CALL FOR EXPLORATORY PROJECTS
UNDER THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY PORTUGAL PROGRAM
2022

Guide for Peer Reviewers

October 2022
# TABLE OF CONTENTS

1. ABOUT FCT ................................................................................................................................. 3

2. THE 2022 CALL FOR EXPLORATORY PROJECTS– MIT PORTUGAL PROGRAM ........ 3

3. EVALUATION CRITERIA .............................................................................................................. 6
   3.1 Criterion A ................................................................................................................................. 6
   3.2 Criterion B ................................................................................................................................. 7
   3.3 Criterion C ................................................................................................................................. 7
   3.4 Criterion D ................................................................................................................................. 8

4. SCORING SYSTEM ......................................................................................................................... 8

5. EVALUATION PROCESS .............................................................................................................. 9
   5.1 Constitution of the Evaluation Panel ....................................................................................... 9
   5.2 EVALUATION STAGES ........................................................................................................... 10
   5.3 Evaluation timeline .................................................................................................................. 10
   5.4 FEEDBACK TO BE TRANSMITTED TO APPLICANTS .......................................................... 10

6. CONFIDENTIALITY AND CONFLICT OF INTEREST ............................................................ 12
   6.1 Confidentiality Statement ........................................................................................................ 12
   6.2 Conflict of interest (CoI) ........................................................................................................ 12

ANNEX I - COMPONENTS OF THE APPLICATIONS .................................................................... 14

ANNEX II - BUDGET RATIONALE ............................................................................................... 19
   Portuguese to English Translation and explanations .................................................................. 21
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 – MIT PORTUGAL PROGRAM

The 2022 Call for Exploratory Proposals - Massachusetts Institute of Technology (MIT) Portugal Program is open from 11 October to 17 November 2022.

The aim of this call is to fund Exploratory Research Projects (PeX) in the scope of the MIT Portugal Program. 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 (more detailed information Annex I), written in English, and should develop research activities between Portuguese universities and the MIT towards the development of intelligent solutions, promoting knowledge/research value, promoting the sustainable thinking, integrating human factors and technology, and stimulating multidisciplinary approaches.

The present call is opened for the following five (5) thematic areas:

• **Climate Science & Climate Change** - Climate change and global warming are urgent areas of interest to humanity. Climate data, measurements and instrumentation focused on the oceans, atmosphere, climate, and near-space enables the monitoring of Earth systems dynamics. Such data allows the understanding of how climate has changed over time, enables the development of complex climate models and provides the possibility to estimate in advance the impact of different climate control policies and strategies. With special focus on climate science and climate change, scientific area #1 targets the study, measurement and modeling of the complex interactive system dynamics of climate, weather, atmosphere, ocean, land, and near-space.
Integrative models and methods of studying and analyzing enormous volumes of data should be implemented.

• **Earth Systems: Oceans to Near Space** - The capacity to observe Earth in its full verticality (from deep-sea to space) enables the understanding of its subsystems (oceans, land, air, and space) including complex dynamics. In this research area, the focus is on investigating Earth’s subsystems, namely its oceans, land masses, atmosphere, and near-space environment, with particular emphasis on measurements, developing technologies and capabilities, and addressing Earth’s critical subsystems from oceans to space through technological innovation, big data, autonomy, and comprehensive systems analysis. Related topic areas include the development of ocean monitoring and measurement, ocean research vessel field deployments to demonstrate novel autonomy and human-machine concept of operations (ConOps) to small-satellite technology and launch capabilities, all to enable advances in ocean and earth science measurements, technology advances, and autonomous operations for exploration and science.

