



#HorizonEU



# THE EU RESEARCH & INNOVATION PROGRAMME

2021 - 2027

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EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR RESEARCH & INNOVATION
H3 – COMMON SERVICE FOR BUSINESS PROCESSES

Webinar CDTI on Cluster 3. Security

23 September 2021

Research and Innovation

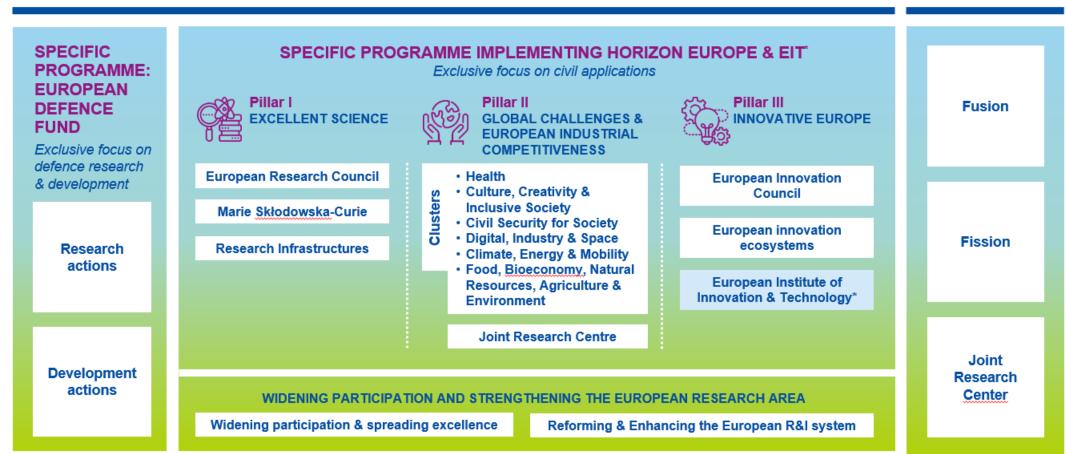
# **About Horizon Europe**

Horizon Europe supports research and innovation through Work Programmes, which set out funding opportunities for research and innovation activities.

#### HORIZON EUROPE

#### **EURATOM**

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<sup>\*</sup> The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

## HORIZON EUROPE

# What is new in the submission process?





Check the General Annexes
of the WP for complete
information

#### **Proposal page limit:** Substantial reduction in maximum length:

RIAs and IAs	CSAs	COFUND	First stage proposals	EIC Pathfinder
45 pages	30 pages	70 pages	10 pages	17 pages

Check for exceptions in your topics!!!

### Consortium composition (collaborative projects)

- at least one independent legal entity established in a Member State (MS), and
- at least two other independent legal entities each established either in a different MS or an Associated Country (AC).
- CSAs: at least one legal entity established in a MS, AC or, if provided for in the specific call conditions, in another third country.

#### Gender Equality Plan (applicable only from 2022 on)

Participants that are public bodies, research organisations or higher education establishments from Members States and Associated countries **must have a gender equality plan**, covering minimum process-related requirements.





# Application form (proposal template)







#### **NEW FIELDS IN PART A**

- Researchers table needed to follow up researchers careers (HE indicator)
- Role of participating organisation
- Self-declaration on gender equality plan

# FIELDS MOVED FROM PART B TO PART A

- Ethics self-assessment
- Security questionnaire (NEW! in all HE proposals)
- Information on participants' previous activities related to the call

#### **NEW IN PART B**

- Glossary of terms.
- Consistency on the use of terminology is ensured in all project phases (from WP to proposal and reporting)
- Extensive explanations on what exactly should be included in each section.



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 some time after the end of the project.
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.
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'.



# HORIZON EUROPE

# What is new in the evaluation process?









#### Same criteria as in H2020

Same three award criteria: 'Excellence', 'Impact' and 'Quality and efficiency of the implementation'. Excellence only for ERC.

#### Adapted following lessons learnt

- The number of 'aspects to be taken into account' have been reduced, ensuring that the same aspect is not assessed twice
- Open Science practices assessed as part of the scientific methodology in the excellence criterion
- New approach to impact: Key Impacts Pathways (KIPs)
- The assessment of the quality of applicants is assessed under 'implementation', rather than as a separate binary assessment of operational capacity
- Assessment of management structures has been removed.



# **Evaluation criteria (RIAs and IAs)**

#### **EXCELLENCE**

- ✓ 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.

#### **IMPACT**

- 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 maximize expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

# QUALITY AND EFFICIENCY OF THE IMPLEMENTATION

- ✓ 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.



