

Call for SR&TD Projects under the Cooperation Agreement between Portugal and the European Laboratory for Particle Physics (CERN) - 2015

Guide for Writing and Submitting Proposals

January 2015



| | |
|--------------------------------------------------------------------|-----------|
| I. INTRODUCTION | 2 |
| Abbreviations | 2 |
| II. Prior to Submission | 3 |
| SUGGESTIONS BASED ON THE EXPERIENCE GAINED ON PREVIOUS CALLS | 3 |
| The FCT proposal submission system | 4 |
| What you should do before submitting a proposal..... | 4 |
| Who may submit proposals | 6 |
| General recommendations | 6 |
| How to write a good proposal | 7 |
| How to direct questions to the FCT | 8 |
| III. Preparation and Submission of the Proposal | 9 |
| Identification of the project | 9 |
| Institutions Involved..... | 10 |
| Scientific Component | 12 |
| Summary (5,000 characters max.) | 13 |
| Technical Description | 13 |
| Literature Review (6,000 characters Max.) | 14 |
| Research Plan and Methods (10,000 characters Max.) | 14 |
| Tasks..... | 15 |
| Project Schedule and Management | 16 |
| References..... | 17 |
| Previous Publications..... | 18 |
| Research Team | 19 |
| Funded projects | 21 |
| Other proposals | 23 |
| Outcome Indicators | 23 |
| Budget | 24 |
| Justification of the budget | 25 |
| APPENDICES | 27 |
| CONFLICTS OF INTEREST | 27 |
| IV. Overview, Sealing and Commitments | 28 |
| Overview of the proposal | 28 |
| Validate and seal the proposal | 28 |
| Declarations of commitment | 29 |
| V. Timeline - From Submission to Approval | 30 |

I. INTRODUCTION

This guide to writing and submitting proposals for SR&TD projects is designed to explain the submission process, to facilitate and guide the proposal writing process and to provide information about the evaluation, notification of decision and appeal processes.

It brings together information that is available on the FCT website, on the application form and in the applicable legislation. It does not override the legislation governing the process, but rather highlights important information that the Principal Investigator should be aware of.

At <http://www.fct.pt/apoios/projectos/concursos/index.phtml.en> you will find a list of recent and currently open calls for R&D project grants. The link for each call leads to the official announcement of that call. The page that displays the official announcement also gives you access to the regulations and the online platform for submitting project grant proposals.

Abbreviations

FCT - Fundação para a Ciência e a Tecnologia [Foundation for Science and Technology]

PI - Principal Investigator

PC - Principal Contractor

MEC - Ministério da Educação e Ciência [Ministry of Education and Science]

II. PRIOR TO SUBMISSION

SUGGESTIONS BASED ON THE EXPERIENCE GAINED ON PREVIOUS CALLS

- Even though the PI's minimum allocation time is 35%, a larger allocation is important, as it emphasizes a larger commitment of the PI to the project he/she proposes to lead, and will be seen in a positive light by the evaluation panel.
- Each PI should obtain the agreement for the association of each team member to the project as well as his/her time allocation.
- Please check in time if all the institutions are **listed on the FCT database**, remember that you should not delay **filling out the Pre-registration of Institutions form** to request the inclusion of an institution. **The new institution** will be added to the list of choices **within two working days after submission of the form**.
- Many evaluation panels from previous calls mentioned that the CVs of the PIs and project key-elements were not sufficiently concise, making it difficult to find the relevant information. We recommend that PIs heed this comment, in particular as regards **distinguishing the most important publications** and the **most relevant activities in recent years**. We also suggest that the **PI reads and checks all the CVs of the research team members**, in particular with regard to the core CVs.
- The field for the **Name in Publications** should be filled in on the FCT-SIG platform. If you do not use the same name in all your publications, just fill it in with the name that is most frequently used or most recent. This information will simplify search of your publications by the evaluators.
- We recommend special attention to the choice of **keywords** that characterise the application considering the **importance of this choice for the evaluation process** and in **the identification of areas/topics of scientific research in Portugal** (see Chapter III of this guide).
- We recommend a careful preparation of the proposal (see the section “**How to write a good proposal**”) to catch the attention of the evaluation panel and to positively respond the highly competitive nature of these calls. FCT's decision to open this type of call on a yearly basis increases the opportunities for submission of proposals but does not decrease the inherently high competitiveness. The comments of the evaluation panel that are conveyed to the PIs contain, in general, useful guidelines for improvement of the proposals.
- **If a proposal is a continuation of previous or ongoing work**, this should be **clearly stated in the scientific component** of the proposal.
- Overestimated requested funds that are not fully justified are detrimental to the proposal's final score.

The FCT proposal submission system

The Calls for Project Proposals Portal gives you access to the following sections:

- List of projects
 - Proposal form
 - Project summary
 - Sections of the proposal form
 - Overview of the proposal
 - Validate and seal the proposal
- Instructions for completing the form
- News
- Sample overview of the form
- Sample Declaration of Commitment

The various sections can be accessed from the bar that appears on the left side of the pages. Changes can generally be made to information submitted by clicking on the buttons labeled “Change”, “Cancel”, “Delete”, etc. that appear on the right side of the page. These changes are transmitted to the FCT server by clicking on the buttons labeled “Guardar / Save” located at the bottom of the page. This enables you to work on the application form over several sessions until you consider it complete. Once all of the validation tests have been passed, the proposal is **sealed**, thereby completing the submission process.

Not all of the sections are accessible at the same time. They become accessible as you progress through the form, and sections may be hidden at times so as not to overload the interface.

What you should do before submitting a proposal

Official Announcement and Regulations

Before beginning to prepare your proposal, make sure you are well informed of the rules and requirements of the call to which you are submitting a proposal by reading the documents containing this information. This is for the most part administrative and financial information contained in the [Regulations](#), in the [Announcement of Call for Proposals](#) and in the [Budget Execution Norms](#).

No information contained in this Guide is intended to replace or override any stipulations set forth in the [Regulations](#), in the [Announcement of the Call for Proposals](#) or in the [Budget Execution Norms](#).

The terms of admissibility of proposals for funding of RS&TD projects, as well as the rules and requirements to be observed in the different phases of the proposal process and execution of the project, should it be approved, are set forth in:

- [Regulations Governing Access to Funding for Scientific Research and Technological Development Projects - 2010](#), which set forth the general terms under which funding may be granted to support scientific and technological research projects through national funding sources and, when eligible, co-funded by the European Regional Development Fund (ERDF) and managed by the Fundação para a Ciência e a Tecnologia (FCT).

