FCT Fundação
para a Ciência
e a Tecnologia

CALL
FOR EXPLORATORY PROJECTS UNDER THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
PORTUGAL PROGRAM
2021

Guide for Peer Reviewers

May 2021

REPÚBLICA
PORTUGUESA

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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, attain the highest 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 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.

1.1 GRANTS FOR RESEARCH PROJECTS

Funding of projects by FCT is based on peer review of applications submitted online when a call is opened. All proposals are judged on the basis of their scientific merit.

Each call entails a public announcement outlining the required features of the applications and the evaluation criteria to be applied. On a regular annual basis, FCT opens calls for projects in all scientific domains, and occasionally for projects in specific research areas.

The 2021 Call for Exploratory Proposals - MIT Portugal Program is open from 19th May to 29th June 2021.

All the eligible proposals will be evaluated by an **international panel.**

The rules under which the applications and the accepted projects are governed are specified in a public document entitled: Regulations Governing Access to Funding for Scientific Research and Technological Development Projects.

The [MIT Portugal Partnership 2030](#) (MPP2030) is a strategic international partnership between Portuguese universities and research institutions, the Massachusetts Institute of Technology (MIT), the Portuguese government, as well as partners from industry and other non-academic institutions. Launched in June of 2018 and funded by the FCT, its goal is to strengthen Portugal's knowledge base and international competitiveness through a strategic investment in research, people, and ideas in areas of global relevance and with significant societal impact.

Potential exploratory research projects should aim to address research topics in a holistic fashion through an integrated and multidisciplinary research design with a view towards piloting and scalability involving entities of the National Research and Innovation System, other public and private partners and the Massachusetts Institute of Technology (MIT).

The proposal should target the development of research activity between MIT and Portuguese universities aiming at developing smart solutions, fostering value out of knowledge/research, promoting sustainable thinking, integrating human factors and technology, and stimulating multidisciplinary approaches.

This call aims to support exploratory projects for the following four research areas, all of which should be supported by data science:

1. **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 modelling 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.

2. **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.

3. **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 agri-culture.

4. **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.

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 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.

Successful proposals are required to meet the following criteria:

- Be of exceptional quality and high relevance for Portugal. They will target innovative, high-impact research that addresses unique research needs and opportunities in Portugal.

- Take an "exploratory approach," i.e. address an emergent research topic within the program framework that can be identified as future research domains and that can have a high impact for Portugal as a scalable living laboratory and innovation ecosystem for the development of new solutions/systems with a global reach, and for fostering an increase of competitiveness of Portuguese economy in the knowledecedge-based industry.

- Be designed with a view towards the long-term objective of developing innovative solutions/systems, demonstrating and leading Portugal's international competitiveness and innovative capacity in science and technology.

- Be strongly collaborative and have a clear multidisciplinary approach.

2.1 MAIN RULES

The 2021 Call for Exploratory Proposals - MIT Portugal Program is launched by FCT through a public announcement outlining the required features of the applications and the evaluation criteria to be applied.

According to the FCT Projects Regulations and the public announcement, 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 eligible investment cannot exceed **€50.000,00**.

The budget allocation is **€400.000 of national state budget**, and, if justifiable, FCT may strengthen this budget.

The beneficiary entities that may apply **individually or in co-promotion** are:

- Non-business entities of the R&I System, namely:

    o Higher education institutions, their institutes and R&D units;

    o State or international laboratories with a head office in Portugal;

    o Non-profit private institutions whose main object is R&D activity;

    o Other non-profit public and private institutions developing or participating in scientific research activities.

The Principal Contractor must be a legal entity belonging to the non-business entities of the R&I System listed above.

The possible involvement of **foreign institutions as participants** in the project does **not confer them the status of beneficiary**. Research activities of participating MIT research teams will need to be covered independently.

It is also important to underscore that:

- **Each PI can only submit, in that quality, <u>one application</u>;**

- **Each PI must identify a Co-PI who replaces the PI in absences and impediments;**

- **The Research Team should have the participation of a MIT researcher (with Principal Investigator status).** This participation is confirmed by means of a "Collaboration Letter" submitted with the application;

- The remaining members of the Portugal research team shall be dedicated to the project, according to their participation.