• **Digital Transformation in Manufacturing** - Today we can imagine-design-make, essentially in real-time. Human-centered design not only has inspirational effects, but it also has societal relevance, having a psychological effect, which has changed how design is seen and valued. Technology, particularly digital technology and additive manufacturing are providing a set of valuable tools capable of providing new possibilities. Within this research topic, research includes multiple aspects of the digital transformation that is enabling new integrated approaches for adaptive design, manufacturing and sustainable solutions. Projects to develop cyber-physical products and systems, assuring improved user experience and value creation for society and the economy are sought. In this context, strategies for Designing at the Speed of Thought are solicited. Synergies are encouraged for research in Area #3 and Areas #1 and #2, for example, to design, manufacture and launch revolutionary Wafer Satellites and MicroSat constellations focused on land and ocean use, algae blooms, top soil erosion, and regenerative aqua- and agriculture.

• **Sustainable Cities** - Cities have currently the potential to serve as living-labs and as research units for large-scale environments on Earth. Advances in open data platforms, integration and accessibility are needed for “smart, sustainable cities”. Within this area context, research involves urban science, design, and engineering with applications in areas such as energy utilization, air quality maintenance, transportation systems, internet-of-things connectivity, and smart cities. Moreover, high priority will be on the ocean-city interface with relevance to Areas #1 and #2, coastal cities are prioritized and relevant climate change, sea-level rise, temperature and natural disaster monitoring, and development of potential solutions to emerging urban problems.

• **Data Science** - The new-age technology has brought a significant increase in the bulk of the data available. Evolving from statistical analysis and data mining, the science of the data that would be harnessed into the decision-making process sprung. Making sense of raw, unstructured data, identifying patterns, building models and deploying them into applications are some of the aims of Data Science. It merges scientific methods, processes, algorithms and systems from
several disciplines including mathematics, computer science, statistics and information science, to prepare the data for analysis and develop strategies for analyzing, exploring, visualizing and interpreting data in a broad range of applications. As such, Data Science is closely related to Big Data, Data Mining and Machine Learning. The foundational concepts of Data Science can be applied to several knowledge domains, which is why all the remaining areas of interest for MPP are considered to be anchored by Data Science.

It is important to highlight that the research topics are not limited to the examples given in the areas' description above. Proposals with different focuses from the ones presented but within the scope of the areas are acceptable. Additionally, all research areas other than Data Science itself should consider data-science integration. The data-science driver should target the development of tools to collect, curate, and synthesize data from public and other repositories, and to make it available more broadly and in more useful forms for public and private use, including but not limited to the public, policy makers, consumers, and businesses.

For this call **€ 400.000 (four-hundred thousand euros)** of national state budget are distributed as follows:

<table>
<thead>
<tr>
<th>Group</th>
<th>Thematic Areas</th>
<th>Budget Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Climate Science &amp; Climate Change</td>
<td>€ 100.000</td>
</tr>
<tr>
<td>2</td>
<td>Data Science</td>
<td>€ 100.000</td>
</tr>
<tr>
<td>3</td>
<td>Earth Systems: Oceans to Near Space</td>
<td>€ 200.000</td>
</tr>
<tr>
<td></td>
<td>Digital Transformation in Manufacturing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sustainable Cities</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td><strong>€ 400.000</strong></td>
</tr>
</tbody>
</table>

If the budget allocation stipulated for the areas “Climate Science & Climate Change” and “Data Science” is not exhausted, the remaining amount will be transferred to the set of the thematic areas “Earth Systems: Oceans to Near Space”, “Digital Transformation in Manufacturing” and “Sustainable Cities”.

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

- The maximum duration of the project is **12 months** (extendable for 3 months, if justified).
- The eligible investment cannot exceed **€50.000** (fifty thousand euros)

The Principal Investigator (PI) is responsible for choosing the most suitable scientific area of the proposed research plan. According to this selection, the eligible proposals will be evaluated by international reviewers.
The **beneficiary entities** 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.

Funding for the **MIT research team** participating in the project will be provided directly by MIT through the Call for Seed Projects held at MIT.

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 - (45%);
- **B.** Scientific merit of the research team - (20%);
- **C.** Feasibility of the plan of work and reasonability of the budget - (20%).
- **D.** Contribution to the knowledge accumulation and competencies of the National Scientific and Technological System – (15%).