- [Announcement of Call for Proposals](#), which sets forth technical stipulations not defined in the regulations or limits the general terms set forth in the regulations. Generally the Announcement of the Call establishes the financial envelope of the call, the maximum amount of funding for each project, the deadlines for submission and the criteria used to evaluate the proposals.

If you intend to include individual grant recipients in your proposal once it has been approved, please consult the following:

- [Research Grants in the Framework of R&D Projects](#)

Grant amounts must correspond to the [table of fellowship and grant amounts](#) for grants awarded directly by the FCT within Portugal and any other requirements or supplements set forth in the [Regulations for Research Fellowships of Fundação para a Ciência e a Tecnologia - 2013](#).

Registering on the Projects Portal

The PI must be registered on the FCT CV Portal (FCTSIG - Management Information System) in order to submit a proposal. For detailed information on how to register, or how to recover your user name and password if you have lost them or they no longer work, please see the [Instructions](#).

Application Form and General Recommendations

The application form is organized in such a way as to provide the international evaluators with relevant information.

Learn about the structure of the application form and the information it asks for before you begin filling it out. **As Principal Investigator you will have to gather information from other colleagues and participating organizations**, e.g. their public keys. Get this information early on. If you wish to include a **recipient institution that is not available at the base of FCT**, remember that you should not delay to **fill out the Pre-registration of Institutions form** to request that addition. The new institution will be added to the list of choices within two working days after the completion of that form.

The FCT website has an overview of the proposal form available in pdf format.

Read the section on [General Recommendations](#) of this chapter, and try to follow these recommendations while you are preparing and submitting your proposal.

How to write a good proposal

This guide offers suggestions on how to write a good scientific proposal. Before you start, read the subsection [How to write a good proposal](#) and the explanations given in each field of the [Scientific Component](#) of the application form. Take note of the instructions regarding the desired content and focus for each of the various fields on the form.

Who may submit proposals

The proposal must be submitted by the Principal Investigator (PI).

The conditions that the PI must satisfy are set forth in the [Regulations](#) and, when applicable, in the [Announcement of Call for Proposals](#).

The recipient entities, i.e. those applying for funding, the role (principal contractor or participating organizations) each plays in the project and the conditions they must satisfy in order to qualify are set forth in the [Regulations](#) and, when applicable, in the [Announcement of Call for Proposals](#).

General recommendations

The FCT organizes calls for proposals with a broad range of characteristics. Some involve thousands of applicants. This page contains suggestions for candidates submitting proposals in these calls.

- Probably the best advice we can give any candidate to a major call where proposals are submitted online, such as some of the FCT calls for project proposals, is: **plan and complete your proposal process as early as possible**. That way you can ensure that in the event it is needed, the FCT can provide you the best possible assistance. Don't find yourself in the situation illustrated in the graph below showing when candidates sealed their applications for the call of projects in 2010.
- **Answers to emails** to support addresses for large calls **are only considered until noon of the last day of the call**.
- Check out **all the sections of the form in advance** so you will have an idea of what is being asked for and to give yourself time to gather all the information required for submission (e.g. public keys of colleagues and advisors).
- Read the **instructions for filling out the form** given in this **guide** and on the **form** itself carefully. Also check the list of **FAQs**. Many of your questions or doubts will be answered in this information. Do this before contacting the FCT with your questions.
- The [Announcement of Call for Proposals](#) and the [Regulations](#) contain important information that you should be familiar with before you begin to submit your project proposal. Read them carefully.
- Read the [News](#) section on the projects portal regularly.
- Create a document in Notepad or another word processor with the contents that you will later copy and paste into the application form text fields. This way you will be able to fill out the form more quickly and won't run the risk of your session expiring before you are able to save the data.
- The proposal **should not** be fully prepared in a word processor and copied to the form only after that. The text should be directly input in the form or, you can copy, paste and save to the form sub-components previously prepared with a word processor. You can always globally visualize the contents of the form, and validate each of its sections thus reducing the errors during project preparation.

- **Do not use quotation marks (“)** to embrace parts of your text. Some types of quotation marks (“) may determine that the text after them is ignored. Please verify if your saved text corresponds to what you have planned.
- As you save the data in different fields on the application form, the system will alert you if there are errors; **correct the errors as you go along during the proposal writing process**. Trying to correct all the errors just before the deadline for submission can be a difficult task or may even disqualify your proposal.
- The system provides an **explanation for each error detected**. Read and interpret this message carefully and proceed accordingly. It is much faster to do this than to contact the FCT to report the error messages you get when you have made a mistake completing the form.
- There is usually a final verification process before [sealing](#) the proposal which may detect additional problems. Waiting until the last minute to make corrections can be risky.
- Do not assume that a form or the rules for submission are the same as they were the last time you submitted a proposal for the same type of call.

How to write a good proposal

This guide provides information on how to write a good R&TD project proposal. This first section gives some general guidelines, which are described in more detail in [Section 3 - Scientific Component](#) of the application form.

Write in such a way as to convince a top expert in your field that your ideas deserve to be funded. At the same time, you must convince someone who is scientifically literate, but may not have specific background in your area. The aim of your proposal is to convince the evaluators that the ideas you are proposing are so important that you should be entrusted with the taxpayers’ money to develop them. You can also point out the importance of the project in terms of specific national interests should this be the case.

While you are writing the proposal, remember that your goal is to convince the evaluators of the merit of the ideas you hope to develop in the project. You will have to prove that your project is worthy of being funded. Remember that the proposal also represents a commitment in terms of time and involvement and cost, not only on your part as principal investigator, but also on the part of the entire team. Be positive and optimistic, but also realistic in terms of your expectations. If your proposal is approved, you must ensure that the team is capable of carrying out the project as described in the proposal.

Avoid the temptation to repeat the same text or entire paragraphs in different sections. The evaluators can always go back and read these paragraphs. Word for word repetitions of portions of text will not advance your proposal in the eyes of the evaluators.

A careful review of the evaluation criteria listed in the [Announcement of Call for Proposals](#) will give you a good idea of how the proposal will be evaluated. Read these criteria carefully and make sure that your proposal addresses each one positively.

If you provide the URLs of bibliographic references or other relevant material, **make sure that the links remain active for the duration of the evaluation process**. You must

understand that an inactive link will not be viewed favorably by a dedicated evaluator and will be interpreted as evidence of a lack of commitment to the proposal.