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# Points to consider when writing a proposal in HE





# **Key principles**



Your proposed work must be within the scope of a work programme topic



You need to demonstrate that your idea is ambitious and goes beyond the state of the art



Your scientific methodology must take into account interdisciplinary, gender dimension and open science practices.



You should show how your project could contribute to the outcomes and impacts described in the work programme (the pathway to impact)



You should describe the planned measures to maximise the impact of your project ('plan for the dissemination and exploitation including communication activities')



You should demonstrate the quality of your work plan, resources and participants



# Policy and horizontal considerations



**Open Science across the programme** 



Gender dimension in R&I content



Pathway to impact



Measures to maximise impact



**Artificial intelligence** 

These aspects must normally be considered in all Horizon Europe calls (unless explicitly mentioned in the topic description).

Specific calls may include other aspects to take into account.





# Describing the impact of your proposal

Project's pathway towards impact

...by thinking about the specific contribution the project can make to the expected outcomes and impacts set out in the Work Programme.



STRATEGIC PLAN

**WORK PROGRAMME** 

# Application process (researed liners) PROJECT PROPOSALS

# Link between policy priorities and project results

EU POLICY PRIORITIES	Overall priorities of the European Union (Green Deal, Fit for the Digital Age,)
KEY STRATEGIC ORIENTATIONS	Set of strategic objectives within the EC policy priorities where R&I investments are expected to make a difference
IMPACT AREAS	Group of expected impacts highlighting the most important transformation to be fostered through R&I
EXPECTED IMPACTS = DESTINATIONS	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 some time after the end of the project.
EXPECTED OUTCOMES = TOPICS	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.
PROJECT 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'



# Describing the impact of your proposal

#### Destination

#### Effective management of EU external borders

This Destination addresses, among other, objectives identified by the **Security Union Strategy**[[COM(2020) 795 final.]] as well as the border management and security dimensions of the **New Pact on Migration and Asylum**[[COM(2020) 609 final.]]. As such, topics included under the Destination are aimed at ensuring strong European land, air and sea external borders. This includes by developing strong capabilities for checks at external borders hence safeguarding the integrity and functioning of the Schengen area without controls at the internal borders, by compensating the absence of intra-EU border checks; being capable to carry out systematic border checks, including identity, health and security checks as necessary, while facilitating the travel of bona fide travellers and respecting rights and possible vulnerabilities of individuals; providing integrated and continuous border surveillance, situational awareness and analysis support; combating identity and document frauds; supporting future technology for the European Border and Coast Guard; supporting the interoperability and performance of EU data exchange and analysis IT systems; supporting better risk detection, incident response and crime prevention; improving European preparedness to, and management of, future rapidly evolving changes; and updating our maritime security management including migration, trafficking as well as search and rescue capabilities.

#### Expected impact

Proposals for topics under this Destination should set out a credible pathway to contributing to the following expected impact of the Horizon Europe Strategic Plan 2021-2024:

"Legitimate passengers and shipments travel more easily into the EU, while illicit trades, trafficking, piracy, terrorist and other criminal acts are prevented, due to improved air, land and sea border management and maritime security including better knowledge on social factors."

More specifically, proposals should contribute to the achievement of one or more of the following impacts:

- Improved security of EU land and air borders, as well as sea borders and maritime environment, infrastructures and activities, against accidents, natural disasters
  and security challenges such as illegal trafficking, piracy and potential terrorist attacks, cyber and hybrid threats;
- Improved border crossing experience for travellers and border authorities staff, while maintaining security and monitoring of movements across air, land and sea EU
  external borders, supporting the Schengen space, reducing illegal movements of people and goods across those borders and protecting fundamental rights of
  travellers;
- Improved customs and supply chain security though better prevention, detection, deterrence and fight of illegal activities involving flows of goods across EU external border crossing points and through the supply chain, minimising disruption to trade flows.

