

**CALL FOR  
EXPLORATORY RESEARCH PROJECTS  
UNDER THE CARNEGIE MELLON PORTUGAL PROGRAM  
2022**

**Guide for Peer Reviewers**

**September 2022**



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## 1. ABOUT FCT

FCT (Fundação para a Ciência e a Tecnologia) is the Portuguese public agency under the responsibility of the Ministry for Science, Technology and Higher Education that supports science, technology and innovation, in all scientific domains.

FCT's mission is to continuously promote the advancement of knowledge in science and technology in Portugal high international standards in quality and competitiveness, and encourage its dissemination and contribution to society and to economic growth.

FCT pursues its mission by funding, through competitive calls with peer review, fellowships, studentships and research contracts for scientists, research projects, research centres and infrastructures. FCT ensures Portugal's participation in international scientific organisations, fosters the participation of the scientific community in international projects and promotes knowledge transfer between Research and Development (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.

The results of FCT accomplishments are, in essence, the outcome of the work carried out by individual scientists, research groups and institutions that are funded by FCT.

## 2. THE 2022 CALL FOR EXPLORATORY PROJECTS – CMU PORTUGAL PROGRAM

The [2022 Call for Exploratory Projects under the Carnegie Mellon Portugal Program](#) is open from 11 October to 17 November 2022.

This Call is designed to assist teams of researchers from the NSST entities, the Carnegie Mellon University (CMU) and industry partners in bootstrapping high-impact potential research activities of strategic relevance for the Carnegie Mellon Portugal Program (CMU Portugal). The Call encourages recent Ph.D. graduates that are faculty at Portuguese Universities or researchers with an appointment in Portuguese research institutions to submit a research proposal.

The proposals should be high-risk/high-reward and show promise and a strategy for significant future expansion of the project's goals. ERPs are aimed at formulating and launching the basis for longer-term projects, i.e., they will not be required to achieve, within their scope, the fully developed and ambitious final results that will be typical of longer-term projects. However, the proposals must be very concrete on the activities and outcomes that the consortium proposes to carry out and achieve within the ERPs scope and clearly link them to its longer-term objectives. The ERPs should value impact, e.g., by building systems that address real-world problems beyond just research papers.

Under this Call, the Program is seeking proposals, namely in the area of ICT, focusing on the opportunities provided by the data economy as a driver of growth and change.

The present call, ruled by the [FCT Projects Regulations](#), entails a [public announcement](#) outlining the required features for applications, the budget allocation and the evaluation criteria to be applied. **All**

**proposals** are submitted online via [MyFCT](#) Web Platform (for more detailed information see Annex I) and must be **written in English**.

The projects to be funded under this call must meet the following specific requirements:

- The maximum duration of the grant is **12 months** (extendable for 3 months, if justified).
- The maximum funding for Portuguese research institutions in each ERP cannot exceed **70.000,00** euros for consortia with **more than one Portuguese research institution**, or **50.000,00** euros for consortia with **a single research institution**.

The budget allocation is **€400.000** (four hundred thousand euros) **of national state budget**.

Research activities at CMU will be covered independently and at a comparable level through the CMU Portugal Program at Carnegie Mellon University.

The **beneficiary entities**, that may apply **individually or in co-promotion**, must be a legal entity belonging to the non-business entities of the R&I System, namely: higher education institutions, their institutes and R&D units; state or international laboratories with a head office in Portugal; non-profit private institutions whose main object is R&D activity; other non-profit public and private institutions developing or participating in scientific research activities. The possible involvement of foreign institutions as participants in the project does not confer them the status of beneficiary.

**Each applicant can only submit one application as PI or Co-PI.** The PI, co-PI, core elements and the remaining elements of the research team, are responsible for **submitting an updated version of their CV in English on the [CIÊNCIAVITAE](#)**.

A **maximum of 4 Core CVs** must be presented: for **PI, co-PI and 2 other team members** (researchers considered as more relevant for the project).

The information provided in the CVs will be used as a complement to the information provided in the application regarding the **PI Synopsis** and the **Research Team Synopsis**. The synopsis should focus on the **last 5 effective years of scientific activity**.