Just as in writing good scientific articles, writing a good proposal is an interactive learning process. If your proposal is not successful, don't give up on a good idea - persistence is the name of the game. After venting your frustration, carefully read over the evaluations, assimilate the feedback given by the evaluators and try to answer the following questions: Why wasn't the proposal funded? What can we do differently next time? If your proposal is not funded, it will not be for lack of attention on the part of the evaluators, but rather for lack of good ideas or because the proposal did not communicate your ideas adequately, or because execution of your project may not be compatible with the level of funding of the call for proposals in question.

How to direct questions to the FCT

Further information on each call may be requested by e-mail, to the address provided in the [Announcement of Call for Proposals](#).

III. PREPARATION AND SUBMISSION OF THE PROPOSAL

The application form has 10 sections:

1. [Identification of the project](#)
2. [Institutions involved](#)
3. [Scientific component](#)
4. [Research team](#)
5. [Funded projects](#)
6. [Outcome indicators](#)
7. [Budget](#)
8. [Justification of the budget](#)
9. [Appendices](#)
10. [Conflicts of Interest](#)

All fields must be filled out in English, except where indicated otherwise.

In the following subsections of this guide, the content requested in each of the 10 sections of the form, and in particular in Section 3 - [Scientific Component](#) is described, and suggestions for writing a good technical/scientific proposal are given.

Many of the fields on the form have character limits. Try to be concise.

Once you enter the [projects portal](#), you will have the option of editing a proposal that has already been created or registering a new proposal, provided that there are calls for proposals underway. If you choose the latter option, you will have access to all the calls for project proposals that are open on that day. Choose the call which you would like to submit a proposal.

In this phase you will have to fill out:

- Title of the project (in Portuguese and in English)
- Main scientific domain - choose from among the options available, which depend on the call to which you are applying

The content of these three fields **can be changed at a later time when you fill out Section 1** - [Identification of the project](#) of the application form.

Identification of the project

When you access this menu for the first time after you have registered your proposal:

- The reference code for the project is automatically generated. This will be the **FCT's unique identification code for the project** until all activities are completed.
- Funding in the amount of 0.00€ is being requested. This amount is updated as you fill out the fields in Section 7 - [Budget](#).
- The main scientific domain and the title (in Portuguese and English) will be filled with the data provided by the PI when the project was created. You can change these from this menu.

Main scientific domain

The main and secondary scientific domains and, if applicable, their sub-domains, must be chosen from among the options available, beginning with the main scientific domain.

Title of the project (in Portuguese and in English)

The title should be brief and to the point, and should be understandable to a reader with a general scientific background and suitable for public dissemination.

Acronym of the project

You can assign an acronym for identification of your project, which should not exceed 15 characters.

Keywords (in Portuguese and English)

Importance in the evaluation process - must be chosen in order to characterize briefly the scope of the project and assist the FTC in the proper selection of experts that will evaluate it.

Project start date

Enter in “day-month-year” format. The date may be changed in projects recommended for funding during the Acceptance Agreement signature phase, in accordance with the rules set forth in the [Regulations](#).

Duration in months

Check the [Regulations](#) and the Announcement of the Call to find out the maximum number of months allowed for the project.

Institutions Involved

This section identifies the institutions involved in the project from an administrative and financial standpoint and a scientific standpoint.

The Principal Contractor and the national Participant Organizations, as entities that may receive funds upon the project approval, must have a NIPC (Collective Person Identification Number, Número de Identificação de Pessoa Colectiva in Portuguese). The name under which they apply must be the official designation associated with the referred NIPC.

The foreign institutions, which do not have a NIPC, may apply as Participant Organizations even though with a zero requested budget. The application form presents the NIF or NIPC as being 0 (zero).

Exceptional situations relative to foreign institutions are stated in nº6, Article 2 of the Regulations.

To add an institution, whatever role it plays in the project, click on “Add”. Then choose the desired institution from the pull-down list of those available. If you begin to write the first few letters of the name of the institution, the choice of institutions will be narrowed.

If the institution meets the requirements but is not on the list, you must fill out the **Pre-registration of Institutions** form to request that addition. The institution will be added to the list of choices **within two working days**. In this case, you will need to come back to this section of the form to add a new institution to the project.

To change or delete an institution, start by clicking on the name of the institution, then click on “Change”.

To save your changes, click on “Change / Modify”.

PC - Principal Contractor

It should be an incorporated entity, i.e., having a NIPC (Identity Number that uniquely identifies the institution relative to Social Security and Finances).

This should be one of the following types of institutions:

- Institutions of higher education, their institutes and R&D centers;
- Associated Laboratories;
- State Laboratories and other public services that carry out R&D activities;
- Private not-for-profit institutions whose primary object is S&T activities;
- Other public and private not-for-profit organizations that carry out or participate in scientific research activities;
- Companies (only in special cases can a company be a Principal Contractor, as set forth in the [Announcement of Call for Proposals](#)).

The PO must be an institution belonging to the national science and technology system and must be headquartered in Portugal.

The PO is the recipient entity that serves as project leader. In addition to coordinating the project, the Principal Contractor is responsible for communicating with the FCT on behalf of all the partners. The PO will receive all payments for the project, after which it will have to transfer the corresponding amounts to partner institutions.

After sealing the application, the head of the Principal Contractor chosen by the PI will have to sign a Declaration of Commitment which is pre-filled with data input by the PI. **Please be sure that you choose the correct Principal Contractor and that you know its requirements (if any) to play the role of Principal Contractor. Errors detected after sealing are very difficult to solve.**

We suggest that the contents of the Declaration of Commitment are presented to the head of the Principal Contractor quite in advance of sealing.

Description of the principal contractor or participating organisation (1,500 characters max.)

Brief description of the principal contractor or participating organization, its objectives, activities and mission, with an emphasis on R&TD activities.

Participating Organisation

Incorporated entity, i.e., having a NIPC (Identity Number that uniquely identifies the institution before Social Security and Tax authorities).

Any institution that meets the criteria for principal contractor can be a participating organization. The following may also be eligible:

- Companies, provided that they are integrated into projects in which the Principal Contractor is a public or private not-for-profit R&D institution, or another company that meets special criteria set forth in the [Announcement of Call for Proposals](#);
- Foreign entities, provided that they are not budgeted, except when indicated otherwise in the Announcement of the Call.

After sealing the application, the heads of the Participating Organizations chosen by the PI will have to sign a Declaration of Commitment which is pre-filled with data input by the PI. **Please be sure that you choose the correct Participating Organizations and that you know their requirements (if any) to play the role of Participating Organization. Errors detected after sealing are very difficult to solve.**

We suggest that the contents of the Declaration of Commitment are presented to the head of the Participating Organizations quite in advance of sealing.

Principal research unit

The research unit that the Principal Investigator is affiliated with.

