



# Horizon Europe Programme

Project Proposal Template[[1]](#footnote-1)

|  |
| --- |
|  **Page limit: The title, list of participants and sections 1, 2 and 3, together, should not be longer than 45 pages. All tables, figures, references and any other element pertaining to these sections must be included as an integral part of these sections and are thus counted against this page limit. The number of pages included in each section of this template is only indicative.**  |

Text in red is provided by the EC as guidelines to follow.

**Comments in green are not provided by the EC; students should consider them as recommendations to follow whenever possible.**

**All sections whose title is underlined (as this line) should be completed before submission for the exam.**

**GROUP NUMBER #**

**Title of Proposal:**

**Any title you wish to give to your project**

**Proposal acronym:**

**Any acronym you wish to give to your project**

**List of participating organisations**

|  |  |  |
| --- | --- | --- |
| **Participant No.** | **Participant organisation name** | **Country** |
| 1 (Coordinator) | **It can be a true institution, or invented (Univ., company, etc)** |  |
| 2 | **It can be a true institution, or invented (Univ., company, etc)** |  |
| 3 | **It can be a true institution, or invented (Univ., company, etc)** |  |
| 4 |  |  |
| 5 |  |  |
| … |  |  |

**Table of Contents**

**Sect. 1 – title – page**

**Sect. 2 – title – page**

**…**

|  |
| --- |
| **DEFINITIONS** |
| **Critical risk** | 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.Level of likelihood to occur (Low/medium/high): The likelihood is the estimated probability that the risk will materialise even after taking account of the mitigating measures put in place.Level of severity (Low/medium/high): The relative seriousness of the risk and the significance of its effect. |
| **Deliverable** | 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). |
| **Impacts** | Wider long term effects on society (including the environment), the economy and science, enabled by the outcomes of R&I investments (long term). It refers to the specific contribution of the project to the work programme expected impacts described in the destination. Impacts generally occur sometime after the end of the project.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.* |
| **Milestone** | 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. |
| **Objectives** | 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. |
| **Outcomes** | 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.Example: *9 European airports adopt the advanced forecasting system demonstrated during the project.* |
| **Pathway to impact** | Logical steps towards the achievement of the expected impacts of the project over time, in particular beyond the duration of a project. A pathway begins with the projects’ results, to their dissemination, exploitation and communication, contributing to the expected outcomes in the work programme topic, and ultimately to the wider scientific, economic and societal impacts of the work programme destination. |
| **Research output** | 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. |
| **Results** | 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, 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.* |
| **Technology Readiness Level** | See Work Programme General Annexes B |

##### Excellence - 18 pages 🡪 lines in total

***Excellence – aspects to be taken into account.***

* Clarity and pertinence of the project’s objectives, and the extent to which the proposed work is ambitious, and goes beyond the state of the art.
* Soundness of the proposed methodology, including the underlying concepts, models, assumptions, interdisciplinary approaches, appropriate consideration of the gender dimension in research and innovation content, and the quality of open science practices, including sharing and management of research outputs and engagement of citizens, civil society, and end users where appropriate.
	1. **Objectives and ambition - 4 pages 🡪 lines**
		+ Briefly describe the objectives of your proposed work. Why are they pertinent to the work programme topic? Are they measurable and verifiable? Are they realistically achievable?
		+ Indicate any exceptional novel concepts and approaches, new products, services or business and organisational models. Where relevant, illustrate the advance by referring to products and services already available on the market.
		+ Describe where the proposed work is situated in the spectrum from ‘idea to application’, or from ‘lab to market’
	2. **Methodology - 14 pages 🡪 lines**
		+ Describe and explain the overall methodology, including the concepts, models and assumptions that underpin your work. Explain how this will enable you to deliver your project’s objectives. Refer to any important challenges you may have identified in the chosen methodology and how you intend to overcome them.
		+ Explain how expertise and methods from different disciplines will be brought together and integrated in pursuit of your objectives. If you consider that an inter-disciplinary approach is unnecessary in the context of the proposed work, please provide a justification.
		+ Describe how the gender dimension (i.e. sex and/or gender analysis) is taken into account in the project’s research and innovation content. If you do not consider such a gender dimension to be relevant in your project, please provide a justification.
		+ Describe applicants generating/collecting data, addressing the following:

**Types of data/research outputs** (e.g. experimental, observational, images, text, numerical) and their estimated size; if applicable, combination with, and provenance of, existing data.

**Curation and storage/preservation costs**; person/team responsible for data management and quality assurance.

##### Impact - 10 pages 🡪 lines in total

***Impact – aspects to be taken into account.***

* Credibility of the pathways to achieve the expected outcomes and impacts specified in the work programme, and the likely scale and significance of the contributions due to the project.
* Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.
	1. **Project’s pathways towards impact - 4 pages 🡪 lines**
		+ Provide a **narrative** explaining how the project’s results are expected to make a difference in terms of impact, beyond the immediate scope and duration of the project.