### 3. EVALUATION CRITERIA

The evaluation of the application will focus on the relevance and quality of following criteria:

- A. Scientific merit and innovative nature of the project from an international standpoint, and alignment with the goals of Phase III of the CMU Portugal Program - **(45%)**;
- B. Scientific merit of the research team - **(20%)**;
- C. Impact of the project results in a real-world problem and potential for opening longer-term research avenues - **(20%)**;
- D. Feasibility of the work plan and reasonableness of the resources and budget - **(15%)**.

### 3.1 CRITERION A

This criterion aims to assess the scientific merit and innovative nature of the project considering the following aspects:

- Relevance and originality of the project proposed project (based on the state-of-the-art in a determined scientific area and previous work done by the proposing team);
- Suitability of the project to the goals of Phase III of the CMU Portugal Program;
- Articulation of the research plan between Portugal and CMU;
- Adequacy of the methodology adopted for carrying out the project;
- Expected results and their contribution to scientific and technological knowledge;
- Resulting publications and articles;
- Degree of internationalization of the team.

### 3.2 CRITERION B

The present criterion aims to evaluate the scientific merit of the research team, considering the following aspects:

- Scientific productivity of the team (references to publications and citations in published works, other relevant indicators);
- Abilities and skills to adequately execute the proposed project (team configuration, PI's qualifications);
- Ability to involve young researchers in training;
- Availability of the team and non-duplication of objectives in relation to other projects underway;
- Degree of success in previous projects in relation to the Principal Investigator (PI) (in the case of young PIs, this requirement must be assessed based on the potential revealed by the PI's curriculum vitae in the absence of prior concrete accomplishments).

### 3.3 CRITERION C

This criterion is intended to evaluate the impact of the project results, considering the following aspects:

- Contribution towards promoting and disseminating science and technology;
- Contribution to the body of knowledge and competence of the National Science and Technology System (expected effects and results);

- The potential economic value of the technology (if appropriate), namely in terms of its impact on the competitiveness of the national socio-economic system;
- Production of knowledge that can contribute to benefits to society or to the business sector;
- Potential to lead to a longer-term research agenda.

### 3.4 CRITERION D

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

- Organization of the project in terms of the proposed objectives and resources (duration, equipment, size of the team, institutional and management resources);
- Institutional resources of the proposing and participating entities (technical-scientific, organizational and managerial and, when appropriate, co-funding capacity on the part of companies).

## 4. SCORING SYSTEM

The scoring system uses a **9-point scale, using 0.1 increments**. The maximum score is 9 and the minimum is 1, as presented in Table I.

Table I – Qualitative descriptors associated to the 9-point scale.

Evaluation	Score	Strengths & Weaknesses
Excellent	9	Exceptionally strong with no weaknesses
Very good	8	Very strong with some negligible weaknesses
	7	Strong with some minor weaknesses
Good	6	Some strengths with numerous minor weaknesses
	5	Some strengths but with at least one moderate weakness
Adequate	4	Few strengths with several minor weaknesses
	3	Few strengths and major weaknesses
Poor	2	Very few strengths and serious weaknesses
	1	Cannot be assessed due to missing or incomplete information

The Merit of the Project (MP) is given by:

$$MP = 0.45 A + 0.2 B + 0.2 C + 0.15 D$$

Criteria A, B, C and D are scored using a 9-point scale system (1 – minimum; 9 – maximum) with **decimal numbers**. The final score of MP is rounded to two-decimal places.

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

- **MP ≥ 5.00 points.**

The **eligible applications will be ranked** by the evaluation panel **by decreasing order** of the **MP score**.

**In case of ties** (projects with the same MP score), the **ratings assigned to criteria A, B, C and D** will be used **sequentially and by decreasing order** to provide the final ranking of the projects.

