

**Research proposal [Form A]**

**BOOST FOR EXCELLENCE**

**Project Information**

Proposal Full Title	
Proposal Acronym	
ERC Area of the Project	

**Applicant's Information**

Name of the Principal Investigator (PI)	
PI's Department	
Academic position (RTDA/RTDB/RU/PA/PO)	
Research domains (SSD)	
Foreign Hosting Institution	

## Research proposal [Part B1]

### Abstract

**ABSTRACT (max 1,000 characters, space included).**

*[Please provide a short description of your research proposal, highlighting the objectives (originality/innovation level) and how you will achieve them (approach/methods, interdisciplinarity)]*

**Section b: Curriculum vitae (max. 2 pages)**

*[Please fulfil the following template with your details and delete any not applicable section]*

**PERSONAL INFORMATION**

Family name, First name:

Researcher unique identifier(s) (such as ORCID, Research ID, etc .....):

Date of birth:

Nationality:

URL for web site:

- EDUCATION**

200?                      PhD

Name of Faculty/ Department, Name of University/ Institution, Country Name of PhD

Supervisor

199?                      Master

Name of Faculty/ Department, Name of University/ Institution, Country

- CURRENT POSITION(S)**

201? –                      Current Position

Name of Faculty/ Department, Name of University/ Institution/ Country 200? – Current Position

Name of Faculty/ Department, Name of University/ Institution/ Country

- PREVIOUS POSITIONS**

200? – 200?              Position held

Name of Faculty/ Department, Name of University/ Institution/ Country 200? – 200?

Position held

Name of Faculty/ Department, Name of University/ Institution/ Country

- FELLOWSHIPS AND AWARDS**

200? – 200?              Scholarship, Name of Faculty/ Department/Centre, Name of University/ Institution/ Country

200?                      Award, Name of Institution/Country

199? – 199?              Scholarship, Name of Faculty/ Department/Centre, Name of University/ Institution/ Country

- SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)**

200? – 200?              Number of Postdocs/ PhD/ Master Students

Name of Faculty/ Department/ Centre, Name of University/ Institution/ Country

- TEACHING ACTIVITIES (if applicable)**

200? –                      Teaching position – Topic, Name of University/ Institution/ Country

200? – 200?              Teaching position – Topic, Name of University/ Institution/ Country

- ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)**

201?                      Please specify your role and the name of event / Country

200?                      Please specify type of event / number of participants / Country

• **INSTITUTIONAL RESPONSIBILITIES (if applicable)**

201? – Faculty member, Name of University/ Institution/ Country  
 201? – 201? Graduate Student Advisor, Name of University/ Institution/ Country  
 200? – 200? Member of the Faculty Committee, Name of University/ Institution/  
 Country  
 200? – 200? Organizer of the Internal Seminar, Name of University/  
 Institution/ Country  
 200? – 200? Member of a Committee; role, Name of  
 University/ Institution/ Country

• **REVIEWING ACTIVITIES (if applicable)**

201? – Scientific Advisory Board, Name of University/ Institution/  
 Country  
 201? – Review Board, Name of University/ Institution/ Country  
 201? – Review panel member, Name of University/ Institution/  
 Country  
 201? – Editorial Board, Name of University/ Institution/ Country  
 200? – Scientific Advisory Board, Name of University/ Institution/  
 Country  
 200? – Reviewer, Name of University/ Institution/ Country  
 200? – Scientific Evaluation, Name of University/ Institution/  
 Country  
 200? – Evaluator, Name of University/ Institution/ Country

• **MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)**

201? – Member, Research Network “*Name of Research Network*”  
 200? – Associated Member, Name of Faculty/ Department/Centre, Name of  
 University/Institution/ Country  
 200? – Founding Member, Name of Faculty/ Department/Centre, Name of University/  
 Institution/Country

• **MAJOR COLLABORATIONS (if applicable)**

Name of collaborators, Topic, Name of Faculty/ Department/Centre, Name of University/Institution/  
 Country

• **CAREER BREAKS (if applicable)**

Exact dates Please indicate the reason and the duration in months.

• **COVID-19 IMPACT TO SCIENTIFIC PRODUCTIVITY (if applicable)**

Please specify which of the following situations apply to you:

- Increased caring responsibility for dependent person, including home schooling of children  
 No access to laboratory facilities, archives, or other necessary facilities  
 No access to field work  
 Adaptation to online teaching  
 Physical and/or mental health issues  
 Other(s) \_\_\_\_\_

Please provide an explanation of the impact on your productivity (300 characters including spaces)

**Appendix: All current grants and on-going and submitted grant applications of the PI(Funding ID)**

**Current grants (Please indicate “No funding” when applicable):**

*[Please specify any overlap between each funded project and the current application, highlighting as well how much effort you will devote to each project]*

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role of the PI</i>	<i>Relation to current proposal</i>

**On-going and submitted grant applications (Please indicate “None” when applicable):**

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role of the PI</i>	<i>Relation to current proposal<sup>2</sup></i>

**Section c: Early achievements track-record (max. 2 pages)**

*[Please provide a list of the PI's research outputs, including a short description of their scientific importance and the PI's role in their production. In line with ERC's eligibility rules, for PIs who earned their PhD before January 1<sup>st</sup>, 2009, the track record must concern only the last 10 years. Any career break eligible for the ERC grants applies also here.]*

## Research proposal [Part B2]

. (max. 15 pages)

[Please respect the following formatting constraints: Times New Roman, at least font size 11, margins (2.0 side and 1.5 top and bottom), single line spacing. While drafting the proposal, please bear in mind the definitions provided by the European Commission and reported in the following table. You must delete both the instruction and the table before submitting your proposal]