*State the target groups that would benefit. Even if target groups are mentioned in general terms in the work programme, you should be specific here, breaking target groups into particular interest groups or segments of society relevant to this project.*

*The outcomes and impacts of your project may be:*

* + *Scientific, e.g. contributing to specific scientific advances, across and within disciplines,*

*creating new knowledge, reinforcing scientific equipment and instruments, computing systems (i.e. research infrastructures);*

* + *Economic/technological, e.g. bringing new products, services, business processes to the market, increasing efficiency, decreasing costs, increasing profits, contributing to standards’ setting, etc.*
	+ *Societal, e.g. decreasing CO2 emissions, decreasing avoidable mortality, improving policies and decision making, raising consumer awareness.*
1. Give an indication of the scale and significance of the project’s contribution to the expected outcomes and impacts, should the project be successful. Provide quantified estimates where possible and meaningful.
2. Describe any barriers/obstacles, and any framework conditions (such as regulation and standards), that may determine whether and to what extent the expected impacts will be achieved. (This should not include the management of the project itself, which should be described below under ‘Implementation’.)
	1. **Measures to maximise impact - Dissemination, exploitation and communication - 6 pages 🡪 lines**

**Dissemination is the action taken by the project to let communities of researchers and innovators know about project scope and achievements: e.g. organisation of workshops, press conferences, fairs, schools, etc.**

**Exploitation is the action taken in order to make use of the outcomes of the project.**

* + - Provide a draft plan for the dissemination and exploitation including communication activities. Describe the dissemination, exploitation and communication measures that are planned, and the target group(s) addressed (e.g. scientific community, end users, financial actors, public at large).
		- Outline your strategy for the management of intellectual property, foreseen protection measures, such as patents, design rights, copyright, trade secrets, etc., and how these would be used to support exploitation.

##### Summary

**Note for the students: skip part 2.3**

Provide a summary of this section by presenting in the canvas below the key elements of your project impact pathway and of the measures to maximise its impact.

### KEY ELEMENT OF THE IMPACT SECTION

|  |
| --- |
| **SPECIFIC NEEDS** |
| *What are the specific needs that triggered this project?*Example 1Most airports use process flow-oriented models based on static mathematical values limiting the optimal management of passenger flow and hampering the accurate use of the available resources to the actual demand of passengers.Example 2Electronic components need to get smaller and lighter to match the expectations of the end-users. At the same time there is a problem of sourcing of raw materials that has an environmental impact. |

|  |
| --- |
| **EXPECTED RESULTS** |
| What do you expect to generate by the end of the project?Example 1**Successful large-scale demonstrator:** Trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management.**Algorithmic model:**Novel algorithmic model for proactive airport passenger flow management.Example 2Publication of a **scientific discovery on transparent electronics.****New product:** More sustainable electronic circuits.**Three PhD students trained.** |

|  |
| --- |
| **D & E & C MEASURES** |
| What dissemination, exploitation and communication measures will you apply to the results?Example 1**Exploitation:** Patenting the algorithmic model.**Dissemination towards the scientific community and airports**: Scientific publication with the results of the large-scale demonstration.**Communication towards citizens:** An event in a shopping mall to show how the outcomes of the action are relevant to our everyday lives.Example 2**Exploitation of the new product:** Patenting the new product; Licencing to major electronic companies.**Dissemination towards the scientific community and industry:** Participating at conferences; Developing a platform of material compositions for industry; Participation at EC project portfolios to disseminate the results as part of a group and maximise the visibility vis-à- vis companies. |

*Who will use or further up-take the results of the project? Who will benefit from the results of the project?*

Example 1

**9 European airports**:

Schiphol, Brussels airport, etc.

**The European Union aviation safety agency.**

**Air passengers (indirect).**

Example 2

**End-users**: consumers of electronic devices.

**Major electronic companies**: Samsung, Apple, etc.

**Scientific community** (field of transparent electronics).

**TARGET GROUPS**

*What change do you expect to see after successful dissemination and exploitation of project results to the target group(s)?*

Example 1

**Up-take by airports:** 9 European airports adopt the advanced forecasting system demonstrated during the project.

Example 2

**High use of the scientific discovery published** (measured with the relative rate of citation index of project publications).

A **major electronic company** (Samsung or Apple)

**exploits/uses the new product** in their manufacturing.

**OUTCOMES**

*What are the expected wider scientific, economic and societal effects of the project contributing to the expected impacts outlined in the respective destination in the work programme?*

Example 1

**Scientific:** New breakthrough scientific discovery on passenger forecast modelling.

**Economic:** Increased airport efficiency

Size: 15% increase of maximum passenger capacity in European airports, leading to a 28% reduction in infrastructure expansion costs.