## 5. EVALUATION PROCESS

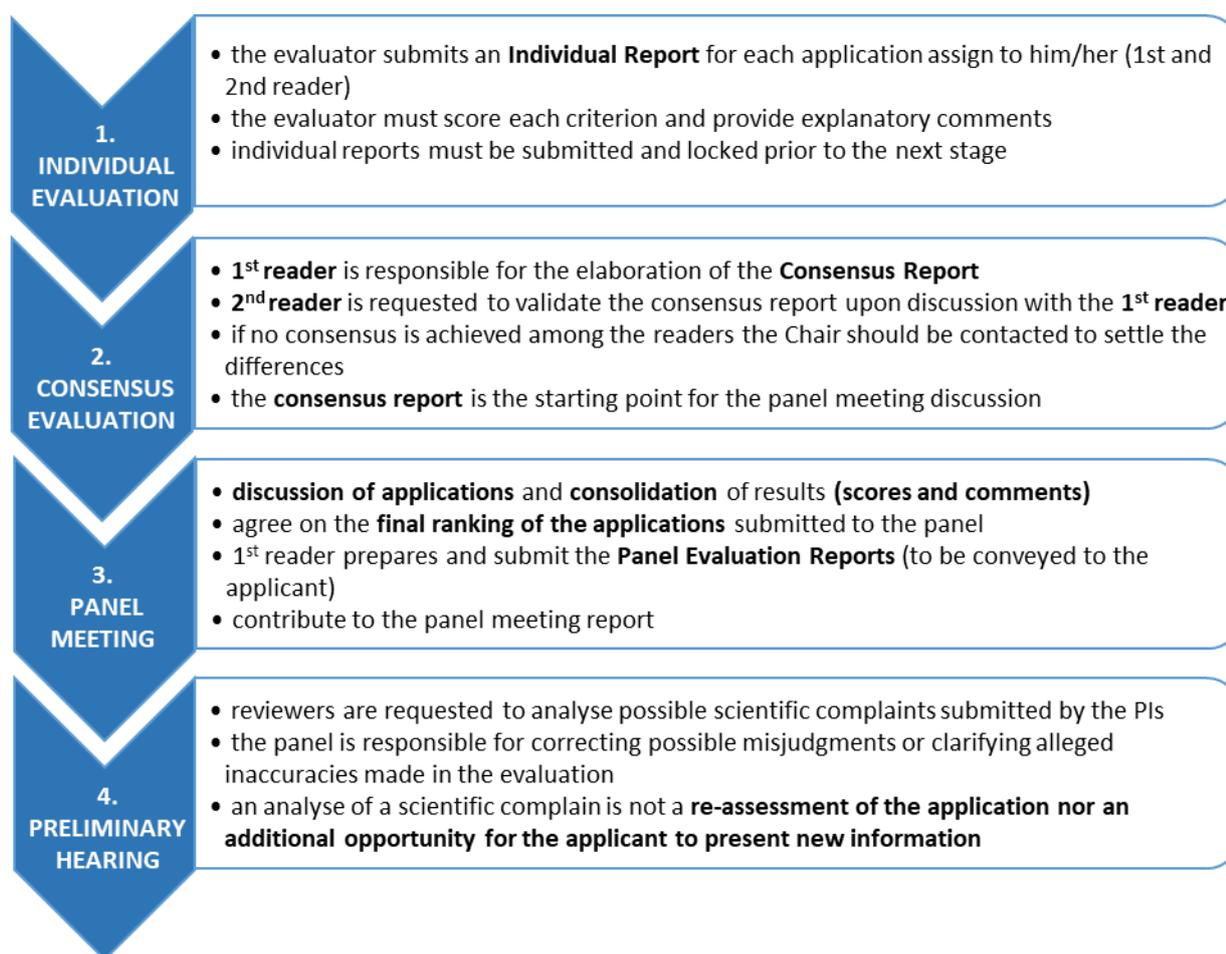
### 5.1 CONSTITUTION OF THE EVALUATION PANEL

- The evaluation panel is constituted by **international reviewers**, taking into consideration the number and the scientific areas of the applications, an adequate gender balance and a fair geographic and institutional distribution of evaluators;
- All experts will be of acknowledged competence in the scientific areas of the application to be evaluated, and cannot be affiliated with Portuguese R&D institutions or have current or scheduled collaborations with any Portuguese R&D institution;
- The panel has a **Chair who is responsible for the following tasks**:
  - Assist FCT with the constitution of the panel by suggesting possible reviewers to be invited;
  - Assign each application to two panel members (1st and 2nd readers), taking into consideration any declared **Conflict of Interest (Col)**, as well as the **matching of scientific expertise** within the topic of the application;
  - Keep the evaluation process within the defined timeframe and contact panel members in case of any delays;
  - Support the FCT team in the resolution of any Col identified during the evaluation process;
  - Suggest external reviewers to be invited by FCT to provide an assessment of the application, whenever a specific expertise is not covered by the panel;
  - Assure the quality of the reviewers' reports: comments should be in agreement with the scores taking into account descriptors of the scoring system (see section 4), providing substantive arguments and identifying both the strengths and weaknesses for each evaluation criterion;
  - Moderate the Panel Meeting;

- Prepare the panel meeting report that should address work methodology, conflicts of interest and final ranking;
- Coordinate the support to be given to FCT and panel members during the period of preliminary hearings, if necessary.

## 5.2 EVALUATION STAGES

The evaluation process comprises **4 stages**:



## 5.3 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 videoconference meeting of the evaluation panel is established in advance by FCT.

## 5.4 FEEDBACK TO BE TRANSMITTED TO APPLICANTS

All the reviewers should comply with the following additional guidelines in the elaboration of the evaluation reports.

Each report must include:

- Score and comments for each evaluation criteria, including strengths and weakness;
- A comment on the proposed budget; suggested changes in the budget must be justified;
- A comment concerning ethical issues, if applicable;
- Confidential comments to the evaluation panel and /or FCT, if necessary.

### **Comments must:**

- Be **coherent** with the **scores** taking into account the **descriptors** presented in Table I (section 4);
