

# **Evaluation Guide for FCT PhD programmes**

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## Introduction

#### **FCT** mission

Fundação para a Ciência e a Tecnologia (FCT), the Portuguese Research Council, is the public agency responsible for implementing the Portuguese government's Science and Technology policy.

FCT was established in August 1997, succeeding the previous research council JNICT, created in the 1980s.

FCT's main mission is to sustainably promote and support the advancement of scientific and technological knowledge in Portugal, exploring all opportunities that become available in any scientific or technological domain, to attain the highest international standards in the creation of knowledge. It is also FCT's mission to promote public awareness of science and of its contribution to improved education, health, environment, quality of life and well-being of citizens in Portugal and elsewhere.

These missions are accomplished mainly through competitive and peer-reviewed funding of applications submitted by institutions, research teams or individuals in public calls. FCT also establishes cooperation agreements and other forms of partnership with universities and other public or private institutions, in Portugal and abroad.

#### FCT's main roles are thus:

- To promote, fund, follow and evaluate research, development and innovation institutions, programmes, projects and graduate training;
- To promote and support infrastructures for scientific research and technological development;
- To promote scientific and technological culture;
- To support and encourage the availability of up-to-date, interconnected and robust science and technology information sources.

FCT's mission and instruments encompass a wide range of scientific research fields, including exact, natural and health sciences, engineering, social sciences, and humanities.

#### **FCT PhD Programmes**

In 2012, FCT launches the first call for FCT PhD programmes. These programmes may involve a single or multiple institutions (e.g. higher education institutions, research (R&D) institutions, industry, national and international organisations dedicated to advanced training). All proposals submitted will be judged on the basis of merit.

Funding of FCT PhD Programmes is based on peer review of applications submitted following an open call. Applications are evaluated within four scientific domains, corresponding to the FCT Scientific Councils:

- Life and Health Sciences
- Exact Sciences and Engineering
- Natural and Environmental Sciences
- Social Sciences and the Humanities

The rules under which applications and the accepted projects are governed are described in the <u>Official Announcement of the Call</u> and the <u>FCT PhD</u> Programmes Regulations.

# **Calls for FCT PhD Programmes**

The Official Announcement of the Call is publicised by the FCT through the appropriate channels.

For the 2012 Call for FCT PhD Programmes, three different types are available:

#### - National PhD programmes

Must involve at least one Portuguese higher education institution qualified to award PhD degrees and one Portuguese R&D institution.

#### - PhD programmes in an industry setting

These programmes have a specific focus on research training in industry and require a formal interaction between academia/research units and industry. They must involve at least one Portuguese higher education institution qualified to award PhD degrees, one Portuguese R&D institution, and one company with research and development activities. A financial contribution from the industry partners is expected as specified in the Official Announcement of the Call.

#### - International PhD programmes

Must involve at least one Portuguese higher education institution qualified to award PhD degrees, one Portuguese R&D institution, and one foreign university or R&D institution. These programmes entail a commitment of matching funds from foreign partners as specified in the Official Announcement of the Call.

#### **Submission**

Applications are submitted online via a dedicated FCT Web application.

The FCT PhD Programme Director (PD) will identify, from a pre-established list, the scientific area of the proposal.

The PD is a researcher with an internationally recognised track-record in graduate training, who is affiliated with the R&D proponent institution or one of the Portuguese R&D institutions, when the proponent institution is a higher education institution.

Any Portuguese higher education institution qualified to award PhD degrees may be a proponent. It must however be associated with at least one Portuguese R&D institution (one of these should be the research institution to which the PD is affiliated).

Any Portuguese R&D institution may be a proponent, as long as it is associated with at least one Portuguese higher education institution qualified to award PhD degrees. In this case the PD must be from one of these R&D institutions.

Any higher education institution (national or foreign), public or private research institution, company, state laboratory, etc, may be a participating institution.

#### **Main Rules**

The main regulations governing access to funding of FCT PhD programmes are as follows:

- The content of the application should be written in English. A Portuguese version of the Title and of the Strategy and Aims is also required.
- A researcher may only be director of one FCT PhD Programme.
- A researcher may be on the team of no more than two FCT PhD Programmes.
- The recipient entities and the PD must agree to comply with the applicable national and European community norms, namely those regarding equal opportunity and gender, and public contracting.

#### Funded items (cf. FCT PhD Programme Regulations)

- Human Resources, including studentships and fellowships or contracts specifically signed for the programme;

The following fellowships (whose nature is explained in section Glossary and Translations of this guide) are allowed:

- BI Research fellowships
- BD PhD studentships

For all studentships and fellowships, the monthly amount to be paid to the student is fixed and established by FCT. Funding calculated in each application automatically assumes the authorised monthly stipend of the fellowship, for the number of months requested.