Example 2

**Scientific:** New breakthrough scientific discovery on transparent electronics.

**Economic/Technological:** A new market for touch enabled electronic devices.

**Societal:** Lower climate impact of electronics manufacturing (including through material sourcing and waste management).

**IMPACTS**

##### Quality and efficiency of the implementation - 17 pages 🡪 lines in total

***Quality and efficiency of the implementation – aspects to be taken into account***

‒ *Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall*

‒ *Capacity and role of each participant, and extent to which the consortium as a whole brings together the necessary expertise.*

* 1. **Work plan and resources - 13 pages 🡪 lines**

**Note for the students: in the ‘detailed work description’ section, only tables 3.1a, 3.1c, 3.1f, 3.1h are mandatory to pass the exam**

Please provide the following:

* + - brief presentation of the overall structure of the work plan (the **WBS**).
		- timing of the different work packages and their components (**Gantt chart** or similar).
		- graphical presentation of the components showing how they inter-relate (**Pert chart** or similar).
		- detailed work description, i.e.:
			* a list of work packages (**table 3.1a**);
			* a description of each work package (**table 3.1b**); **Note for the students: skip table 3.1b**
			* a list of deliverables (**table 3.1c**);

*Resources assigned to work packages should be in line with their objectives and deliverables. You are advised to include a distinct work package on ‘project management’, and to give due visibility in the work plan to ‘data management’ ‘dissemination and exploitation’ and ‘communication activities’, either with distinct tasks or distinct work packages.*

* + - a list of milestones (**table 3.1d**); **Note for the students: skip table 3.1d**
		- a list of critical risks, relating to project implementation, that the stated project's objectives may not be achieved. Detail any risk mitigation measures. You will be able to update the list of critical risks and mitigation measures as the project progresses (**table 3.1e**); **Note for the students: skip table 3.1e**
		- a table showing number of person months required (**table 3.1f**);
		- a table showing description and justification of subcontracting costs for each participant (**table 3.1g**); **Note for the students: skip table 3.1g**
		- a table showing justifications for ‘purchase costs’ (**table 3.1h**) for participants where those costs exceed 15% of the personnel costs
		- if applicable, a table showing justifications for ‘other costs categories’ (**table 3.1i**); **Note for the students: skip table 3.1i**
		- if applicable, a table showing in-kind contributions from third parties (**table 3.1j**) **Note for the students: skip table 3.1j**
	1. **Capacity of participants and consortium as a whole - 4 pages 🡪 lines**

*The individual participants of the consortium are described in a separate section under Part A. There is no need to repeat that information here.*

* + - Describe the consortium. How does it match the project’s objectives and bring together the necessary disciplinary and inter-disciplinary knowledge. Show how this includes expertise in social sciences and humanities, open science practices, and gender aspects, as appropriate. Include in the description affiliated entities and associated partners, if any.
		- Describe how the members complement one another (and cover the value chain, where appropriate)
		- In what way does each of them contribute to the project? Show that each has a valid role, and adequate resources in the project to fulfil that role.
		- If applicable, describe the industrial/commercial involvement in the project to ensure exploitation of the results and explain why this is consistent with and will help to achieve the specific measures which are proposed for exploitation of the results of the project (see section 2.2).

##### Tables for section 3.1

##### Table 3.1a: List of work packages

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Work package No.** | **Work Package Title** | **Lead Participant No.** | **Lead Participant Short Name** | **Person- Months** | **Start Month** | **End month** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**Table 3.1b: Work package**

|  |  |
| --- | --- |
| **Work package number** |  |
| **Work package title** |  |

**Note for the students: skip table 3.1b**

**Description for each work package:**

*Participants involved in each WP and their efforts are shown in table 3.1f. Lead participant and starting and end date of each WP are shown in table 3.1a.)*

**Objectives**

**Description of work** (where appropriate, broken down into tasks), lead partner and role of participants. Deliverables linked to each WP are listed in table 3.1c (no need to repeat the information here).

##### Table 3.1c: List of Deliverables[[2]](#footnote-2)

Only include deliverables that you consider essential for effective project monitoring.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Number** | **Deliverable name** | **Short description** | **Work package number** | **Short name of lead participant** | **Type** | **Dissemination level** | **Delivery date (in months)** |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

##### KEY

Deliverable numbers in order of delivery dates. Please use the numbering convention

<WP number>.<number of deliverable within that WP>.

For example, deliverable 4.2 would be the second deliverable from work package 4.

##### Type:

Use one of the following codes:

R: Document, report (excluding the periodic and final reports)

DEM: Demonstrator, pilot, prototype, plan designs

DEC: Websites, patents filing, press & media actions, videos, etc.

DATA: Data sets, microdata, etc.

DMP: Data management plan

ETHICS: Deliverables related to ethics issues.