- Be **clear** and **consistent**, highlighting the **strengths** and **weaknesses** of the application for each criterion;
- Use **dispassionate and analytical language**, avoiding dismissive statements about the applicant, the proposed science, or the scientific field;
- Be **impeccably polite**;
- Address the **submitted work plan and not the work the reviewers consider should have been proposed**.

### **Comments must not:**

- Give a **description or a summary of the application**;
- 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 ..." or "It is considered...";
- **Ask questions**, as the applicant will not be able to answer them;
- **Provide recommendations or advices** for improving the application;
- Have **contradicting statements**;
- **Mention quantitative details** that can easily **originate factual mistakes**.

**The quality of the comments to be transmitted to the applicants is of paramount importance and part of the evaluation process, therefore being a crucial task of the evaluation panel.**

## 6. CONFIDENTIALITY AND CONFLICT OF INTEREST

### 6.1 CONFIDENTIALITY STATEMENT

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 accept a statement of confidentiality relative to the contents of the project applications and to the results of the evaluation.

### 6.2 CONFLICT OF INTEREST (COI)

#### Disqualifying Conflict of Interest

##### With the present Call

Researchers are **hindered to participate as Chair, Panel member or External reviewer** if they:

1. Have **submitted any application as PI, co-PI, team member or consultant**;
2. Have **first-degree relationships, domestic partnership or are married with a PI, co-PI, team member or consultant** of an application.

##### With an application

Panel members cannot evaluate nor participate in the panel meeting discussion of an application in the following circumstances:

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 before the opening date of the call, 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 three 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

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).

**In case a conflict of interest is detected during the evaluation process, the individual reviewer is required to inform the panel Chair and FCT team of this situation, so that the application may be reassigned. Depending on its nature, this information will be presented in the panel meeting report.**

## ANNEX I - COMPONENTS OF THE APPLICATIONS

**Applications must be written in English** and are submitted online via a dedicated FCT Web Platform ([MyFCT](#)).

Multiple applications of the same project are not allowed. New applications grounded on a previous project should contain substantial modification and update.