The beneficiary entities and the PI must agree to comply with the applicable national and European Community norms namely: competition, environment, equal opportunity and gender, and public contracting, whenever applicable. The following should be considered:

- Animal experimentation - the PI must vouch for the research team's compliance with EU directives and the relevant Portuguese laws regarding the protection of animals used for experimental and other scientific purposes;

- Regarding the donation, procurement, testing, processing, storage, distribution and preservation of human tissues and cells, the PI must vouch for the research team's compliance with EU directives and the relevant Portuguese laws on standards of quality and safety;

- The dissemination strategy of research outputs of the projects, including considerations of open access, will be taken into account in the evaluation.

For more detailed information please refer to the [Ethics Self-Assessment Guide](#).

2.2 COMPONENTS OF THE APPLICATIONS

Applications are submitted online via a specially designed [FCT Web application](#). **The application must be written in English.**

The application comprises the following sections:

1. **Project description -** where the PI:

   - identifies the scientific domain and the main scientific area from the four research areas of the call;
   - identifies the secondary set of scientific area from the provided list (optional);
   - indicates the title of the project;
   - indicates up to four keywords that reflect the scientific content of the proposed research plan;
   - identifies 1 to 3 of the 17 UN sustainable development goals (2030 UN Agenda Goals), for information purposes only.

2. **Institution description and its competencies for the development of the project** (3000 characters)**.**

3. **Scientific components:**

   - **"*Abstract*"** (5000 characters);
   - **"*Technical Description*"** comprises "*Literature Review*" (6000 characters), "*Research Plan and Methods*" (10000 characters), "*Tasks*" (4000 characters for each task), "*Project Timeline and Management Plan*" (3000 characters);
   - *"**Bibliographic References**"* (max. of 30);
   - "***Past Publications***" (lists the 5 most representative publications of the team).

4. **Research team:**

   - includes the members list and the number of new recruitments;

   - the identification of the **Co-PI**.

   A **maximum of 4 Core CVs** must be presented: for PI, co-PI and 2 other team members (core elements).

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

5. **Funded projects -** this field should describe all projects approved through peer-review **in the last 5 years from the PI and Co-PI** related to the present application.

6. **Expected Indicators** - in this section, the PI should indicate the potential scientific research results including, among others, the following: a) Publications, b) Communications, c) Reports, d) Organization of Seminars and Conferences, e) Advanced Training, f) Models, g) Software, h) Pilot plants, i) Prototypes, j) Patents and l) Other; Other means of knowledge dissemination.

7. **Budget** - the following items are eligible for funding:

   - **Direct costs:** Human resources, Missions, Subcontracts, Patent registrations, Demonstration, promotion and publication, Service procurement and acquisitions, Instruments and scientific and technical equipment.

   - **Indirect costs**, with a **flat rate of 25% of eligible direct costs**, excluding subcontracting. This percentage is automatically checked by the submission tool. Applications cannot be locked if this condition is not verified.

8. **Budget Rationale -** where the PI presents the justification of the requested items of the budget (more detailed information in Annex I).

9. **Attachments -** in addition to the mandatory annexes with the Collaboration Letter **and timeline**, the PI may attach the following documents to the proposal**: support letters, consultants' CVs, formulas, schemes, diagrams, graphs, images or bibliographic references and previous publications** thar are not available online.

   Information or documents made available through other platforms, e.g., Dropbox or Google Drive, should not be considered for evaluation.

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 work plan and reasonability of the budget - **(20%)**

D. Contribution to the knowledge accumulation and competencies of the National Science and Technology 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:

i. 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)

ii. Thematic alignment of the proposal with the exploratory projects topics as referred in section 2

iii. Adequacy of methodology adopted for carrying out the project

iv. Expected results and their contribution to scientific and technological knowledge

v. Resulting publications and articles

vi. Contribution towards promoting and disseminating science and technology

vii. Production of knowledge that can contribute to benefits to society or to the business sector

viii. 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:

i. Scientific productivity of the team (references to publications and citations in published works, other relevant indicators)

ii. Abilities and skills to adequately execute the proposed project (team configuration, Principal Investigator's qualifications)

iii. Ability to involve young researchers in training

iv. Availability of the team and non-duplication of objectives in relation to other projects underway

v. Participation in the exploratory project of PhD students enrolled in PhD Programs

vi. 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:

    i. Organization of the project in terms of the proposed objectives and resources (duration, equipment, size of the team, institutional and management resources)

    ii. Institutional resources of the participating entities, in particular of the Principal Contractor (PC) (technical-scientific, organizational and managerial and, when appropriate, co-funding capacity on the part of companies)

    iii. 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:

    i. Contribution to the body of knowledge and competence of the National Science and Technology System (expected effects and results)

    ii. 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.

