Application Proposal

Part B

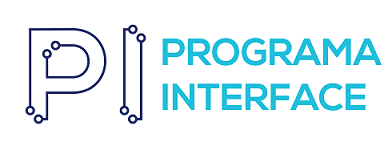
(Technical Annex)

Incentive System for RESEARCH And TECHNOLOGICAL DEVELOPMENT (SI I&DT)

**PROJECTS IN CO-PROMOTION**

**INTERNATIONAL PARTNERSHIPS**

CALL Number 04/SI/2019



|  |
| --- |
| In preparing your application, please follow the structure (Topics) of this template. The template was designed with the aim of ensuring that all the important aspects of the project are evident and clear in order to allow expert evaluators an effective assessment.  **Page Limit**: The sections shall not, as a whole, exceed **70 pages**  It is possible to include graphics and images.  Font Size - minimum size must be 11 points.  The pages must follow the A4 size, and all the margins (top, bottom, left, right) must be at least 3 cm (excluding headers and footers).  Once completed, the attachment should be converted to a PDF format (Portable Document Format) and uploaded prior to submitting the final application.  **Attention**, in case the uploaded attachment exceeds the page limit, the pages in excess shall not be considered. |

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# Acronym and Project Title:

## Summary (Portuguese)

## Summary (English)

|  |  |
| --- | --- |
| **Project leader Company:** |  |

|  |  |
| --- | --- |
| **1-Total number of participants (2 + 3):** |  |
| **2-Companies** |  |
| **3-Non-Company Entities of the R&I System** |  |
| **4-Other Partners:** |  |

|  |  |
| --- | --- |
| **Start Date:** |  |
| **End Date:** |  |
| **Duration (Months):** |  |

(Fill in the following table with the list of all the project beneficiaries/participants – add lines as necessary)

**List of participants**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **N. º** | **Nif** | **Social Designation of the Entity** | **Entity Type** | **R&I NCE Entity** | **Public/Private** |
| 1 |  | Leader | Company | Yes/No |  |
| 2 |  | (participant 1) | R&D Center or University or Polytechnic Department | Yes/No |  |
| n |  | (participant X) | University/Company Interface Institution | Yes/No |  |

# Project Description with Identification of Objectives and Goals



## Description of the problem

Context description, identifying the problem and needs that motivate the project.

## Goals

Describe the objectives of the project. The objectives of the project should be clear, quantifiable, realistic and achievable during the duration of the project. The objectives should be consistent with the expected impact of the project.



## Proposed concept and solution

Describe the concept or solution proposed by the project to solve the identified problem. Depending on the concrete thematic area of the project, when relevant, present the architecture/structure of the proposed solution, with the description of the main components, approach, etc...

When the project includes a pilot, prototype(s) or special premises for experiments, they must be well justified in terms of their need and in reference to the economic scale of the final production. In the case of prototypes, the number of needed units to be built must be well justified.

## Description of the state of the art and identification of the innovative characteristics of the product/process/service targeted by the project



Describe the advances proposed by the project against the state of the art and identify the main innovative features of the project.

Describe and justify the quantifiable characteristics of the new product/service listed in the following table, by comparing them to the performance of available solutions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Innovative Features** | **Unit of Measure** | **Situation in the Market** | **Project Objectives** | **Relative Importance (%)** |
|  |  |  |  |  |
|  |  |  |  |  |

# Project Implementation Plan



## Structure and logics of the work plan

Describe the structure and the structuring logic of the work plan. Identify the main planned activities and tasks and their relationships and dependencies. Include a Gantt chart with the project activities and tasks plan. Describe the research strategy of the project and justify its suitability to achieve the project's objectives.