- Others: a fixed amount can be requested, as specified in the Official Announcement of the Call, for other expenses associated to the programme, such as travel and accommodation (e.g. for a programme retreat), consultants (exclusively for the members of the external evaluation committee); acquisition of goods and services and other current expenses directly related to the management of the programme.

A maximum of 18 Bls or 12 BDs may be requested for each admission year.

Each institution [(proponent or participant(s)] must present a core team of 10 researchers (or 5 in the case of Industry partners). All team members involved in the application must submit their CV in English according to FCT rules (cf. <u>Application Guide</u>).

# **Evaluation Criteria**

All proposals should be clearly research-based. The evaluation and selection process is based on the following main review criteria:

- A Scientific merit of the programme and expected impact on the training of students;
- B Scientific merit of the team and conditions available at the host institutions;
- C Management structure of the programme;
- D Recruitment strategy.

The application of these criteria shall take into account, among other considerations, the following:

#### A

For criterion A:

- i Scientific relevance and pertinence of the topic of the programme;
- ii Programme design, flexibility and interdisciplinarity (if applicable);
- iii Possibility for students to tailor their academic pathway;
- iv Mobility (if applicable);

#### В

For criterion B:

- i Scientific productivity of the team evaluated according to internationally accepted criteria, in different scientific communities (ranging from references to publications and citations in published work, used in natural sciences and engineering, to performance and artistic work used in the arts, or monographs and books used in the social sciences and humanities);
  ii Abilities and skills to adequately execute the proposed project (e.g. team
- ii Abilities and skills to adequately execute the proposed project (e.g. team configuration, PD's qualifications);
- iii Degree of internationalization of the team;
- iv Capacity to attract and assimilate both Portuguese and foreign students;
- v Criteria for being a supervisor of PhD students;
- vi Ability to involve young, excellent researchers in training and supervision of students;
- vii Quality and adequacy of the research infrastructures of the host institutions;
- viii Complementarity and commitment of the host institutions (if more than one);
- ix Level of commitment of the participating institutions.

#### C

For criterion C:

- i quality of the organisation, coordination and decision structure;
- ii monitoring and remediation strategies for the programme;
- iii mentoring and tutoring of the students;
- ${\it iv}$  the external supervisory committee.

#### D

For criterion D:

- i Quality of the recruitment and advertising strategy;
- **ii** Selection criteria to ensure selection of the best students, not only based on past performance but also on potential for future development.

# **Evaluation Process** and Procedures

#### **General information**

- The evaluation panel consists of international experts appointed by the FCT Board of Directors, after consultation with the FCT Scientific Councils.
   The names of the panel members will be published on the FCT website.
- The panel will be divided into sub-panels within the themes of the FCT Scientific Councils; for each sub-panel a Chair will be appointed.
   A panel chair will be designated among the chairs of the sub-panels.
   The panel chair shall 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 FCT Board of Directors.
- Panel members will be recognised leaders in the scientific areas of the applications and in advanced training programmes, but will not be active scientists affiliated with Portuguese institutions.
- Each application will be remotely evaluated, individually, by three panel members. After individual evaluations are completed, one of the panel members will be appointed as the panel reader for the application.
- The first time a panel member logs in to the evaluation web pages, he/she has to sign a Confidentiality Statement and Conflict of Interest Statement, and prior to every individual online review all panel members have to sign an acknowledgement of the Terms of Reference for the evaluation exercise.
- Each individual evaluation form includes:
  - the marks and comments for each of the four evaluation criteria;
  - the overall rating of the proposal;
  - a general comment on the application;
  - recommendation for funding;
  - confidential comments for the panel or for FCT.
- The application's final marks and the comments to be made available to the applicants are decided during the panel meeting.

Panel members will have access to:

- all applications;
- individual evaluations submitted by the individual panel members;
- individual evaluations submitted by panel readers.
- Each panel evaluation form, to be transmitted to the applicants, includes:
  - the marks and the comments for each of the four criteria;
  - the overall rating of the proposal;
  - a general comment on the application;
  - quantified funding recommendation.

- The panel must issue a final report on its activities.
- There is an allocated FCT team for each evaluation sub-panel. They are the FCT contact points for the panel members.

#### **FCT Evaluation Website**

The username and password sent to each panel member allows access through <a href="https://www.fct.mctes.pt/evaluation">https://www.fct.mctes.pt/evaluation</a> to the list of proposals under evaluation. Please see the Instructions at the top of the menu when you access the page.