Additional research unit

A research unit that another member of the research team is affiliated with. Filling out this field is optional. Together with the information regarding the principal research unit, it serves to inform the evaluators of the R&D units that key members of the research team belong to. The form allows the inclusion of a maximum of three units of additional research.

Host institution

University, faculty or other organization that plays the role of host institution for the principal research unit under the FCT's Multi-Year Funding Program.

You are not required to name the host institutions of other research units (if they exist).

Scientific Component

The Scientific Component of the project is the central nucleus of the proposal and the section that will be subject to the closest scrutiny by the evaluation panel to determine its scientific merit.

This section is organized into the following subsections:

- Summary
- Technical Description
 - Literature Review
 - Research Plan and Methods
 - Tasks
 - Project Schedule and Management
- References
- Previous Publications

The fields in the scientific component should be filled in text format. It is neither simple nor possible to include mathematical formulas, chemical structures, musical scores or other technical communication methods with special typesetting requirements. For this purpose, and to support the text inserted in the fields of Section 3, you may wish to create a PDF file to be uploaded in Section 9. However, you should not limit your presentation to these files, neglecting the text to be included in Section 3.

Summary (5,000 characters max.)

The summary should be the central point of the argument designed to win the evaluator over to the research ideas proposed and the methods to be used. Unlike a conventional introduction, this should be an analysis that focuses more on the state of the art, the main problems that need to be solved, the knowledge and know-how the group brings to the project, the strategy and methods to be used, the novelty of the project and the expected results.

If the summary is too ambitious for the length of time or the human resources and funding requested for the project, this may weigh in on the negative side when the proposal is evaluated. A good summary should be positive and supported by solid references and key observations that will make the proposed work stand out from other research being conducted in the same field.

The references cited in this section, as well as any in the other sections of the form, must be included in the subsection [References](#), using the citation scheme chosen by the PI.

It should be also fill out a **summary** that can be used by FCT for the **purpose of publicizing** the project. This summary may be exactly the same as submitted in the previous field or slightly modified, for confidentiality reasons. The content of this field will always be a decision of the responsibility of the PI.

This field should be written in **English and Portuguese**.

Technical Description

This subsection should answer the question “Why should public funds be spent on this project?” Your description should be written in a positive tone and explain in detail what you intend to do in the project, what objectives you hope to achieve and the reasons why these are important.

You are expected to describe **in detail** the problem to be researched, the challenges it poses, and the approaches and methods to be used to achieve the objectives. You must also convince the evaluators that the PI and the research team are capable of achieving these objectives. You should show that the proposed methodologies are appropriate for achieving the objectives.

Specific details are required. General statements of objectives that are not properly substantiated or ideas not shown to be *new* ideas of the PI and his/her team are neither useful nor sufficient. The PI’s goal is to convince the evaluation panel that he/she has the potential to contribute to progress and not just to the “status quo”.

This subsection is not only technical - it should also address organizational considerations. It should show that the PI has a well conceived plan to achieve the objectives (including, if needed, alternative methodologies if the proposed methods prove to be unfruitful), that

he/she knows how to predict results, that the temporal planning and management are adequate and that resources are well distributed.

It should contain a brief description of how the PI proposes to organize the work into various tasks, the interaction between the various tasks, the role of each participant and what each of the research groups involved will do, the schedule, and a set of milestones with which to judge how the work is progressing.

This subsection is organized in four parts:

- [Critical Review of the Literature](#) - here you make the team's previous work known, you show your knowledge of the state of the art and you explain the innovative nature of your proposal;
- [Research Plan and Methods](#) - here you describe, in detail, the research plan you intend to carry out, the methodologies to be adopted, the expected results and how the activities will be divided into tasks;
- [Tasks](#) - here you describe, in detail, the methods to be used and expected results for each of the tasks in the plan of work, along with the resources needed, the duration of each task and the roles of the various participants;
- [Project Scheduling and Management](#) - here you describe the management of the project, how team members will be coordinated and the planned reports.

LITERATURE REVIEW (6,000 CHARACTERS MAX.)

The goal of this section is to describe the group's previous work and the methodologies that compete with those proposed in this project, and to justify the need for the proposed innovation. The literature review should be critical. Simply referring to previous work without commenting on the contribution the work makes to the approach proposed in your project or without mentioning its limitations is neither significant nor useful. Previous results of the PI and the research team are viewed favourably. The evaluators look at this section to evaluate the vision and the knowledge that the PI has regarding the state of the art and the reasons why the PI believes that the methodologies proposed will perform the best. The PI must convince the evaluators that he/she and the research team have the background needed and understand the open problems in the field of research in which the proposal falls.

The references cited in this section, as well as those in other sections of the proposal, must be fully identified in the [References](#) section, using a method of cross-referencing chosen by the PI.

RESEARCH PLAN AND METHODS (10,000 CHARACTERS MAX.)

Based on the critical review of the literature presented above, describe the proposed research plan and methods to be used, focusing on the following questions:

- What is the problem to be investigated; what are its challenges and what is the “great idea” that the PI and his/her team have to overcome them?
- Why is the problem important and interesting?
- What points of view and methods are to be adopted?
- How will the project advance the state of the art, and what are the new basic ideas that will enable the team to reach their goal?
- What important ideas do the PI and his/her team have for achieving these ends?
- What results can be expected from the project?

- What is the nature of the collaboration between the various partners and what role is played by each one?

In this component, the PI should present an overview of the methodologies to be adopted, which will be elaborated on in detail for each task in the following subsection.

TASKS

For each task into which the project's activities are organized, the following information should be provided:

Task denomination

Task denominations should be self-explanatory.

Start date for the activity

In "day-month-year" format.

Duration of the task (in months)

Self-explanatory.

Person*month

The amount in full months equivalent to the total work of an investigator during the course of the project. To calculate this, begin by estimating the percentage of a full-time week of professional work that the investigator will dedicate to project-related tasks in each phase of the project.

Examples:

- 1 person at 50% for 6 months = 3 person*months
- 1 person at 30% for 6 months = 1.8 person*months
- 1 person at 50% for 15 days = 0.25 person*months

The total number of person*months in the project for an investigator is obtained by adding up the amounts obtained for all of the phases of dedication to the project that need to be considered.

Description of task and expected results (4,000 characters max.)

In connection with the content of subsection 3.2.2 [Research Plan and Methods](#), describe, in detail, for each task:

- the objectives, in the context of the project;
- the methods and approaches proposed to achieve them;
- the expected results of the task, and how these results are prerequisites for the tasks to follow;
- how they articulate with the other tasks;
- the role each partner and institution will play in the task.

