dismissive statements about the team, the proposed science or technology, the knowledge or the field concerned must be avoided;
 - Panel members must evaluate the work that is being proposed, and not the work that they consider should have been proposed.
- The panel will have to prepare a **Panel Meeting Report** containing a summary of the meeting activities that should address (but is not limited to) the following issues:
 - Work methodology adopted by the panel;
 - Identification of Conflicts of Interest and their resolution at any time during the process;
 - Final Panel Ranking.

This report should be signed by all panel members.

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

In summary:

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) reports and panel discussions;
- Produce a Final **Panel Ranking** of all evaluated applications;
- Prepare a **Panel Meeting Report** with a summary of the meeting activities and comments regarding the evaluation process;
- Prepare a document with **Recommendations to FCT**.

FCT EVALUATION WEBPAGE ([HTTPS://SIG.FCT.PT/EVALUATION/](https://sig.fct.pt/evaluation/))

PANEL CHAIR CREDENTIALS

Panel Chair credentials give access to the FCT evaluation webpage, and enable Panel Chairs to:

- Allocate each application to two panel members and external reviewers (if applicable);
- Check the number of applications assigned to each reviewer;

- Monitor the individual reviewers' work flow (individual evaluation report submitted by panel members);
- Extract an excel file to sort the applications according to various items, including scores, requested funding, etc.

The main menu displays the following options:

Project List – This list displays all the applications submitted to the panel. The reference/title are links to access the overview of the selected application form, the status of its evaluation and the contents of the individual reports, if locked. Each application must be assigned to two panel members.

Evaluators List - This list displays the names of the reviewers and the number of projects assigned to each. By clicking the name, the Panel Chair will access the list of applications associated with each reviewer.

Evaluators / Ratings - List of all projects, with data relative to the reviewers' work flow.

Additional Documents - Set of documents with information on the evaluation process, the particular call, logistical aspects, etc.

Extra Information - Lists that can be extracted to an excel file to monitor the work flow. This includes a list with the information regarding the conflict of interest declared by the reviewer.

Registration Form - To be filled in by the evaluator with her/his Personal Data, Scientific Field and Payment Data.

INDIVIDUAL CREDENTIALS

Individual credentials give access to the list of applications assigned to the reviewer, with the type of reader identified. After logging in and accepting the statement of confidentiality, instructions are available at the top of the menu.

For each application, the following is available:

- A statement on Conflicts of Interest;
- The content of the application;
- The Individual and Compilation (Pre-Consensus) (if 1st reader) 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.

PANEL CREDENTIALS

Panel credentials give access to the list of all applications and to the respective evaluations (all individual and compilation reports). After logging in, instructions are available at the top of the menu.

For each application, the following is available:

- The content of the application ("Form Overview" tab);
- The Individual and Compilation (Pre-Consensus) Reports ("Evaluation" tab);

- The **Panel Report Form** (to be filled in by the 1st reader) (“Panel Evaluation” tab) – this form has the same structure of the Individual and Compilation reports;
- 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.

EVALUATION TIMELINE

The evaluation timeline is established by FCT’s Board of Directors and conveyed to the evaluation panel chair and members. The date of the final meeting of the evaluation panel is established in advance by FCT that carries out all logistic arrangements.

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 or otherwise use material contained in the applications. All reviewers are requested to sign a statement of confidentiality relative to the contents of the project 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:

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 use 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.

CONFLICT OF INTEREST (COI)

Researchers that have submitted any **application to the present Call**, as PI, co-PI, team member or consultant to the project, **have to decline** participating in the evaluation process. Those with first-degree relationships, domestic partnership or married to the PI, co-PI or any team member are also hindered from being a panel member or external reviewer.

Disqualifying Conflict of Interest

In case a disqualifying conflict of interest is identified, the panel member cannot evaluate the respective application. 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 the following:

1. Personal or financial interest in the application's success;
2. Current or planned close scientific cooperation;
3. Research cooperation within the last three years, *e.g.* joint publications;
4. Dependent employment relationship or supervisory relationship (*e.g.* teacher-student relationship up to and including the postdoctoral phase) within the last five years before the opening date of the call;
5. Affiliation or pending transfer to any of the departments, research centres or companies involved in the project;

6. Researchers who are active in a council or similar supervisory or advisory board of the applying institutions are excluded from participating in the review and decision-making process for applications originating from these institutions.

Potential Conflict of Interest

In the case of a potential conflict of interest, the panel member 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:

7. Relationships other than first-degree, marriage or domestic partnership; other personal ties or conflicts;
8. Participation in university bodies other than those listed under no. 6, *e.g.* in scientific advisory committees in the research environment;
9. Preparation of an application or implementation of a project with a closely related research topic (competition);
10. Participating in an on-going scientific or inter-personal conflict with the applicant(s).

Before starting the evaluation of each application, and in order to be able to access the evaluation form, each reviewer needs to complete a Col 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**)

In case of a disqualifying or potential Col, the reviewer is asked to justify the situation.

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

GLOSSARY AND TRANSLATIONS

PORTUGUESE TO ENGLISH TRANSLATION AND EXPLANATIONS

Agregação = Aggregation. This is an academic title. It attests

- i.) the quality of the academic, professional, scientific and pedagogical curriculum
- ii.) the capacity to carry out research work
- iii.) the capability to coordinate and carry out independent research work,

and is issued to PhD holders after a public exam by a jury. The exam is required by the candidates and takes places during two days.

Doutoramento = PhD, doctoral degree

Mestrado – Master’s degree

Licenciatura = BA (3, 4 or 5 years graduate course)

Bolsa = Grant, fellowship

Bolseiro = Grant Holder, fellow

BCC = Bolsa de Cientista Convidado = Invited Scientist Grant

- Invited scientist grants are designed for doctoral degree holders with scientific curricula of notable merit, for the purpose of developing and carrying out research activities in Portuguese science and technology institutions, including directing and coordinating of research projects.
- The total duration of this type of grant can vary between one month and three years.

BI = Bolsa de Investigação = Research Grant

- These research grants are available for bachelor, graduation or master degree holders for the purpose of obtaining scientific training in research projects or in Portuguese science and technology institutions.
- These grants are, in principle, one year in length, renewable for up to a total of three years, and cannot be awarded for periods of less than three consecutive months.

GLOSSARY

CoI = Conflict of Interest

Co-PI = Co-Principal Investigator

MP = Merit of the Project

OECD = Organization for Economic Co-operation and Development

PI = Principal Investigator

Postdoctoral fellow = a PhD holder that has a Post-doctoral grant

R&D = Research and Development

R&I = Research and Innovation

SR&TD = Scientific Research and Technological Development