The following items are required for each application:

- A statement of Conflict of Interest;
- All the information submitted in the Form Overview. In this form, the name of each team member has a link to his/her CV;
- The information in the Form Overview can be printed and a pdf file created. See the links on "Print this page" and "Instructions to view and print this page" for this purpose.
- The Individual/Panel Evaluation Form;
- The possibility to SAVE the submitted evaluation report. This means that the uploaded information will be kept for future revision;
- The need to LOCK the submitted evaluation report. After locking the form, the panel member will no longer be able to modify the uploaded information.
- A summary of the work that has been completed and of what remains to be filled in.

#### **Evaluation stages**

Evaluation of proposals involves the following stages:

#### **First Level of Review**

Pre-Meeting Activities

#### a) Remote Reviews

The sub-panel chairs will allocate each proposal to three sub-panel members, taking into consideration conflicts of interest and matching scientific competences.

An e-mail invitation will be sent by the FCT scientific officer to each of the panel members with indication of the review submission deadline.

Allocated panel members will individually evaluate each proposal in the Individual Reviewer Evaluation Form and lock the review.

Individual reviewing includes:

- Applying the evaluation criteria and rating each criterion;
- Providing a succinct but substantial explanatory <u>comment for each criterion</u>. This statement should address the relative importance of the criterion and the extent to which the application actually meets the criterion;
- Providing an <u>overall mark for the proposal</u>, which is based on the evaluator's own judgment of the merit of the overall application without resorting to any sort of quantitative algorithms;
- Providing a global substantial explanatory <u>comment for the proposal</u>.

  This statement should fully explain the evaluator's judgment on the proposal;
- Providing <u>recommendations</u> of modifications to the proposal, with proper justification;
- Providing confidential comments to the panel members or to FCT, if necessary;
- Both marks and comments provided in the Individual Reviewer Evaluation Form are critically important. The individual review ratings and comments are the starting point for the panel discussions and for the panel final rating;
- Comments should be succinct but substantial and constructive.
   If so decided by panel members, the comments may be reproduced totally or partially in the feedback to applicants.

#### b) Preliminary Assessment

Each evaluation panel member will individually evaluate the allocated proposals. After the three independent reviews are locked, one of the panel members will be designated as the panel reader for that proposal.

The evaluation panel members will have access to:

- all applications which were assigned to them;
- remote panel members evaluation reports.

The evaluation panel member assigned as panel reader will be asked to draft the evaluation panel report of each application, before the panel meeting, in the corresponding form and lock the review.

Once this preliminary assessment is finalized, all proposals, rating and documents will be available to all panel members.

#### **Second Level of Review**

Meeting Activities

At the panel meeting in Lisbon all applications will be discussed.

It is the duty of the evaluation panel to:

- a) Provide the final evaluation in the Panel Evaluation Form of each proposal;
- b) Prepare a ranking of all the evaluated proposals;
- c) Prepare a final evaluation panel report;
- d) Close the panel.

The Panel Evaluation Form to be conveyed to the applicants must be filled in by the Panel reader who prepares a critique for each of its assigned proposals considering the discussion at the panel meeting.

The Panel Evaluation Form includes marks and comments for each evaluation criteria, the overall rating of the proposal and a global statement that fully explains the panel's judgment on the application and states recommendations including those regarding budget. It also includes confidential comments to FCT if necessary.

Comments should take the form of a statement of key strengths and key weaknesses, in the light of the criteria.

Panel Members are encouraged to observe the following additional guidelines:

- 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 PD, team or proposed programme.
- Avoid asking questions, as the PD will not be able to answer them.
- Evaluate the proposed programme and not what should have been proposed.

The Final Evaluation Panel Report should be organized in two main parts:

#### Part I

Evaluation, including, but not limited to:

- Working methodology adopted by the panel;
- Identification of potential Conflicts of Interest and their resolution;

#### Part II

Recommendations to FCT, on the various aspects of the evaluation that might help FCT to improve procedures in future calls. Please refer, among other considered important:

- Comments and criticism on the application form, with suggestions for possible improvements;
- Comments on the material available to the PDs, in particular the <u>Guide to</u> writing and submitting proposals to FCT PhD Programmes;
- Strong and weak aspects of the evaluation web application;
- Strong and weak aspects of the FCT team;
- Strong and weak logistic aspects (travel, hotel, meeting).

This report should be signed by all panel members.

#### **Evaluation timeline**

The evaluation timeline is established by FCT's Board of Directors and conveyed to the evaluation panel members. The date of the final meeting of the evaluation panel, to be held in Lisbon, is established in advance by FCT. FCT is also responsible for carrying out all logistic arrangements.