**Identification of the R&D Activities**

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity Number** | **Activity Title** | **Classification** | **Responsible Participant** |
|  |  | Industrial Research/Experimental Development/Technical Management |  |

**Scheduling Activities/Tasks**

|  |  |
| --- | --- |
| **Activity** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **N º OF  Task** | **Task Title** | **Start Date** | **Completion Date** |
| 1 |  |  |  |
| N |  |  |  |

**This Activities/Tasks timetable in the Technical Annex must be the same as inserted in the Application Form. In case of discrepancy, the timetable indicated in the Application Form shall prevail.**

## Detailed description of activities and tasks

Fill in the detailed description of each of the project Activities.

|  |  |
| --- | --- |
| **Activity number** | **Activity Title** |
|  |  |
| **Objectives of the Activity** | |
|  | |
| **Description of Tasks** | |
| (Describe each of the activity Tasks, identifying the Leader and all the other participants, their responsibilities, and the start and end month of the task). | |
| **Description of Deliverables and Milestones** | |
|  | |

**Summary Table of Deliverables**

Identify and classify all the deliverables of the project, as well as the tasks they derive from:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Deliverable Number** | **Task Number** | **Title of the Deliverable** | **Date** | **Type of Deliverable** | **Disclosure Level** |
| D 1.1 | T 1.1 |  |  | Document Report Prototype Sampler Pilot Website Publication etc.) | Confidential/Public (\*) |
| D 1.2 | T 1.2 |  |  |  |  |
| DN. n | TN. n |  |  |  |  |

(\*) Confidential: Disclosure only within the scope of the consortium and the evaluation and monitoring teams /PUBLIC: disclosure without limitations (e.g., at the project Website or by the leader of the project)

**Summary Table of Milestones**

Identify the main milestones of the project and their means of verification, as well as the tasks to which they are associated:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Milestone Number** | **Task Number** | **Date** | **Milestone Title** | **Means of Verification** |
| M 1.1 | T 1.1 |  |  |  |
| M 1.2 | T 1.2 |  |  |  |
| MN. n | TN. n |  |  |  |

## Presentation of the Consortium

Describe the contribution of each participant and their prior experience relevant to their participation in the project. Define the profile of the team members who will carry out the work.

In the case of critical staff for the proposed developments (due to the relevance of their experience and decisive competences for the success of the project), please include their CV (this includes experts provided by external entities, e.g., subcontractors).

Demonstrate complementarity between the different participants and, where applicable, justify any outsourcing under subcontracting.

Describe how, collectively, the participants constitute a "complete consortium" capable to reach project objectives and take the developed product to market, under the conditions laid down in article 66 nº 4) (d) of the applicable regulation (RECI).

|  |
| --- |
| **"Complete Consortium"** |
|  |



## Project management

Describe the organizational structure as well as decision-making mechanisms and demonstrate their suitability to the dimension and complexity of the project.

Identify the main risks of the project and proposed contingency plans.



## Description and justification of the investment plan

Present a summary table of the project investments divided by expenditure and by participant. Each expenditure should be justified.

# Project Impact



## Strategy for economic valuation of project results

Describe the strategy for economic valuation of the project results, namely:

-Identify and characterize the target market and marketing strategy (application sectors, geographic markets, target segments and positioning).

-Identify the market objectives for the project results.

-Identify potentially competing solutions and constraints.

-Identify the critical access channels, existing or to be developed.

-Identify complementary (productive) investment needs.

-Refer the main commercial risks and their mitigation strategies.

-Refer to the strategy for protecting intellectual property (patents or other).

-Identify the target application/market sectors of the technology.

- Identify the business agents responsible for valuing the results, including whether it will be carried out exclusively by one or more of the project participants, and/or by a new Company (Spin-off) to be created during or after the project.

The use of a Spin-off company as strategy for valuing the results of the project can only be accepted for the fulfilment of the concept of "complete consortium" if the market to be exploited is an emerging market and, as such, there are no national companies to exploit it or if the national business activity within that market is still very immature. If the context that justifies the need to create a Spin-off company to market the solutions resulting from the project is unclear, the concept of "complete consortium" shall not be considered as met.