Each application comprises the following sections:

### **Project Description**

- Principal investigator
- Project Title (PT/EN) **(max. 255 characters)**
- Project acronym **(max. 15 characters)**
- Keywords (PT/EN) **(max. 4)**
- Main scientific area (Scientific Domain /Scientific Area)
- Justification of the selected area **(max. 1000 characters)**
- Timetable (start date and duration)

### **Institutions**

#### **Principal contractor**

- Institution
- Research unit – maximum 3
- Institution description and its competencies for the development of the project **(max. 1500 characters)**

#### **Participating Institutions**

- Institution  
Research unit – maximum 3
- Institution description and its competencies for the development of the project **(max. 1500 characters)**

#### **Collaborative Institutions**

- Country
- Institution Name
- Institution description and its competencies for the development of the project **(max. 1500 characters)**

### **Research team**

#### **Principal Investigator**

- % commitment
- Institution to which you are associated in the scope of the research project
- Total cost (in euros) (if applicable)
- Employment relationship (if applicable)
- Curriculum Vitae

- PI CV Synopsis - (describes the PI research, academic and professional experience, in the last 5 effective years of scientific activity. It must include at least 3 references of the PI) (max. 3000 characters)
- Files
  - Certificate of PI PhD degree
  - Collaboration letter

#### **Team Members**

- Email
- Role in the team (Co-PI or team member)
- Core CV
- % commitment
- Institution to which you are associated in the scope of the research project
- Total cost (in euros) (if applicable)
- Employment relationship (if applicable)

#### **Hirings (if applicable)**

- Type
- % commitment
- Institution to which you are associated in the scope of the research project
- Total cost (in euros)

#### **Consultants (if applicable)**

- Email
- Framework of consultant's participation (max. 1000 characters)

#### **Research Team CV Synopsis (max. 3000 characters)**

*Research Team CV Synopsis provides the framework and skills of the research team and their coherence with the proposed work plan. It should focus on the last 5 years of effective scientific activity of the research team, indicating the most relevant scientific achievements of the research team and demonstrating its competence and skills in the area of the proposed project.*

#### **Work plan**

##### **Abstract**

- Abstract in Portuguese (**max. 5000 characters**)
- Abstract in English (**max. 5000 characters**)
- Abstract for publication if different

##### **Literature review (max. 6000 characters)**

##### **Research plan and methods (max. 10000 characters)**

##### **Bibliographic references (max. 10000 characters)**

##### **Past publications**

- Order
- Publication (**max. 600 characters**)
- URL

##### **Tasks**

- Task denomination

- Task description and expected results (**max. 4000 characters**)
- Assigned to
- Person\*month
- Start date
- Duration (months)

#### Project timeline and management

- Milestones list (**max. 300 characters**)
- Timeline (including tasks from CMU partner)
- Management (**max. 3000 characters**)

#### Ethical issues (if applicable)

*Ethical Issues (when applicable) are properly identified and addressed, according to the Ethics Self-Assessment Guide*

- Are there Ethics Issues identified in this project?
- Select the ethical declarations you consider appropriate (if applicable)
- Justification (if applicable) (**max. 3000 characters**)

#### Other funded projects

*List the approved projects (led by PI or Co-PI) through peer-review and initiated in the last 5 years (concluded or running projects)*

Add funded project

- Project reference
- PI or Co-PI in actual application
- Project status
- Project title (in English)
- Principal contractor

Funding

- Funding entity
- Total funding

Timetable

- Start date
- Duration (months)

Results

- Please list the main results of the project that you consider relevant for this application (**max. 2000 characters**)

#### Attachments

- PhD degree certificate from PI at CMU
- CV from PI at CMU

*If needed, the PI may attach the following documents to the proposal: **support letters, formulas, schemes, diagrams, graphs or images.** No other documents than the ones previously mentioned should be considered in this section.*

#### Indicators

##### Expected output indicators

- Description

##### Release

- Promotion actions of the scientific activity planned in the project (**max. 3000 characters**)

**Budget** (for detailed information about each item see Annex II)

**Principal contractor**

- Item
- Rationale for requested funding

**Participating institutions**

- Item
- Rationale for requested funding

**Funding plan**

- Global budget (automatic filling)
- Funding Plan (automatic filling)