Justification of the resources, both human and material, needed to achieve the expected results of the task should be included. You will be asked for an overall justification of the resources required for the project in Section 8 - [Justification of the budget](#).

Members of the research team who will participate in the task

After saving the contents of the previous fields, the members of the research team who will participate in the task should be entered. To do this, click on the task name to access the menu “Members of the research team participating in the task”.

The first time you access this menu, only the name of the PI will appear. With the “add” button, you can link other members of the team to the task. These should be chosen from among the members indicated in Section 4 - [Research team](#) for the project. You will therefore have to first fill out the fields in Section 4 - Research team, as well as the [Justification of Human Resources](#) section if you intend to contract personnel or award individual grants from project funds.

PROJECT SCHEDULE AND MANAGEMENT

The PI should indicate a timeline and describe the management structure to be adopted in the project, in particular with respect to coordination between participants, any meetings to be held and the reporting structure. A list of “milestones” should also be indicated.

Description of the management structure (3,000 characters max.)

In this section you should describe the management structure to be adopted, in particular the coordination among partners, the planned meetings, and the reporting process. The relevance of this item will depend on the dimension of the project, in particular, the number of participating research units.

List of milestones

A milestone or marker is a date by which a certain objective should be achieved or a phase should be completed. Enter a scheduled list of milestones that will allow independent evaluators to verify whether or not the project work is progressing towards the objective stated in the proposal.

For each milestone, include a name (60 characters max.), a date and a description (300 characters max.) of what can be demonstrated or reported by that date. Milestone dates should be entered in the timeline graph described below. Example:

Milestone M1

Date: Month 8

Name: Preparation of a test or questionnaire

Description: Validation of the measuring tool

Milestone M2

Date: Month 19

Name: Automatic counting system

Description: system that automatically counts the number of parts in the transporter and marks those that have manufacturing defects by analyzing data from infrared sensors.

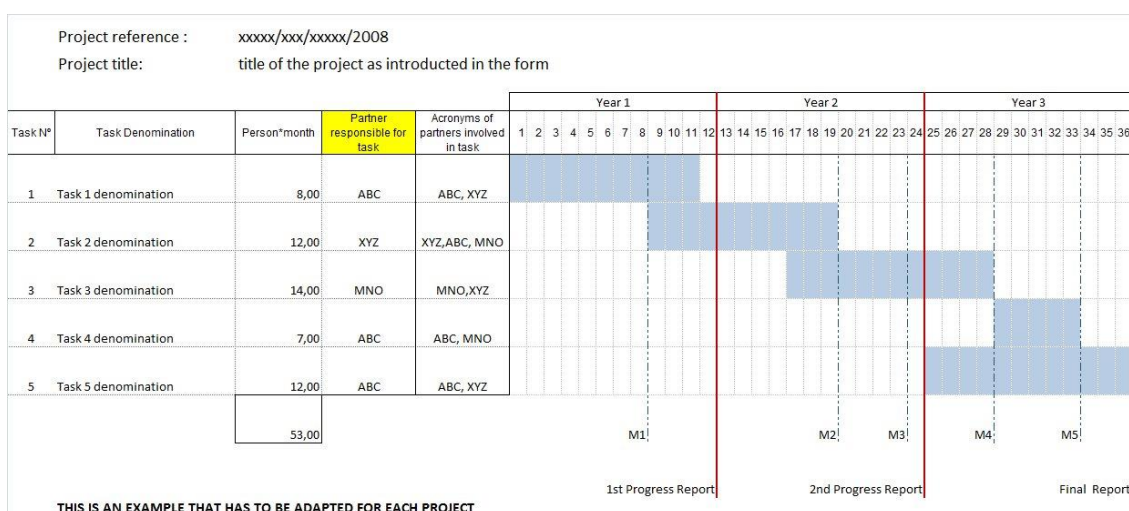
The milestones should be mentioned in the progress reports to be submitted on the FCT website.

The maximum number of Milestones is 6.

Timeline

Include a chart showing the schedule of tasks and milestone dates. You can use suitable software tools to generate this or adapt an Excel spreadsheet as shown in the example available, which is available for downloading in Section 3.4.2c of the application form. Generate a file in pdf format with the name timeline.pdf and upload it into Section 9 - [Appendices](#).

A sample timeline is shown below:



When filling in the timeline,

- in the field “Partner responsible for task” you should include the acronym of the institution responsible for the task;
- in the field “Acronyms of partners involved in task” you should mention the acronyms of all the institutions that will participate in the task, including the one responsible for it.

We recommend that you fill out and validate the tasks on the application form before creating this additional file. That way any incongruence in the dates of the project and its tasks will be detected.

References

Include the references cited in the technical and scientific description of the proposal, using a method of cross-referencing chosen by the PI. Include the title, authors’ names in the order they appear in the publication, name of the book or periodical, publisher’s data when applicable, volume number, page numbers and year of publication. If a publication is available online, you may include the respective URL **even though it is not mandatory**.

The maximum number of entries in this field is 30.

The items in the application form are:

Reference Year URL Publication

Example:

For the publication

Silva, N., Costa, R., Elgart, R.A., Murt, C. (2007) High speed and robust controller for a non-linear system. Journal of Control Theory 57, 121-134.

you could use

Reference: [SiCoElMu07]

Year: 2007

URL

Publication: Silva, N., Costa, R., Elgart, R.A., Murt, C. (2007) High speed and robust controller for a non-linear system. Journal of Control Theory 57, 121-134.

and, in the proposal, the cross reference will be used, for example, as: “The controller proposed in [SiCoElMu07] has recently been”

There are situations (e.g., whenever an author yields to a publishing company the rights of a publication) where it is not possible to make the publication available on-line without violating the law. In these cases we suggest that you use the web server of your school or research unit to create an area of restricted access through username and password. If you consider this solution, create a document authentication.pdf file to be include in Section 9. with this information. The members of the evaluation panel will receive instructions to use its contents to access the restricted area and not divulge the material beyond what is strictly needed for this evaluation.

Previous Publications

Under the heading "Previous Publications", you may include references for up to 5 articles, books or monographs published or accepted for publication, authored or co-authored by members of the research team, which you consider relevant for evaluating the scientific quality of the demonstrated by the team for the project in question. Include the title, authors' names in the order they appear in the publication, name of the book or periodical, publisher's data when applicable, volume number, page numbers and year of publication.

It is highly recommended that the evaluators can access these 5 publications. These articles may be **uploaded to a website**. The URL addresses provided must be complete, and it is the PI's responsibility to make sure that the links remain active.

- until the evaluation process is completed;
- until the project is completed in the case of projects that are approved.