## Plan for disclosing and disseminating results

Describe how the consortium plans to disseminate the results of the project, namely by listing the plans for the following types of activities:

-Dissemination actions

-Technical/scientific publications

-Conferences, seminars or forums

-Master's and PhD Thesis

-Actions targeting specific sectors

# Project Merit

Please provide complementary information or specific elements, other than those that have already been listed in the Application Form, that can provide further support for assessing the various criteria that will determine the merit of the project:

1. **Project Quality**

**A1. Coherence and rationality of the Project**

Quality of the scientific-technological methodology/ Work Plan

This sub criterion evaluates the coherence of the work plan and methodology that will be followed to achieve the objectives, the adequacy of tasks (description, duration and participants), milestones and deliverables (relevance and timing).

Coherence of the investment plan/adequacy of the resources involved against the proposed objectives

This sub criterion evaluates the overall Investment Plan proposed in relation to the objectives and project strategy.

**A2. Degree of innovation**

Describe what has already been discovered at the research level within the project framework. What is, in scientific terms, the current situation that exists in the research area on which the project activities are focused? Describe the original scientific/technological contributions proposed by the project.

Does the proposed innovation point to the opening of a new market/industry in a sustained way?

Is the proposed innovation focused on the level of the product/process/service or does it exceed it to the level of the creation of new experiences for the market?

Is the proposed innovation based on a new approach to the market, to the region and/or country, or can it be said to be at the level of an international innovation for the whole World?

What is the degree of novelty of knowledge associated with the project, as well as the uncertainty and the associated scientific and technological risk?

**A3. Qualification and adequacy of teams/Consortium**

Do the teams have all the scientific skills required to carry out the project activities, particularly in key critical areas?

Does the consortium have the necessary skills to carry out all the planned activities?

**B – Impact of the project on company competitiveness**

**B1. Project Impact on business strategy**

The consortium plans to enter new markets or customer segments? What is the expected direct impact on the product / customer portfolio of consortium companies?

• New business area;

• New range of products / new process;

• Improvement of an existing product / service / process.

• Focus on current customers;

• New Clients / Same Geographies;

• New Clients / New Geographies;

**B2. Propensity for international markets**

Is the post-project sales volume expected to reach an increased sustainable basis in international market? How large is the expected sustainable increase between pre-project and post-project?

Does the pre and post-project sales differential allow the statement that the company or companies expect to acquire a new justified vocation for international markets?

Will international sales be based on external markets that are already consolidated with existing international partners or other facilitating agents?

Are the products / processes / services able to be exported and are these export sales supported by the existence of channels and partners that facilitate access to external markets?

**B3. Strengthening the capacity of R&D and innovation by the company (ies)**

The strengthening of the internal competencies of the company (s) through the hiring of highly qualified human resources should be evidenced, as they shall provide a positive contribution for the evaluation.

Likewise, the participation of highly qualified technical staff (research and doctoral fellows, staff researchers, trainees) on the project activities should also be carefully described as they also provide a positive contribution for the evaluation.

Quantitative criteria: clearly describe the relative weight of the hours worked by qualified technicians vs the total time spent by the whole technical staff of the participants in the project.

**C Contribution of the project to the economy**

**C1. Contribution of the project to the results of Portugal 2020**

Quantitative criteria: GVA of the beneficiary(s) obtained from the financial statements and post-project investment in R & D.

**C2. Structural Impact of the project**

Is the project embedded in tradable goods/services with potential to be exported? Explain carefully.

Does the project foresee the use of sophisticated technology and capital-intensive processes? Explain carefully.

**C3. Effect of demonstration, dissemination and valorization of results**

Please describe the whole, detailed disclosure plan actions.

Are there plans for an extensive dissemination targeting companies and user sectors, notably amongst competitors?

**C4. Positive Externalities**

What is the practical effect of the project on relations with other companies, upstream and downstream of the company(s) presenting the project, and in what way?

Does the project involve indirect valuation of other companies located upstream and downstream of the value chain of the company (s) presenting the project? If so, in what form? How can the company(s) provide evidence and disseminate the results of the side effects of this project to other companies?

**D Contribution of the project to regional convergence**

Please carefully describe the project contributions to the priorities of the regional smart strategy priorities of the involved regions.