**Statement of Commitment of PI**

**Validate and submit**

## ANNEX II - BUDGET RATIONALE

**BUDGET** - the following items are eligible for funding:

**a) Direct costs:**

**i. Human resources rationale:**

Expenses with **Human Resources** dedicated or related to the development of R&D activities related to the project execution in all mandatory components by the applicable labour legislation, including charges with grant holders 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;
  - The **research fellowships** are tendered and contracted by the beneficiary entities in the context of the supported projects, which must comply with the Research Fellowship Holder Statute (Law n.º 40/2004 of 18 August, in its present version) and FCT Regulation for Research Studentships and Fellowships.
- ii. Missions**, expenses with travel, accommodation, registration fees, etc. in Portugal and abroad, and directly attributable to the project.
- iii. Acquisition of scientific and technical tools and equipment**, indispensable to the project if used within the project during their useful lifetime.
- iv. Amortization of scientific and technical 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.
- v. Subcontracts**, directly related to the project scientific task's execution.
- vi. Patent registration**, expenses related to the national and foreign record of **patents, copyrights, usefulness models and drawings, national models or brands** when related to other forms of intellectual protection, namely rates, researches to the status of the technique and consulting expenses.
- vii. Demonstration, Promotion and Publication**, expenses with the **demonstration, promotion and disclosure of the project's outputs**, namely dissemination fees within the fulfilment and pursuant to national policies of open access.

**viii. 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.

**ix. 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 direct costs, excluding 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.**

## 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 supervision;
- iii.) the capability to coordinate and carry out independent research work, and is issued to PhD holders with a research and academic path after a public exam by a jury involving discussion of the CV, of a submitted curricular proposal and the presentation and discussion of a lecture.

**Doutoramento** = PhD, doctoral degree

**Mestrado** = Master's degree

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

**Bolsa** = Grant, fellowship

**Bolseiro** = Grant holder, fellow

**BII** = Bolsas de Iniciação à Investigação = Research Initiation Grants

- Research Initiation Grants are intended for students enrolled in a Higher Professional Education, a 1st cycle of a Higher Education institution, an Integrated Master or Master to initiate their scientific training, within research projects to be developed in national institutions;
- These grants are also aimed at holders of a graduate degree, enrolled in courses that do not award an academic degree, integrated in an educational project of a higher education institution developed individually or jointly in their institutes or R&D units;

- These grants have a minimum duration of three months and may be renewable up to a maximum of one year.

#### **BI = Bolsas de Investigação = Research Grants**

- Research grants are intended for students enrolled in an Integrated Master, Master or Doctoral degree, for obtaining the respective scientific academic degree, through the development of scientific training integrated or not in R&D projects;
- These grants are also aimed at holders of a graduate degree or master, enrolled in courses that do not award an academic degree, integrated in an educational project of a higher education institution developed individually or jointly in their institutes or R&D units;
- These grants are, in principle, one year in length, and cannot be awarded for periods of less than three consecutive months;
- The grants may be renewable for additional periods up to:
  - One year, for grants awarded to graduated degree or master holders enrolled in courses that do not award an academic degree;
  - Two years, for grants awarded to students enrolled in master's courses;
  - Four years, for grants awarded to students enrolled in doctoral degrees;
  - These grants may be national, mixed or abroad, depending if the work plan occurs completely, partially or not in national institutions;
  - For mixed research grants, the work plan performed in a foreign institution may not exceed 2 years.

#### **BIPD= Bolsas de Investigação Pós-Doutoral = Postdoctoral Research Grants**

- Postdoctoral Research Grants are intended for doctoral degree holders for the development of R&D activities;
- BIPDs are temporally restricted in order to stimulate the scientific employment and the use of researcher contracts as a rule instrument for their hiring, as well as to promote the development, in National Scientific and Technological System entities, of careers aiming at scientific research;
- BIPDs may only be granted provided that the following requirements are cumulatively met:
  - The doctoral degree has been obtained in the last three years before the submission date of the application grant;
  - The postdoctoral research is carried out in a host entity different than the one in which the research work was done to achieve the doctoral degree;

- The research activities does not require post-doctoral experience;
  - The research activities have a development and execution period equal or less than three years.
- 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;
  - Once the contract grant is finished, a new contract grant cannot be performed between the same host entity and the same fellow.