The fields to fill in the application form are the same as mentioned previously in References.

There are situations (e.g., whenever an author yields to a publishing company the rights of a publication) where it is not possible to make the publication available on-line without violating the law. In these cases we suggest that you use the web server of your school or research unit to create an area of restricted access through username and password. If you consider this solution, create a document authentication.pdf file to be include in Section 9. with this information. The members of the evaluation panel will receive instructions to use its contents to access the restricted area and not divulge the material beyond what is strictly

needed for this evaluation. This indication does not apply to the references in the field References.

Re-submissions of applications

It must be **indicated** if the present proposal is the **re-submission of an application** previously submitted by the same PI to FCT and not recommended for funding, indicating the reference of the application (applications submitted to FCT from the year 2006 inclusive).

Additionally you must complete a field with a **comment to the panel evaluation that evaluated the application**, as well as **summary identifying**, in a clear and unambiguous way, **the main changes introduced in the new proposal**. Substantive arguments should be used to objectively direct to the scientific arguments used by the evaluators. **Avoid a direct response to the evaluator** that, almost certainly, will not be the same who evaluated the previous application.

Research Team

4.1. List of members

The information on the Principal Investigator (Name, Position and Academic Degree) will be automatically filled in. This is the information that the PI entered in his/her **curriculum vitae** on the site <https://sig.fct.pt/fctsig/cv/>. The percentage of full time dedicated to the project should be filled in on the application form. You can access this field by clicking on the link associated with the PI's name.

Read the [Regulations](#) and the [Announcement of Call for Proposals](#) carefully for the requirements regarding minimum allocation amounts for PIs.

Each research team member to include (except for individual grant recipients or other personnel contracted specifically for the project) is required to supply his/her FCT association key (**and no other FCT supplied credentials**) to the Principal Investigator as a means of confirming the intent to participate in the project. Association keys are issued after completing the registration process in the FCT Management area in <https://sig.fct.pt/fctsig/> and can be consulted there.

Notice that it shall also be indicated a **percentage of dedication to the project compatible with the overall maximum of 100% at the time the acceptance agreement is signed**. The FCTSIG management area also offers the means for each researcher to easily check all current and planned percentages of dedication in FCT projects.

The names of all members of the team entered in the FCTSIG management area should be written just as they appear on the individual's national identity card or passport, and these should be updated whenever there are changes.

Investigators may choose to include DeGois curricula instead of FCTSIG/cv. In this case, they shall communicate to the PI their DeGois key (a number with 16 digits which is also part of the URL of your public curriculum DeGois).

It is the responsibility of each team member, as well as being in his/her best interest, to update his/her **curriculum vitae** at <https://sig.fct.pt/fctsig/cv/> or <http://www.degois.pt>, since the existing information on that site on the date the proposal is sealed is what will be available to the evaluation panel.

The curriculum vitae:

- Should be **brief**, emphasizing relevant information, and should be written in English;
- Fill in the field **Name in Publications**;
- **Should not include references to articles submitted** for publication or presentation, nor to R&D projects currently in the proposal phase. Only articles published or accepted for publication and projects approved for funding should be mentioned;
- Should follow reverse chronological order when presenting lists;
- When mentioning projects, indicate the project title, the entity funding the project, the period in which the project was executed and your role in the project (e.g., Principal Investigator, team member);
- In the field “Other skills/activities” under “Current research interests”, mention activities such as serving as associate editor for journals, member of the technical committee for international conferences, person in charge or jointly in charge of organizing scientific events;
- In the field “Experience as advisor”, mention only doctoral or master’s theses **that have already been completed**. For each student, enter their name, title of the dissertation, year completed and the student’s current job position. List doctoral dissertations first, followed by master’s dissertations. Do not include dissertations currently underway;
- The field “Field of Specialization” under “Current research interests” must be filled out.

Important notes:

- The previous notes have been prepared from the standpoint of a curriculum in FCTSIG/cv. They are valid for what is relevant to a curriculum DeGois.
- The evaluation panel will examine with particular interest the CVs of the PI and key members of the research team (up to two) chosen by the PI. This choice is made in Section 4 - [Research Team](#).
- All members of the research team, but particularly the PI and key members indicated by the PI, should pay particular attention to the directions given above for completing the CV in the FCTSIG (Information Management System).
- The **curricula vitae** of all members of the research team will be copied at the moment the proposal is sealed to the evaluation area. Therefore, for the purposes of evaluation of the proposal, the state of each **curriculum vitae** at the moment the proposal is sealed is what counts, although each researcher can continue to update his/her **curriculum vitae** on the management page.

% of Time

This field should be filled with the mean time of each team member during the entire time duration of the project.

We remind that a **minimum allocation time of 35%** is specified for the **PI** and for **ALL** the remaining members of the team a minimum of allocation of time of **15%** is requested.

Example 1:

In a project with duration of 36 months (3 years), if a team member is involved during 12 months (1 year) allocating during that period 45% of his/her time, the filled % of time should be filled with 15%.

Example 2:

In a project with duration of 36 months (3 years), if a team member is only involved in two tasks, with a time allocation of 15% in a task that develops in years 1 and 2, and an allocation of 15% in a task that occurs in years 2 and 3, the team member has a medium allocation to the project of $60\%/3=20\%$.

4.2. List of members to be hired during execution of the project

This field is only displayed if you have indicated that there will be individual grants awarded or hiring of other team members under the heading of “Human Resources” in Section 8 - [Justification of the Budget](#). It will be filled in automatically, and the amounts shown here will be those that the PI entered in Section 8.

Funded projects

This component is designed to evaluate the success of previous work that was led by the same PI as the current proposal. It serves as an indicator of the quality of research already carried out and the ability of the PI to organize and plan research activities and produce results. The evaluators will look at this component to determine the likelihood that the current proposal will be successful. Indicate projects, approved after a peer-review process, that were begun within the last 5 years, are completed or currently underway, as well as any pending projects, i.e., projects approved for funding but not yet started.

In this item you should consider among your projects as a PI, those that were funded after a peer-review process. Even though there is no limitation in the number of projects to be included in this section, it is the PI's responsibility to choose the projects to include, given their perceived importance and relevance for the evaluation. Remaining funded projects for which you were a PI could be (and must be) included in your CV.

The evaluation panels will take into account the situation of PIs who have held their doctoral degrees for less than 5 years, taking into consideration the potential for success rather than past proof of success.

For FCT funded projects, enter the full reference code and click on “search”. The fields on the menu will be automatically filled in except for the “Results” field.

For projects funded by other institutions, enter the reference code and fill in the following information.