# **Scoring System**

The FCT grant application scoring system uses a 9-point scale:

Impact	Score	Additional Guidance on Strengths/Weaknesses
High	9	Exceptionally strong with essentially no weaknesses
	8	Extremely strong with negligible weaknesses
	7	Very strong with only some minor weaknesses
Medium	6	Strong but with numerous minor weaknesses
	5	Strong but with at least one moderate weakness
	4	Some strengths but also some moderate weaknesses
Low	3	Some strengths but with at least one major weakness
	2	A few strengths and a few major weaknesses
	1	Very few strengths and numerous major weaknesses

**Minor weakness:** An easily addressable weakness that does not substantially lessen impact. **Moderate weakness:** A weakness that lessens impact.

Major weakness: A weakness that severely limits impact.

A score of 9 indicates an exceptionally strong application with essentially no weaknesses. A score of 1 indicates an application with serious and substantive weaknesses with very few strengths; 5 is considered an average score.

Impact is the programmes' likelihood to have a sustained, powerful influence on advanced training of students in the thematic area of the proposal:

- High impact = 7 to 9;
- Medium impact = 4 to 6;
- Low impact = 1 to 3.

Each of the four criteria is rated using this 9-point scale with whole numbers only (no decimal ratings). Reviewers have to identify strengths and weaknesses for each criterion and should provide context for their comments based on the application.

Designated panel members give an overall rating to each application which is based on their own judgment of the merit of the overall application without resorting to any sort of quantitative algorithms. The overall rating should reflect the panel's overall evaluation, not a numerical average of individual criterion scores. An application does not need to be strong in all criterion scores to be judged likely to have major impact.

The overall rating is also expressed as a mark from 1 to 9. Reviewers should provide a paragraph summarising the factors that informed their overall rating.

# **Conflict of Interest**

#### **Confidentiality**

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

The text to be accepted, which appears the first time each panel member uses his/hers username and password to access the evaluation area, is the following:

#### **Statement of Confidentiality**

Thank you for accepting to participate in the scientific evaluation of PhD Programmes submitted to the Portuguese research council Fundação para a Ciência e a Tecnologia - FCT.

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

#### **Conflict of Interest (Col)**

Panel members that participate in any application have to decline being on the Evaluation Panel.

Any conflict of interest (CoI) must be declared prior to the evaluation process.

No reviewer shall make an individual review of a proposal if in a Col with it.

Circumstances that could be interpreted as a disqualifying conflict of interest are laid down in the following criteria:

- 1. First-degree relationship, marriage, life partnership, domestic partnership with any of the applicants;
- **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.** Contingent employment relationship or supervisory relationship (e.g. teacher- student relationship up to and including the postdoctoral phase) extending to five years beyond the end of the relationship;
- 5. Affiliation or pending transfer to a participating institution;
- **6.** Researchers who are active in a council or similar supervisory board of the applying institution are excluded from participating in the review and decision-making process for applications originating from that institution.

A potential conflict of interest may exist, even in cases not covered by the clear disqualifying conflicts indicated above, under the following circumstances:

- 7. Relationships that do not fall under no. 1, other personal ties or conflicts;
- 8. Financial interests of persons listed under no. 7;
- **9.** Participation in university bodies other than those listed under no. 6, e.g. in scientific advisory committees in the greater research environment;
- 10. Research cooperation within the last three years, e.g. joint publications;
- 11. Participating in an on-going scientific or inter-personal conflict with the applicant(s).

In this case inform FCT. FCT will decide whether the situation in question constitutes an actual Col.

If you have a conflict of interest you will not be able to evaluate this proposal.

Before starting the evaluation of each application, and in order to be able to access the evaluation form, each panel member needs to specify the following:

#### []I don't have a conflict of interest and can evaluate this application

The panel member will not be able to proceed in case of a strong conflict of interest. In this case the panel member is required to inform the panel co-chair and the FCT team of the situation, for project re-allocation. The final panel report must mention all Potential Col declared.

Should a CoI emerge for any panel member, the panel co-chair should solve it, supported by the FCT team and make an explicit mention of it on the panel final report.

# **Glossary and Translations**

Agregação Habilitation

This is an academic title. It attests to:

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 if within Bologna, or 4 to 5 if before Bologna, years graduate course)

Bolsa Studentship, fellowship

**Bolseiro** Student holding studentships, fellow

BI Research fellowship

Bolsa de Investigação These research fellowships are available for

those holding bachelor or master degrees for the purpose of obtaining scientific

training

**BD** PhD Studentship

**Bolsa de Doutoramento** PhD studentships may be awarded to those

fulfilling the adequate regulation, with the aim to develop research conducting to a

PhD degree.

**PD** Programme director

**POPH** Operational Programme for Human

Programa Operacional Potential

Potencial Humano

## **FCT** Fundação para a Ciência e a Tecnologia MINISTÉRIO DA EDUCAÇÃO E CIÊNCIA