SECURITY: Deliverables related to security issues

OTHER: Software, technical diagram, algorithms, models, etc.

##### Dissemination level:

Use one of the following codes:

PU – Public, fully open, e.g. web (Deliverables flagged as public will be automatically published in CORDIS project’s page)

SEN – Sensitive, limited under the conditions of the Grant Agreement

Classified R-UE/EU-R – EU RESTRICTED under the Commission Decision No2015/444

Classified C-UE/EU-C – EU CONFIDENTIAL under the Commission Decision No2015/444

Classified S-UE/EU-S – EU SECRET under the Commission Decision No2015/444

##### Delivery date

Measured in months from the project start date (month 1)

**Table 3.1d: List of milestones**

**Note for the students: skip table 3.1d**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Milestone number** | **Milestone name** | **Related work package(s)** | **Due date (in month)** | **Means of verification** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**KEY**

**Due date**

Measured in months from the project start date (month 1)

**Means of verification**

Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate. For example: a laboratory prototype that is ‘up and running’; software released and validated by a user group; field survey complete and data quality validated.

**Table 3.1e: Critical risks for implementation**

**Note for the students: skip table 3.1e**

|  |  |  |
| --- | --- | --- |
| **Description of risk (indicate level of (i) likelihood, and (ii) severity: Low/Medium/High)** | **Work package(s) involved** | **Proposed risk-mitigation measures** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Definition critical risk:**

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.

**Level of likelihood to occur: Low/medium/high**

The likelihood is the estimated probability that the risk will materialise even after taking account of the mitigating measures put in place.

**Level of severity: Low/medium/high**

The relative seriousness of the risk and the significance of its effect.

**Table 3.1f: Summary of staff effort**

*Please indicate the number of person/months over the whole duration of the planned work, for each work package, for each participant. Identify the work-package leader for each WP by showing the relevant person- month figure in bold.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **WPn** | **WPn+1** | **WPn+2** | **Total Person-****Months per Participant** |
| **Participant****Number/Short Name** |  |  |  |  |
| **Participant Number/****Short Name** |  |  |  |  |
| **Participant Number/****Short Name** |  |  |  |  |
| **Total Person Months** |  |  |  |  |

##### Table 3.1g: ‘Subcontracting costs’ items

#####  Note for the students: skip table 3.1g

For each participant describe and justify the tasks to be subcontracted (please note that core tasks of the project should not be sub-contracted).

|  |
| --- |
| **Participant Number/Short Name** |
|  | **Cost (€)** | **Description of tasks and justification** |
| **Subcontracting** |  |  |

##### Table 3.1h: ‘Purchase costs’ items (travel and subsistence, equipment, and other goods, works and services)

Please complete the table below for each participant if the purchase costs (i.e. the sum of the costs for ’travel and subsistence’, ‘equipment’, and ‘other goods, works and services’) exceeds 15% of the personnel costs for that participant (according to the budget table in proposal part A). The record must list cost items in order of costs and starting with the largest cost item, up to the level that the remaining costs are below 15% of personnel costs.

|  |
| --- |
| **Participant Number/Short Name** |
|  | **Cost (€)** | **Justification** |
| **Travel and subsistence** |  |  |
| **Equipment** |  |  |
| **Other goods, works and****services** |  |  |
| **Remaining purchase costs (<15% of pers.****Costs)** |  |  |
| **Total** |  |

##### Table 3.1i: ‘Other costs categories’ items (e.g. internally invoiced goods and services)

##### Note for the students: skip table 3.1i

Please complete the table below for each participant that would like to declare costs under other costs categories (e.g. internally invoiced goods and services), irrespective of the percentage of personnel costs.

|  |
| --- |
| **Participant Number/Short Name** |
|  | **Cost (€)** | **Justification** |
| **Internally invoiced****goods and services** |  |  |
| **…** |  |  |

##### Table 3.1j: ‘In-kind contributions’ provided by third parties

##### Note for the students: skip table 3.1j

Please complete the table below for each participant that will make use of in-kind contributions (non-financial resources made available free of charge by third parties). In kind contributions provided by third parties free of charge are declared by the participants as eligible direct costs in the corresponding cost category (e.g. personnel costs or purchase costs for equipment).

|  |
| --- |
| **Participant Number/Short Name** |
| **Third party name** | **Category** | **Cost (€)** | **Justification** |
|  | **Select between** Seconded personnel Travel and subsistence EquipmentOther goods, works and servicesInternally invoiced goods and services |  |  |
|  |  |  |  |

1. Questo documento è destinato esclusivamente agli studenti del corso “Introduzione al Project Management e alle Soft Skill” dell’Università di Bologna. [↑](#footnote-ref-1)
2. You must include a ‘plan for dissemination and exploitation including communication activities as distinct deliverables within the first 6 months of the project. [↑](#footnote-ref-2)