Project reference code

Project code as it appears on the funding award contract, regardless of the funding source.

For **each project** entered, the following information will be required:

State of the project

The following options are available: Underway, Completed, Pending.

Title of the project (in Portuguese and in English)

Self-explanatory. You may include an acronym before the title (i.e., Acronym - title).

Funding entity

Choose from among the options available. If the entity that funded the project does not appear on the list, write its name.

PC - Principal Contractor

This is the institution leading the project. Choose from among the options available. If the entity that funded the project does not appear on the list, write its name.

Funding

Amount, in euros, of funding for the project (if already completed), or the budget for projects underway.

Start date

Self-explanatory.

Duration (in months)

Self-explanatory.

Abstract

Self-explanatory.

Total Person*Months

Total involvement of human resources in the project calculated as shown in the description of Tasks in Section 3 - [Scientific Component](#).

Total Person*Months on this team

Indicate any members of the research team for the proposal you are submitting now who were involved in the project in which you were or are PI that you are describing in this section.

Results (5,000 characters max.)

Provide a complete list of the results achieved in the project, systems/prototypes built, patents obtained from the results of the project, academic degrees obtained by students who participated in the project. Publications resulting from the project are entered in another field.

Use this field to also indicate:

- how the funded project in which you were/are PI is related to the research team associated with the current proposal;
- how the funded project in which you were/are PI is related to the research topic of the current proposal.

Is this project related to the current research team?

If yes, explain the relationship in the “Results” field.

Is this project related to the current research topic?

If yes, explain the relationship in the “Results” field.

After saving the data entered in the previous fields, you will be taken to a menu where all of these data are displayed. Here you should enter the members of the research team for the current proposal who participated in the previously funded project that is being described, as well as any publications that came out of this project.

Members of the research team who participated in this project

Select from the list of all members of the research team that you already entered for the current proposal.

Publications resulting from this project

Include the title, authors' names in the order they appear in the publication, name of the book or periodical, publisher, volume number, page numbers and year of publication.

These articles may be **uploaded to a website**. The URL addresses provided must be complete, and it is the Principal Investigator's responsibility to make sure that the links remain active until the evaluation process is completed.

Other proposals

It is compulsory to refer any other candidacy similar to the one under preparation and that may configure, if both were accepted, an irregular situation. The form interface is similar to the one used for funded projects.

See nº 5 of Article 3º of the Regulations.

Outcome Indicators

Outcome indicators for the project

In the proposal phase, this list represents a commitment to carrying out the project. The deliverables achieved as a result of the project activities must be described in progress reports and in the final report and will be subject to scrutiny in the final evaluation.

Be positive, but also realistic in terms of your expectations. If your proposal is approved, you must ensure that the team is capable of carrying out the project as described in the proposal.

The minimum number of indicators is 5.

Dissemination of scientific activity

Although it is important to carry out initiatives to disseminate scientific activity, in the proposal phase, this indication expresses intent to do so. Actions of this nature during the execution of the project should be described in the progress and final reports and will be subject to scrutiny by the evaluators after the work has been completed.

This item is not mandatory. Actions of scientific dissemination may not be adequate for the characteristics of the project, or, even if they are, the PI may consider not organizing them. In any case, it is advisable for the PI to include an explanation for the absence of this type of activities.

Budget

The per project funding limit is set forth in the respective [Announcement of Call for Proposals](#). A budget table must be filled out for the Principal Contractor and for each Participating Organization. The total of all the tables represents the sum of funding requested, which is calculated automatically and shown in the table “Overall Budget”.

For all institutions, except for-profit organizations, the budget equals the funds requested from FCT as eligible expenses are funded at a 100% rate. In the case of for-profit organizations such as companies, eligible expenses are funded at a 50% rate. Hence the budget in this table should be 50% or less of the full budget. The remaining budget should be presented in an additional table.

The budget should be distributed over the different years taking into account the number of months in each calendar year of the project. If the project is approved, there is a possibility that changes will be made to the budget distribution schedule based on observations of the evaluation panel or when the project is approved. See the [timeline](#) for the evaluation and decision process.

The expense categories that appear in this menu are those set forth in the [Regulations](#) and in the [Announcement of Call for Proposals](#). It is not an error if the numbering of the different types of expenses is not sequential. This is a limitation of our web application which can be used for different types of calls.

In the “Funding Plan” table indicate, whether there is any self funding, other public funding or other private funding coming from any of the principal contractor and participating organizations. The total cost of the project is the sum of all the components indicated in the Funding Plan table.

Human resources

Human resources dedicated to the project’s R&TD activities, including costs of individual grant recipients and contracts. The funding of these grants shall comply with the ([Research Grants in the Framework of R&D Projects](#)).

Travel

Expenses resulting from project-related participation in conferences travel for fieldwork, meetings and visits in Portugal or abroad. Example: Travel expenses, registration fees, daily allowances, and accommodation.

Consultants

Consulting expenses for project support. Foreign scientists residing outside Portugal may collaborate on the project and receive financial support for travel to Portugal and accommodation and may be paid for consulting work done on behalf of the project.

Acquisition of goods and services

Expenses related to acquisition of goods or services for the project and which can be documented by: “Green” receipts, receipt for an “Isolated Act” or an Invoice/Receipt.

Also included in this category are other current expenses directly related to execution of the project (e.g., consumables, reagents, etc., and acquisition of books and subscriptions to

scientific journals when these fall within the scope of the project) and expenses paid to licensed auditors or accountants.

Patent registration

Registration **abroad** of patents, copyrights, utility models and designs, national models or brands when associated with other forms of intellectual property, namely fees, prior-art searches, consultant's fees.

Adaptation of buildings and facilities

Adaptation of buildings and facilities when essential to carrying out the project, namely for environmental and safety reasons, provided that these costs do not exceed 10% of the total eligible cost of the project.

Equipment

Expenses related to obtaining instruments and equipment, provided they are directly and unequivocally used by the project and remain tied to the project during the period of its execution. Indicate the phase of the project in which they are to be acquired.

Overheads

Overheads incurred due to execution of the project are imputable to it on a pro-rated basis up to a limit of 20% of **ALL** eligible direct costs of the project.

As the budget is presented by civil year, the above referred limit of 20% also applies for each year.

Since there were doubts about whether the costs of overheads also concerned about the direct costs of equipment, we clarify that the costs of overheads relate to **ALL** (including equipment) the direct costs.

Justification of the budget

Justification of human resources

In this field you will justify the funding requested under the category of human resources.

You must relate to the objectives of the project, in a detailed way, the need for the requested resources.

