

EVALUATION GUIDE SCIENTIFIC EMPLOYMENT – INSTITUTIONAL SUPPORT 2018 CALL



1. INTRODUCTION

This document outlines the evaluation process for the 2018 call for the Stimulus of Scientific Employment – Institutional Support launched by the *Fundação para a Ciência e a Tecnologia, I. P.* (FCT) on 22.02.2018.

FCT is the Portuguese public research agency that funds research and technological development in all areas of science and technology. FCT aims to promote research talent through sustainable advanced training and scientific careers, to support the development of internationally leading research centres, to foster international competitiveness of research and innovation carried out in Portugal, to facilitate access of the scientific community to state-of-the-art infrastructures and to encourage knowledge transfer between R&D centres and businesses.

FCT awards scholarships, scientific employment contracts and research project grants, and funds research centres and infrastructures, as well as international cooperation.

2. SCIENTIFIC EMPLOYMENT – INSTITUTIONAL SUPPORT

Strengthening scientific employment in Portugal is a central issue to the program of the XXI Constitutional Government and to the National Reforms Program. In this context, FCT provides financial support to encourage recruitment of new researchers in the context of career development plans, thereby providing institutional rejuvenation and reduction of precariousness in scientific employment.

Beneficiary institutions include:

- 1. Non-corporate entities of the R&D system, namely institutions of higher education, their institutes and R&D units, State Laboratories or international laboratories headquartered in Portugal, and private non-profit institutions whose main object is R&D, including associated laboratories and collaborative laboratories.
- 2. Companies whose activity has been recognised as of scientific or technological interest or that have been awarded the title of Collaborative Laboratory.

FCT issued in 2017 the Regulation of Scientific Employment (REC) by which two instruments were created to promote scientific employment: an **individual programme** for the direct hiring of doctoral researchers by R&D institutions; and an **institutional programme**, for developing scientific employment and career development plans by the beneficiary institutions.

The present call relates to the institutional support programme for contracting researchers holding a PhD degree. It aims to support and strengthen scientific careers in R&D institutions through a contract program based on an institutional scientific employment program.

The profile of the Scientific Employment candidates to be hired by the beneficiary institutions should correspond to highly motivated scientists seeking to develop, carry out or coordinate top quality research in Portugal.



Four levels of career stages will be considered:

- a) **Junior researcher**: Ph.D. holders with a reduced post-doctoral experience in the scientific area of application;
- b) **Assistant researcher**: Ph.D. holders with more than 5 years of post-doctoral research, with relevant experience in the scientific area of application but with no need to demonstrate scientific independence;
- c) Principal researcher: holders with more than 5 years of post-doctoral research, with relevant experience in the scientific area of application and demonstrating scientific independency for the last 3 years;
- d) **Coordinating researcher**: Ph.D. holders with more than 5 years of post-doctoral research, holders of a title of *agregação* or *habilitação*, with relevant experience and demonstrating scientific independency and leadership evidence in the scientific area of application.

Also the three levels of research career ("investigador auxiliar", "investigador principal" and "investigador coordenador"), university professorial career ("professor auxiliary", "professor associado" and "professor catedrático") and polytechnic professorial career ("professor adjunto", "professor coordenador" and "professor coordenador principal") will be considered.

Research independency is demonstrated by originality and scientific competence with international recognition or by experience in doctoral or post-doctoral supervision or by having attracted funding in competitive grant applications at national or international level.

Scientific leadership is demonstrated by those promoting innovative research and technological development of recognized merit and quality that contributed to knowledge advancement or its application, and that have become an international reference in its area of expertise in national or international contexts. Examples of leadership are coordination of research groups or centres and of international research projects or the realization of plenary presentations.

Candidate institutions can apply individually or as partner of a network of institutions (group of scientific institutions with common or complementary research objectives expressed in a written specific agreement)

Each institution can only submit one application as single proponent or as a participating member of a network, except for large institutions, which may submit one application per each group of more than 300 PhD holders.

3. COMPONENTS OF THE APPLICATION

Applications are submitted online via a dedicated FCT web application.

The application comprises the following parts to be evaluated:

a) Profile of the applicant institution identifying its nature and mission;