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 major 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:

$$MP = 0.45\ A + 0.20\ B + 0.20\ C + 0.15\ D$$

The criterion 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 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 descending 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**, organized by MIT Portugal Program Governing Committee and the Board of Directors of FCT and approved by the Minister of Science, Technology and Higher Education;

- The constitution of the evaluation panels takes 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;

- Each panel has a **Chair who is responsible for the following tasks:**

  - Assisting FCT with the constitution of the panel by suggesting possible reviewers to be invited;

  - Assigning each application to two Panel Members;

  - Keeping the evaluation process within the defined timeframe and contacting panel members in case of any delays;

  - Supporting the FCT team in the resolution of any Conflict of Interest (CoI) identified during the evaluation process;

- Suggesting external reviewers to be invited by FCT to provide an assessment of the applications, whenever a particular expertise is not covered by the panel;

- Assuring 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;

- Supporting the overall application of these guidelines and an effective differentiation of the projects' assessment;

- Leading the Panel Meeting;

- Elaboration of the panel meeting report to be conveyed to the Board of Directors of FCT;

- Coordinating the support to be given to FCT by panel members during the period of preliminary hearings, if necessary.

5.2 EVALUATION STAGES

The evaluation process involves the following stages:

- Applications eligibility and assignment to reviewers;

- Remote evaluation:

  - Individual phase;

  - Pre-Consensus phase (Compilation phase).

- Panel Meeting;

- Preliminary hearing analysis.

APPLICATIONS ELIGIBILITY AND ASSIGNMENT

- FCT is responsible for verifying the eligibility of the submitted applications according to the factual and legally binding criteria described in the announcement. A**n application can be declared ineligible at any stage of evaluation**. If any doubt arises during the evaluation regarding eligibility, the Panel Chair and FCT should be informed;

- **Each application** is remotely and **individually evaluated by two panel members**. One of the Panel Members is appointed as **first reader** of the application;

- The panel Chair is responsible for the **assignment of each application** to the respective first and second readers (1st and 2nd readers);

— An **external reviewer** may be assigned by the Chair to a given application whenever **a particular expertise** is not covered by the panel;

— **The allocation** of the applications to Panel Members and external reviewers (if applicable) necessarily takes into consideration any declared **Conflict of Interest (CoI)**, as well as the **matching of professional and scientific expertise** within the topic of the application.

REMOTE EVALUATION

INDIVIDUAL PHASE

— Before accessing each application, the reviewer has to declare whether or not a **CoI** is identified for that particular application;

— In case of a Disqualifying Conflict of Interest, the panel Chair should be informed and the application is allocated to a different panel member;

— The reviewers must submit an **Individual Evaluation Report** with their assessment for each application assigned to them. This report 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.

— The **reviewers should perform their assessments** considering **only the information provided by the applicant**. The final score (MP) of each application is calculated taking into account the weight given to each criterion (please see section 4), with two decimal places;

— **Both readers must submit and lock their individual evaluation** prior the beginning of the pre-consensus phase.

PRE-CONSENSUS PHASE (COMPILATION PHASE)

— The Panel Member appointed as **1st** reader prepares the **Compilation (Pre-Consensus) Report for each application** based **on the two individual reviews** (and the external expert's assessment, if applicable) to be submitted **before the panel meeting;**

— If the 1st reader is unable to reach a pre-consensus report based on the two individual reviews, the Chair should settle the differences;

— **The Pre-Consensus report**, similar in structure to the individual reports, is the starting point for the panel discussion during the panel meeting. Comments must include the strengths and weaknesses for each evaluation criterion and be in agreement with the scores.

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PANEL MEETING

− Each evaluation panel meeting will be remotely coordinated by the Chair to proceed with the following activities:

- Discussion of the applications according to the provisional ranking list;

- Ensure that each application receives a fair judgement and is discussed appropriately;

- Settle the final scores for each criterion, as well as the **comments to be conveyed to the applicants,** and **ensure that the scores are in agreement with the comments**. Final comments should be included in the panel evaluation report by the 1st reader (as specified in section 5.3);

- Prepare a Panel Meeting Report with a summary of the meeting activities that should address (but is not limited to) the following issues:

   ▪ Work methodology adopted by the panel;

   ▪ Identification of Conflicts of Interest and their resolution at any time during the process;

   ▪ Final Panel Ranking by typology.

   This report is signed by the Chair with the agreement of all Panel Members.

- Finally, an additional document with Recommendations to FCT on the various aspects of the evaluation process will help FCT to improve procedures in future calls.