For individual grants, chose from the list of types of grants that can be awarded in the framework of projects. The monthly amount will be entered automatically in accordance with the [current stipend values](#).

Steps:

- Select the type of grant.
- Enter the number of grants of the type requested.
- Enter the duration of the grant, in months.

- Enter other costs
 - For BPD grants, consider an additional amount of €750, spread out in a single payment, to pay for a trip to a conference.
 - According to the [Research Fellowship Holder Statute](#), “the grant holders not covered by any social security system may subscribe to the voluntary social insurance (SSV-Seguro Social Voluntário). The funding institution should pay the costs corresponding to the 1st tier of the SSV.
 - It is suggested to estimate the SSV associated costs, in case the grant holder decides to subscribe, and to include them in the Human Resources budget, in Other Costs. This value is indexed to the national minimum wage and consequently a realistic annual update should be considered.

If you want to have a contract, choose the option “C-Contracts” and:

- Enter the number of contracts;
- The duration (in months) of the contracts;
- The corresponding cost (it will commonly be equal to number of contracts * duration * monthly cost);
- Other costs.

Justification of travel

Expenses resulting from project-related participation in conferences, meetings and visits in Portugal or abroad. Ex: Travel expenses, registration fees, daily allowances, accommodation, etc.

When justifying missions to scientific events it is not required the indication of the particular event which might not even be known. Given the difference of costs, what should be stated is the event location, distinguishing among events in Portugal, in Europe, or outside Europe.

Justification of consultants

Given the importance of consultants in the evaluation of the project and the team, the names and institutions given should be clear and complete, so that they can be easily identified by the evaluation panel. We suggest that a brief, up-to-date and easy to locate public CV be made available on the Internet.

If the consultant has filled out his/her CV in the FCTSIG, you need only enter the public key.

Justification of goods and services

Self-explanatory. See description under [Budget](#).

Justification of patent registration

Self-explanatory. See description under [Budget](#).

Justification of adaptation of buildings and facilities

You must explain the need for these expenses, taking into account the provisions set forth in the [Announcement of Call for Proposals](#) and the [Regulations](#).

Justification of Equipment

This point has two parts:

- Equipment already available for execution of the project
 - Type of equipment, manufacturer, model and year
- Description of equipment to be acquired
 - Type of equipment, manufacturer, model and year
 - Justification of the equipment requested

You must relate to the objectives of the project, in a detailed way, the need to purchase the equipment required.

APPENDICES

If necessary you may attach the following types of documents to your proposal: formulas, schematics, diagrams, charts or images. You will have to attach a timeline file (timeline.pdf) as described in Section 3.2.4. You might need to include an authentication.pdf file as previously stated relative to restricted distribution items referred in the References and Previous Publications sections.

No other documents besides those mentioned above will be considered in this section. The maximum disk space reserved for each proposal is 5 MB. Acceptable formats are:

- GIF (Graphics Interchange Format)
- JPEG (Joint Photographic Experts Group)
- PDF (Portable Document Format)

CONFLICTS OF INTEREST

In this field you may identify up to five names of evaluators that, according to the criteria for classification of conflicts of interest listed on the FCT Guide for Peer Reviewers, constitute a clear conflict of interest concerning the evaluation of the present application.

For each conflict of interest reported you must fill in the following fields: **Name**, **Institution** and **Motive for mentioning each conflict of interest**. The indication of the Email and CV (URL) are optional fields.

IV. OVERVIEW, SEALING AND COMMITMENTS

The [Project Summary](#) link gives you access to the following options:

- End Session
- List of projects
- Project form
- Overview of the proposal
- Validate and seal the proposal

Overview of the proposal

The overview of the proposal displays the contents of the proposal fields in a single window, which includes links to the CVs of the PI and the other members of the research team. You can view the details of a single section of the form or a group of sections.

Using the “Print” option in your browser, you can generate a pdf file with the contents of this window.

Notice: The aforementioned pdf file will NOT, in any circumstances, be accepted as a substitute for submitting the proposal by completing the form and sealing it online.

Validate and seal the proposal

Sealing is preceded by an automatic procedure that validates the proposal and checks for errors.

We suggest that you run the validation procedure, available for each section, periodically as you fill out your form. This way, you will eliminate errors at an early stage (e.g. in the text fields of the scientific component). After the application is complete, click on “Validate and Seal” to validate the entire proposal. When no errors are detected, the program will ask the PI to confirm that he/she indeed wishes to seal the proposal.

If there are errors, a list of the problems detected is generated on the application form showing the section and field where the error occurred, along with a brief description of the problem that led to the error. The existence of **errors prevents sealing**.

The **warnings** issued during the validation **do not prevent sealing**. Only the existence of errors prevents sealing. When the PI seals the proposal he/she will receive guidance on how to proceed with the warnings. Many of them are related to lack of information concerning the applicant and participating institutions, and these will be required to provide the missing information.

The **warnings** relative to the Social Security and Tax of institutions mean that FCT does not have the corresponding certificates or the ones available will expire in the indicated date. These warnings should not be considered by institutions that authorized FCT to analyze their

status on-line through official portals. To overcome these problems the institutions will be contacted by FCT.

The error related with the legal characterization of the involved institutions (only an alert in case of institutions with zero budget) refers to the absence of information on whether the institution is a Government Agency, a private not-for-profit or a for-profit organization. We recommend that the PI contact the institution's Board or Management, to provide information on the legal status of the institution by e-mail, to the support e-mail for the call.

The proposal can only be sealed after the form has been completed validated. Reread the [General Recommendations](#) and do not wait until the deadline for the call draws near to do the validation.

Once a proposal is sealed, or after the closing date for the call, you will not longer have access to the application form, but you may view its contents in the Overview of the Proposal.

Declarations of commitment

After sealing, and to complete your proposal, you will need to upload on the FCT website a declaration of commitment in digital format which is made available after the sealing.

After sealing your proposal, print out the declaration of commitment, have it signed by someone authorized to do so, scan it and submit it.

The deadline for submitting this document is set forth in the [Regulations](#). Noncompliance with the regulations will nullify the proposal.

A careful reading of the contents of the Declarations of Commitment is suggested. Additionally, for those projects that might involve animal experimentation or the donation, procurement, testing, processing, preservation, storage and distribution of human tissues and cells and for which specific questions are asked, we suggest a reading of the legislation that applies before answering the questions on the Declaration of Commitment.

V. TIMELINE - FROM SUBMISSION TO APPROVAL

The diagram below shows the timeline for the various steps from submission of the proposal to approval of the project (in Portuguese). It corresponds to the timeline set forth in the Regulations.