- b) In the case of a network of institutions, network objectives and mission of each member, should be clearly identified;
- c) Profile of the faculty and/or research staff of each applicant institution or network partner, discriminating the number of faculty, research staff and post-doc fellowships, with the identification of the source of information used for this characterisation and referred to 31 December 2017;
- d) Institutional strategy for recruitment and career development of PhD researchers for the period (2018-22) and results achieved in the last 5 years (2013-17) in terms of rejuvenation, new positions of researchers and academic staff aiming at reinforcing their specific careers;
- e) List of calls opened in the last 5 years (2013-17) to reinforce the following top career positions: research level ("investigador coordenador" and "investigador principal"); university level ("professor catedrático" and "professor associado"); polytechnic level ("professor coordenador principal" and "professor coordenador");
- f) List of calls planned for the next 5 years (2018-22) to reinforce the following top career positions: research level ("investigador coordenador" and "investigador principal"); university level ("professor catedrático" and "professor associado"); polytechnic level ("professor coordenador principal" and "professor coordenador");
- g) Identification of a maximum of five relevant programs, activities or initiatives in science, technology or innovation, achieved by the candidate institution or network, in the last 5 years (2013-17);
- h) Identification of a maximum of five relevant programs, activities or initiatives in science, technology or innovation, planned by the candidate institution or network for the next 5 years (2018-22);
- i) Level of co-location and integration of activities, namely research, innovation, interaction with society and higher/advanced education, evidenced by the candidate institution or network;
- j) Outreach activities promoting scientific culture among different sectors of the society
- k) Expected contributions of the proposed scientific employment plan to the achievement of specific UN Sustainable Development Goals and Targets, which should be clearly identified;
- Financial support requested for a period of 6 years, in terms of number and level of new positions and duration of the respective contracts, to be accomplished by the candidate institution or network.

The Scientific Employment and Career Development Plans correspond to the information disclosed in items d) to k).



4. EVALUATION CRITERIA

Two evaluation criteria will be used:

- A Hosting conditions and institutional practices in recruitment and integration of highly qualified scientific and academic staff demonstrated in the last 5 years (2013-17);
- B Scientific Employment Plan for the next 5 years (2018-22);

with the following weighting factors: 0,5*A +0,5*B.

Criterion A – Merit of the application taking into account the conditions and procedures of recruitment and integration of highly qualified scientific and academic staff within the institutional capacity to promote scientific, technological, cultural or artistic development demonstrated in the last 5 years (2013-17), by the candidate institution or network based on the following reference sub-criteria:

- A1. Contractual level: Ratio between the total number of PhD holders, researchers and professors, with a legal contract (permanent or with a determined duration in time i.e. "contrato a termo indeterminado", "contrato sem termo", "contrato por tempo determinado", "contrato a termo resolutivo") and the total number of scientific and academic PhD holders including post-docs fellows, registered in 31 December 2017;
- A2. Recruitment: Ratio between the number of calls opened in the last 5 years (2013-17) and the total number of PhD graduates, with a legal contract (permanent or with a determined duration in time i.e. "contrato a termo indeterminado", "contrato sem termo", "contrato por tempo determinado", "contrato a termo resolutivo"), registered in 31 December, 2017;
- A3. Careers: Ratio between the number of researchers and professors with a permanent appointment (i.e. "contrato a termo indeterminado" or "contrato sem termo") and the total number of scientific and academic PhD holders, including post-docs fellows, registered in 31 December, 2017;
- A4. Reinforcement of the careers: Ratio between the number of contracts signed for "top level staff" during the last 5 years and the total number of PhD graduates with a legal contract, registered in 31 December, 2017. (Note: "top level staff" includes the research career ("investigador coordenador" and "investigador principal"), the university professorial career ("professor catedrático" and "professor associado") and the polytechnic professorial career ("professor coordenador principal" and "professor coordenador");
- A5. Excellence, level 1: score given by the Evaluation Panel to the 5 most relevant programs, activities, initiatives or achievements in science, technology or arts, considered as such by the institution or the network, in the last 5 years;
- A6. Excellence, level 2: score given by the Evaluation Panel to the level of co-location and articulation between scientific, innovation higher/advanced education and interaction with the society activities, considered as such by the institution or the network;



A7. Excellence, level 3: score given by the Evaluation Panel to the 5 most relevant programs, activities, initiatives or achievements promotion of scientific culture and innovation, considered as such by the institution or the network.

Weighting factors, A = 0.1*(A1+A2+A3+A4) + 0.2*(A5+A6+A7)

Criterion B – Merit of the Scientific Employment Plan for the next 5 years (2018-22), based on the following criteria:

