Driving innovation through integrated testbed research

MIT PORTUGAL 2013 CALL FOR PROPOSAL PROPOSAL SUBMISSION GUIDE

November 2013





Driving innovation through integrated testbed research

GENERAL INFORMATION

This set of guidelines provides additional information regarding the submission of information for 2013 Call for Proposals for Integrated Testbed Research Proposal through MIT Portugal.

Due to the specific intent that international co-investigators should reuse parts of the proposals to apply for additional support through their National Funding Agencies, particularly the National Science Foundation of United States (NSF), and given the fact that the current FCT application forms and procedures are not specifically tailored to this intent, we require that each application may consist of two parts:

- 1. The standard FCT online form for collaborative research proposals, available through the FCT online platform at (https://concursos.fct.mctes.pt/projectos)
- 2. A required Annex, attached to Item 9 of the online FCT form.

The Annex is the primary document to lay out the vision, narrative, scientific content, and projected impact of the proposed research. Reviewers will be asked to pay particular attention to the Annex as an indication of the quality and coherence of the overall research agenda.

There will be considerable overlap between the FCT online form and the required Annex in terms of content (cf. notes to Section 9), so we encourage you to re-use your Annex material for the FCT forms. The Annex is intended to make submissions compatible with international proposal standards with the specific intent that international co-investigators may reuse parts of the proposal to apply for additional support through their National Funding Agencies, particularly the National Science Foundation of United States (NSF). The Annex should reflect NSF proposal standards in quality and style as summarized by the following brief guidelines, and must not exceed a total of 15 pages (not including references, if needed).

Please ensure that all sections of the FCT online form must be completed. Except where explicitly mentioned otherwise, all sections should be completed in English. If you copy and paste material, please make sure that text entered in the online form remains formatted.

INFORMATION ON APPLICATION SECTIONS

Sections 1 & 2. Project Description & Institutions and Their Roles

Investigators applying for collaborative research grants must be organized as an international research team. One investigator is designated as the "Principal Applicant" and the other investigators as "Co-Applicants." The Principal Applicant must be located in Portugal. The Principal Applicant will be responsible for coordinating the research on behalf of the team. He/she will also act as the team's liaison with the MIT Portugal Program and FCT throughout the application process and the execution of the proposal, and will be required to submit annual budgets and progress reports.





Driving innovation through integrated testbed research

SECTION 3. SCIENTIFIC COMPONENT

This section should include an overview of the Testbed Research Proposal, clearly stating its vision and goals, nature and expected outcomes of the collaborative and cross-disciplinary work, the envisaged scientific and broader socioeconomic impact, and explain the advantages of conducting the proposed efforts as a collaborative and cross-disciplinary work that involves multiple universities, MIT, and non-academic partners. Please discuss the aims of the team as a whole and indicate the specific role played by each member in achieving the goals of the team. The section should also describe briefly how the proposal meets the objectives and focus areas laid out in the Terms of Reference.

Please make sure to complete sub-sections 3.1.b (Executive Summary), 3.2.1. (Literature Review), 3.2.2 (Plan and Methods) and 3.2.3 (Tasks).

SECTION 4. RESEARCH TEAM

All Portuguese proposed members of the research groups participating in the proposal should be included in the FCT form if considered necessary/appropriate. All members listed should obtain an Association Key at the FCT SIG website.

MIT members should be listed in the Annex of the FCT form.

Section 5. Funded Projects

This section of the FCT form must indicate funded projects by Portuguese groups participating in the proposal. Funded projects from MIT groups can also be included in the Annex of the FCT form.

SECTION 6. EXPECTED INDICATORS

This section of the FCT form is applicable to the whole team (Portuguese and international members).

SECTIONS 7 & 8. BUDGET

This section is applicable only to the Portuguese institutions participating. Research activities of participating MIT research teams will be covered independently through designated MIT funds at a comparable level. Please make sure the total budget does not exceed the supported funding.





Driving innovation through integrated testbed research

SECTION 9. ATTACHMENTS

Please upload a single Annex pdf-file not exceeding 5 MB in size and 15 pages in length (not including references, if needed). Please follow the below instructions for sections to be included in the Annex, which are also outlined in the Terms of Reference document.