5.3 FEEDBACK TO BE TRANSMITTED TO APPLICANTS

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

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 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**.

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.

5.4 FCT EVALUATION WEBPAGE (HTTPS://SIG.FCT.PT/EVALUATION/)

The first time a reviewer logs in the evaluation webpage located at the FCT site, he/she has to accept a Confidentiality Statement;

PANEL CHAIR CREDENTIALS

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

- Allocate each application to two panel members and external reviewers (if applicable);

- Check the number of applications assigned to each reviewer;

- Monitor the individual reviewers' work flow (individual evaluation report submitted by panel members);

- Extract an excel file to sort the applications according to various items, including scores, requested funding, etc.

The main menu displays the following options:

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

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

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

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

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

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

INDIVIDUAL CREDENTIALS

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

For each application, the following is available:

- A statement on Conflicts of Interest;

- The content of the application;

- The Individual and Compilation (Pre-Consensus) (if 1st reader) Report Forms;

- The possibility to **SAVE** the submitted evaluation report - the uploaded information will be kept for future revision;

- The **LOCK** button to submit the evaluation report - the reviewer will no longer be able to modify the uploaded information.

PANEL CREDENTIALS

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

 For each application, the following is available:

- The content of the application ("Form Overview" tab);

- The Individual and Compilation (Pre-Consensus) Reports ("Evaluation" tab);

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

- The possibility to **SAVE** the submitted evaluation report - the uploaded information will be kept for future revision;

- The **LOCK** button to submit the evaluation report - the reviewer will no longer be able to modify the uploaded information.

5.5 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.

6. CONFIDENTIALITY AND CONFLICT OF INTEREST

6.1 CONFIDENTIALITY

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

The statement that needs to be accepted, which appears the first time the reviewer uses the individual credentials to access the evaluation area, is the following:

STATEMENT OF CONFIDENTIALITY

Thank you for accepting to participate in the scientific evaluation of Research Projects submitted to the Portuguese Foundation of Science and Technology (*Fundação para a Ciência e a Tecnologia*, I.P.) – FCT.

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

6.2 CONFLICT OF INTEREST (COI)

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

Disqualifying Conflict of Interest

In case a disqualifying conflict of interest is identified, the panel member cannot evaluate the respective application. Panel members are also not allowed to participate in the panel meeting discussion of these applications. Circumstances that could be interpreted as a disqualifying conflict of interest are the following:

1. Personal or financial interest in the application's success;

2. Current or planned close scientific cooperation;

3. Research cooperation within the last three years, *e.g.* joint publications;

4. Dependent employment relationship or supervisory relationship (*e.g.* teacher-student relationship up to and including the postdoctoral phase) within the last five years before the opening date of the call;

5. Affiliation or pending transfer to any of the departments, research centres or companies involved in the project;

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

Potential Conflict of Interest

In the case of a potential conflict of interest, the panel member should notify FCT and clarify if he/she is able to perform an unbiased evaluation or if the conflict should rather be considered as disqualifying. A potential conflict of interest exists in the following circumstances:

7. Relationships other than first-degree, marriage or domestic partnership; other personal ties or conflicts;

8. Participation in university bodies other than those listed under no. 6, *e.g.* in scientific advisory committees in the research environment;

9. Preparation of an application or implementation of a project with a closely related research topic (competition);

10. Participating in an on-going scientific or inter-personal conflict with the applicant(s).

Before starting the evaluation of each application, and in order to be able to access the evaluation form, each reviewer needs to complete a CoI Declaration, as follows:

Conflict of Interest Declaration

Please state:

- No, I have no conflict

- Yes, I have a strong conflict (see **Disqualifying CoI**)

- It is possible that I have a conflict (see **Potential CoI**)

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

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

7.1 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:

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- 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.

7.2 GLOSSARY

CoI = Conflict of Interest

Co-PI = Co-Principal Investigator

MP = Merit of the Project

PI = Principal Investigator

R&D = Research and Development

R&I = Research and Innovation

ANNEX I - BUDGET RATIONALE

Under this call, the following items in R&D projects 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. Service procurement and acquisitions:

Acquisition of other goods and services directly related to the project's execution, including costs with **consultants that** do not establish subcontracts.

iv. Equipment rationale:

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.

Acquisition of scientific and technical tools and equipment, indispensable to the project if used within the project during their useful lifetime.

v. 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.

vi. 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.

vii. Subcontracts:

Directly related to the project scientific task´s execution

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**.