- B1. Recruitment: Ratio between the number of calls for placements of researchers and professors planned for the next 5 years (2018-2022) and the total number of PhD graduates with a contract, registered in 31 December, 2017;
- B2. Careers: Ratio between the number of researchers and professors with a permanent appointment (i.e. "contrato a termo indeterminado" or "contrato sem termo") planned to be hired in the next 5 years (2018-20) and the total number of PhD graduates with a contract, registered in 31 December 2017;
- B3. Reinforcement of the careers: Ratio between the number of new contracts at "top level staff" planned for the next 5 years (2018-20), and the total number of PhD graduates, with a legal contract (permanent or with a determined duration in time i.e. "contrato a termo indeterminado", "contrato sem termo", "contrato por tempo determinado", "contrato a termo resolutivo"), registered in 31 December, 2017 (Note: "top level staff" includes the research career ("investigador coordenador" and "investigadorprincipal"), the university professorial career ("professor catedrático" and "professor associado") and the polytechnic professorial career ("professor coordenador principal" and "professor coordenador");
- B4. Sustainable Development Goals 2030 (SDG 2030): Score of the Evaluation Panel based on the contribution of the Scientific Employment Plan to the achievement of the selected Goals and Targets of SDG 2030 taking into account the relations between each planned new contract and specific goal(s) and target(s);
- B5. Excellence, level 1: Score given by the Evaluation Panel to the 5 most relevant programs, activities or initiatives in science, technology or innovation planned by the institution or the network for the next 5 years (2018-20);
- B6. Excellence, level 2: Score given by the Evaluation Panel to the planned initiatives to promote the level of co-location and articulation between scientific, innovation higher/advanced education and interaction with the society activities planned by the institution or the network for the next 5 years (2018-20);
- B7. Excellence, level 3: Score given by the Evaluation Panel to the 5 most relevant programs, activities, initiatives or achievements for the promotion of scientific culture and innovation planned by the institution or the network for the next 5 years (2018-20).



Weighting factors, B = 0.1*(B1+B2+B3+B4) + 0.2*(B5+B6+B7)

Criteria A1 to A4 and B1 to B3 should be considered in relative terms, taking into account the size and type of institution or network of institutions.

The Evaluation Panel should evaluate the sub-criteria in the light of specificities of the applicant, namely in the case of networks, taking into consideration also the terms of the respective network agreement.

5. SCORING

The scoring system uses a 10-point scale, using 0.1 intervals. The highest score is 10.0.

Each criterion is scored individually.

The final score (CF) is given by the following formula: CF = 0.5*A + 0.5*B.

The minimum merit threshold for a proposal to be considered for funding is 7.0.

6. EVALUATION PROCESS

The evaluation will be performed by an Evaluation Panel of international experts of recognised merit and experience institutional management and evaluation, co-chaired by Professors António Rendas and António M. Cunha.

The evaluation process will include:

- Rating each of the sub-criteria using the 10-point scale with 0.1 increments. The weighted score of
 each application will be calculated as referred above, in sections 4 and 5;
- Proposal of the number and type of positions to be supported in each application, taking into
 account the overall and individual scores as well as the size and type of institution or network of
 institutions.;
- A statement providing overall comments, which should fully explain the judgment on the application. These comments should be objective and substantial, highlighting the strengths and weaknesses of the proposed Scientific Employment Plan;

Within this process, the Evaluation panel will ensure that each application receives a fair judgment and is discussed appropriately.



7. FEEDBACK TO APPLICANTS

The evaluation comments may be succinct but should be substantial, highlighting the strengths and weaknesses of the application. A minimum of 1000 characters (with spaces) is required. The use of standard comments is strongly discouraged.

8. CONFIDENTIALITY AND CONFLICT OF INTERESTS

Confidentiality

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

The first time a reviewer has access to the evaluation area, he/she will have to confirm the following statement:

STATEMENT OF CONFIDENTIALITY

Thank you for accepting to participate in the scientific evaluation of the Stimulus of Scientific Employment – Institutional Support submitted to the *Fundação para a Ciência e a Tecnologia, I.P.* (FCT, I.P.).

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 available, other than to the FCT, I.P. or the Evaluation Panel, the results of the evaluation.

Conflict of Interests (CoI)

Disqualifying conflict of interests

In case a disqualifying conflict of interests is identified for an application, the panel member cannot evaluate it nor participate in its discussion. Circumstances that should be interpreted as a disqualifying conflict of interests are laid down in the following criteria:

- 1. Personal or financial interest in the application's success;
- 2. Current or planned close scientific cooperation with the applicant institution or network;
- 3. Affiliation, or pending transfer, to any of the departments or research centres involved in the application;
- 4. Be an active member in a council or similar supervisory board in any unit e.g. department or research centre of the applicant institution or network or will be in the scope of the application.



Potential conflict of interests

In the case of a potential conflict of interests, the panel member should notify FCT and clarify if he/she considers to be able to perform an unbiased evaluation or if the conflict should rather be considered as disqualifying. FCT will make a decision whether the situation in question constitutes an actual CoI or no CoI exists. A potential conflict of interests exists in the following circumstances:

- 5. Professional relationships, other than those listed under no. 4;
- 6. Participation in university bodies other than those listed under no. 6, *e.g.*, scientific advisory committees in the research environment;
- 7. Involvement in a project or other activities with the applicant institution or network.

Before starting the evaluation of each application, and in order to access the evaluation form, the reviewer needs to complete a CoI declaration, where a disqualifying or potential CoI should be clarified. In case of a disqualifying conflict of interest, the reviewer will not be able to proceed with the evaluation and should immediately inform the Chair and FCT, so that the application may be reassigned. The evaluation meeting report must mention all declared CoI.