Project Summary

Each proposal must contain a summary of the proposed project not more than one page in length. The Project Summary consists of an overview, a statement on the intellectual merit of the proposed activity, and a statement on the broader impacts of the proposed activity.

The overview includes a description of the activity that would result if the proposal were funded and a statement of objectives and methods to be employed. The statement on intellectual merit should describe the potential of the proposed activity to advance knowledge. The statement on broader impacts should describe the potential of the proposed activity to benefit society and contribute to the achievement of specific, desired societal outcomes.

The Project Summary should also highlight how the proposed project is utilizing a testbed approach for its research design and implementation. The Project Summary should be written in the third person, informative to other persons working in the same or related fields, and, insofar as possible, understandable to a scientifically or technically literate lay reader. It should not be an abstract of the proposal.

Project Description

The Project Description with no more than ten pages that should provide a clear statement of the work to be undertaken and must include:

- 1. Objectives for the period of the proposed work and expected significance;
- 2. A description of the long-term goals to be reached within the domain of this testbed;
- 3. Relation to the present state of knowledge in the field (including the citation of pertinent literature), to work in progress by the PIS under other support and to work in progress elsewhere.
- 4. A general plan of work, including a research plan, relevant sub-projects and research tasks, scheduling, management, and, where appropriate, a clear description of experimental methods and procedures;
- 5. A plan for how to consolidate the consortium over the course of the grant.

Special emphasis should be put on the collaborative character of the proposal and on demonstrating an integrated, application-oriented research design that spans multiple fields and development stages as a "testbed." Proposers should address what they want to do, why they want to do with it, how they plan to do it, how they will know if they succeed, and what economical benefits could accrue if the project is successful. The project activities may be based on previously established and/or innovative methods and approaches, but in either case must be well justified.





Driving innovation through integrated testbed research

The Project Description must contain, as a separate section within the narrative, a discussion of the broader impacts of the proposed activities. Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to the project. FCT values the advancement of scientific knowledge and activities that contribute to the achievement of societally relevant outcomes. Such outcomes include, but are not limited to:

- Contribution to the body of knowledge and competence of the National Science and Technology System;
- Increased partnerships between academia, industry, government, and others;
- Increased economic competitiveness of Portugal and European Union;
- Improved well-being of individuals and society at large, including the addressing of longterm socio-economic challenges in Portugal;
- Potential for industrial commercialization of research output through new or existing ventures as a vehicle for societal impact;
- The contribution of scientific knowledge to economic development;
- Increased public scientific literacy and public engagement with science and technology;
- Improved science, technology, engineering, and mathematics (STEM) education and educator development at any level;
- Development of a diverse, globally competitive STEM workforce.

Previous research projects

This section should have no more than three pages. Please summarize previous work pertinent to the current proposals that was led by the same PI(s). This will help the reviewers to evaluate the ability of the PI(s) to plan, organize, and perform research activities in light of the quality of research already carried out in the past. The reviewers will look at this component to determine the likelihood that the current proposal will be successful. For each previous project, please include the following information:

- 1. The title of the previous project(s)
- 2. The name of the research call, grant number or any other identification information under which the previous project was funded
- A summary of the results of the completed work, including accomplishments, described in two separate sections, related to the Intellectual Merit and Broader Impact activities supported by the award;
- 4. Publications resulting from the research award;
- 5. Evidence of research products and their availability, including, but not limited to: data, publications, samples, physical collections, software, and models, as described in any Data Management Plan.





Driving innovation through integrated testbed research

GENERAL REMARKS

- If URLs with references or other material pertinent to your proposal are mentioned in the application, please make sure these are operational for the duration of the review process.
- PDF files cannot be larger than 5Mb. Avoid using large images or bitmaps to keep the files under this size.
- Please refer to the FCT on-line materials for general information on application submission process, http://www.fct.pt/apoios/projectos/concursos/instrucoes
- For specific information relted to application submission, please contact projetosMIT@fct.pt
- For general inquires and comments related to this Call, please contact the MIT-Portugal Program at: testbeds2013@mitportugal.org
- For information regarding questions related to the technical aspects of the website, please contact the webmaster by e-mail at webmaster@fct.pt