<b>Definitions</b>	
<b>Critical risk</b>	<p>A critical risk is a plausible event or issue that could have a high adverse impact on the ability of the project to achieve its objectives.</p> <p>Level of likelihood to occur (low/medium/high): The likelihood is the estimated probability that the risk will materialize even after taking account of the mitigating measures put in place</p> <p>Level of severity (Low/medium/high): the relative seriousness of the risk and the significance of its effect.</p>
<b>Deliverable</b>	<p>A report that is sent to the Commission or Agency providing information to ensure effective monitoring of the project. There are different types of deliverables (e.g. a report on specific activities or results, data management plans, ethics or security requirements).</p>
<b>Impacts</b>	<p>Wider long term effects on society (including the environment), the economy and science, enabled by the outcomes of R&amp;I investments (long term). Impacts generally occur some time after the end of the project.</p> <p>Example: The deployment of the advanced forecasting system enables each airport to increase maximum passenger capacity by 15% and passenger average throughput by 10%, leading to a 28% reduction in infrastructure expansion costs.</p>
<b>Milestone</b>	<p>Control points in the project that help to chart progress. Milestones may correspond to the achievement of a key result, allowing the next phase of the work to begin. They may also be needed at intermediary points so that, if problems have arisen, corrective measures can be taken. A milestone may be a critical decision point in the project where, for example, the consortium must decide which of several technologies to adopt for further development. The achievement of a milestone should be verifiable.</p>
<b>Objectives</b>	<p>The goals of the work performed within the project, in terms of its research and innovation content. This will be translated into the project's results. These may range from tackling specific research questions, demonstrating the feasibility of an innovation, sharing knowledge among stakeholders on specific issues. The nature of the objectives will depend on the type of action, and the scope of the topic</p>
<b>Outcomes</b>	<p>The expected effects, over the medium term, of projects supported under a given topic. The results of a project should contribute to these outcomes, fostered in particular by the dissemination and exploitation measures. This may include the uptake, diffusion, deployment, and/or use of the project's results by direct target groups. Outcomes generally occur during or shortly after the end of the project.</p> <p>Example: 9 European airports adopt the advanced forecasting system demonstrated during the project.</p>
<b>Research output</b>	<p>Results generated by the action to which access can be given in the form of scientific publications, data or other engineered outcomes and processes such as software, algorithms, protocols and electronic notebooks.</p>
<b>Results</b>	<p>What is generated during the project implementation. This may include, for example, know-how, innovative solutions, algorithms, proof of feasibility, new business models, policy recommendations, guidelines, prototypes, demonstrators,</p>

	<p>databases and datasets, trained researchers, new infrastructures, networks, etc. Most project results (inventions, scientific works, etc.) are 'Intellectual Property', which may, if appropriate, be protected by formal 'Intellectual Property Rights'. Example: Successful large-scale demonstrator: trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management.</p>
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## 1. Excellence

### 1.1 State of the art and objectives

- *[Please describe the objective of your project, highlighting how measurable, verifiable and realistically reachable they are.*
- *Please describe how your project is ambitious: how far it goes beyond the state of the art.]*

### 1.2 Methodology

*[Please describe t*

- *the methodology you rely on in your project and how it makes you achieve your objectives;*
- *the interdisciplinarity of your approach – if it is the case;*
- *any diversity aspect that you might need to address in your research, including gender dimension.*
- *how the methodology addresses the “do not significant harm” principle (ex Regulation EU) n. 2020/852);*
- *how your methodology implements open science practices;*
- *any ethics issue your research could raise and provide the necessary information]*

## 2. Impact

### 2.1 Expected outcomes outlined in a dissemination and exploitation plan, including communication activities and public engagement

*[Please describe your dissemination and exploitation plan aimed to maximise the impact of your project including for each activity:*

- *The objectives*
- *The tools and channels used*
- *The addressed target group (e.g. scientific community, financial actors, end user, public at large)*
- *The benefits the project will have for the target group*

*If relevant, please describe your strategy for the Intellectual property management and how it will impact on results exploitation]*

### 2.2 Expected scientific, societal, and economic impacts

*[Please describe how your project results will provide benefits beyond the scope and the duration of the project itself, including the scientific, the societal and the economic components of impact.]*

### 2.3 Expected impact on the PI's CV

*[Please describe how the proposed research will contribute to make PI's CV more competitive to apply for ERC or MSCA grants, underling*

- *the role played by the research period at the foreign host institution*
- *what CV sections will benefit the most from the research results]*

## 3 Project implementation

### 3.1 Project work plan, including timing, deliverables, and milestones

*[Please describe*

- *the work plan overall structure, including deliverables and milestones. You should also include the timing of the different work packages and their components and include the time effort devoted to each work package;*
- *the mechanisms in place to assess and mitigate any critical risk – of either research or administrative nature – that might affect your research plan.]*

### 3.2 Hosting arrangements with the foreign host institution

*[Please describe the hosting arrangements with the host institutions including:*

- *The PI integration with the team and the support services available to him/her*

- the access granted to infrastructures and facilities necessary to undertake project activities ]

### 3.3 Project resources and overall budget

[Please fulfil the table below and provide

- a description of the research group and of the value added that each team member brings to the project;
- a description and full justification of the amount of funding considered necessary to reach the objectives of the project, for each cost category]

Cost Category	Months M1-M6	Months M7-M12	Months M13-M18	Months M19-M24	Total (M1-M24)
Personnel (1 post-doc)	€	€	€	€	€
Travel and subsistence	€	€	€	€	€
Equipment	€	€	€	€	€
Other goods, works and services	€	€	€	€	€
Access to and use of research infrastructure	€	€	€	€	€
Project total costs	€	€	€	€	€
Requested grant	€	€	€	€	€