#### 3.1 CRITERION A

This criterion is intended to evaluate the scientific merit and innovative nature of the project from an international standpoint, considering the following dimensions in an integrated way:

- Relevance and originality of the project proposed (based on the state-of-the-art in a determined scientific area and previous work done by the proposing team)
- Thematic alignment of the proposal with the exploratory projects topics as referred in section 2
- Adequacy of methodology adopted for carrying out the project
- Expected results and their contribution to scientific and technological knowledge
• Resulting publications and articles
• Contribution towards promoting and disseminating science and technology
• Production of knowledge that can contribute to benefits to society or to the business sector
• Advancement of knowledge and understanding within the proposed field and/or across fields, highlighting the vision and break-through ambitions of the proposed research, rather than incremental progress

3.2 CRITERION B

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

• 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, Principal Investigator's qualifications)
• Ability to involve young researchers in training
• Availability of the team and non-duplication of objectives in relation to other projects underway
• Participation in the exploratory project of PhD students enrolled in PhD Programs
• Involvement and level of commitment of companies and other stakeholders like independent non-academic organizations (e.g. hospitals, foundations, ministry departments, city councils, private or public associations, etc.) that participate in the project

3.3 CRITERION C

This criterion is intended to evaluate the quality and feasibility of the workplan and reasonability of the 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 participating entities, in particular of the Principal Contractor (PC) (technical-scientific, organizational and managerial and, when appropriate, co-funding capacity on the part of companies)
• Quality of project design and rationale for the proposed budget
3.4 CRITERION D

The present criterion aims to assess the contribution to the knowledge accumulation and competencies of the National Science and Technology System, considering the following dimensions in an integrated way:

- Contribution to the body of knowledge and competence of the National Science and Technology System (expected effects and results)
- Enhancement of partnerships for research, education and innovation

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.

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

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

\[ MP = 0.45 \text{A} + 0.20 \text{B} + 0.20 \text{C} + 0.15 \text{D} \]

The 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:

- \( \text{MP} \geq 5.00 \) points.

The eligible applications will be ranked by the evaluation panel, by group of thematic areas defined in section 2 and 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 panels are 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 (CoI), 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 CoI identified during the evaluation process;
  
  - Suggest external reviewers to provide an assessment of an application, whenever a specific expertise is not covered by the panel;
  
  - Assure the quality of the 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 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:

1. INDIVIDUAL EVALUATION
   - the evaluator submits an Individual Report for each application assigned to him/her (1st and 2nd reader)
   - the evaluator must score each criterion and provide explanatory comments
   - individual reports must be submitted and locked prior to the next stage

2. CONSENSUS EVALUATION
   - 1st reader is responsible for the elaboration of the Consensus Report
   - 2nd reader is requested to validate the consensus report upon discussion with the 1st reader
   - if no consensus is achieved among the readers, the Chair should be contacted to settle the differences
   - the consensus report is the starting point for the panel meeting discussion

3. PANEL MEETING
   - discussion of applications and consolidation of results (scores and comments)
   - agree on the final ranking of the applications submitted to the panel
   - 1st reader prepares and submit the Panel Evaluation Reports (to be conveyed to the applicant)
   - contribute to the panel meeting report

4. PRELIMINARY HEARING
   - reviewers are requested to analyze possible scientific complaints submitted to the PIs
   - the panel is responsible for correcting possible misjudgments or clarifying alleged inaccuracies made in the evaluation
   - an analysis of a scientific complaint is not a re-assessment of the application nor an additional opportunity for the applicant to present new information

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 and includes:

- The score and comments for each of the 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.

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.

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 considers...” 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.
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

In the present Call

Researchers are hindered to participate as Chair, Co-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:

**General Data**

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 - (max. 3000 characters)
  PI CV synopsis (describe 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)
- Files
  - Certificate of academic 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 (provide 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 different?

Literature review
- Literature review (max. 6000 characters)

Research plan and methods
- Research plan and methods (max. 10000 characters)

Bibliographic references
- 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
- 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 (lead 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

*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** (detailed information about each item in 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.