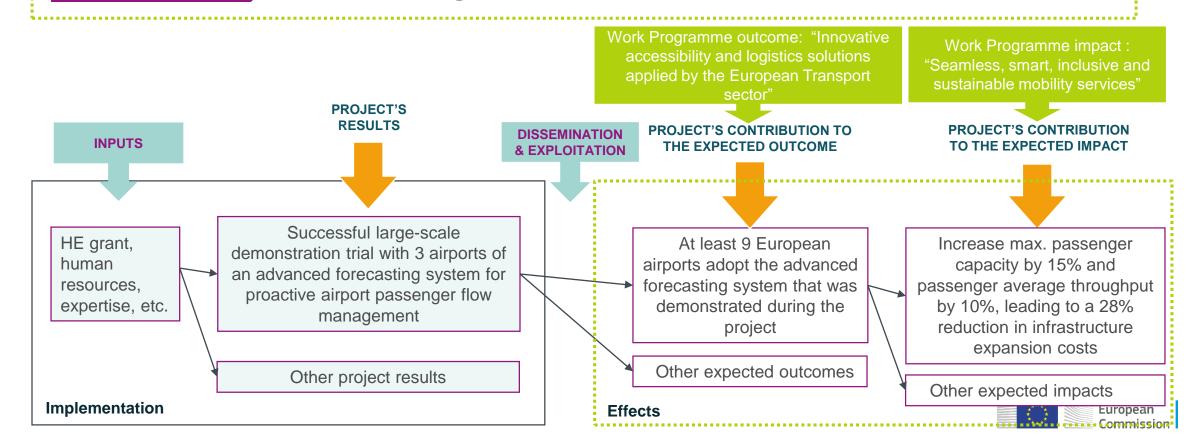




# Describing the impact of your proposal

Project's pathway towards impact

...by thinking about the specific contribution the project can make to the expected outcomes and impacts set out in the Work Programme.





# Measures to maximise impact

Dissemination, exploitation and communication

To include a draft plan in proposal is an admissibility condition, unless the work programme topic explicitly states otherwise.

All measures should be proportionate to the scale of the project, and should contain concrete actions to be implemented both during and after the end of the project

#### Elements of the D&E&C plan

- Planned measures to maximise the impact of projects
- Target groups (e.g. scientific community, end users, financial actors, public at large) and proposed channels to interact
- Communication measures for promoting the project and its findings throughout the full lifespan of the project
- Policy feedback measures to contribute to policy shaping and supporting the implementation of new policy initiatives and decisions
- Follow-up plan to foster exploitation/uptake of the results
  - Comprehensive and feasible strategy for the management of the intellectual property (the provision of a results ownership list is mandatory at the end of the project)
  - If exploitation is expected primarily in non-associated third countries, give a convincing justification that this is still in the Union's interest.



# Trustworthy Artificial Intelligence

Due diligence is required regarding the trustworthiness of all Al-based systems/ techniques used or developed in projects funded under Horizon Europe.

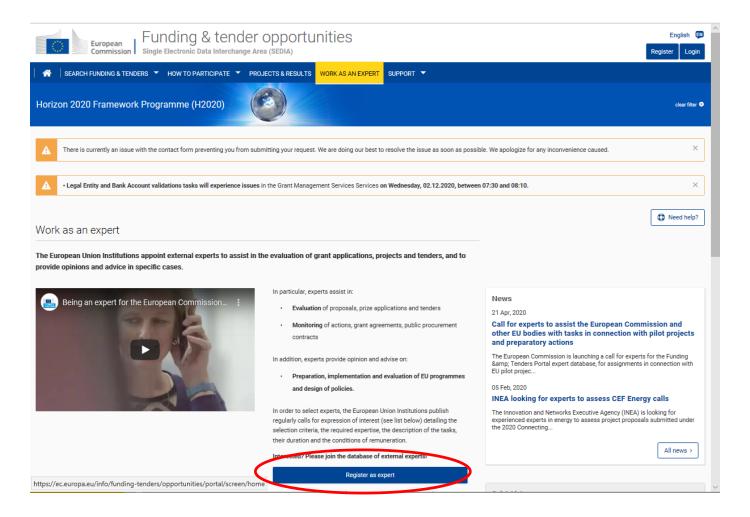
# Under Horizon Europe, the technical robustness\* of the proposed Al based systems must be evaluated under the excellence criterion.

(\*) Technical robustness refers to technical aspects of AI systems and development, including resilience to attack and security, fullback plan and general safety, accuracy, reliability and reproducibility.

Al-based systems or techniques should be, or be developed to become:

- Technically robust, accurate and reproducible, and able to deal with and inform about possible failures, inaccuracies and
  errors, proportionate to the assessed risk posed by the AI-based system or technique.
- Socially robust, in that they duly consider the context and environment in which they operate.
- Reliable and function as intended, minimizing unintentional and unexpected harm, preventing unacceptable harm and safeguarding the physical and mental integrity of humans.
- Able to provide a suitable explanation of its decision-making process, whenever an Al-based system can have a significant impact on people's lives.





# The best way to learn is by doing

You can register in the EU experts database at any time.

Click <u>here</u> to register!



## HORIZON EUROPE

# Do you need more information?







#### ... check recorded webinars:

- 'How to prepare a successful proposal in Horizon Europe' (24 March 2021). See recorded session here.
- 'A successful proposal for Horizon Europe: Scientific-technical excellence is key, but don't forget the other aspects' (21 April 2021). Recorded session
- 'The Funding & Tenders Portal for beginners' (27 May 2021). Recorded session
- 'All you need to know on D&E under Horizon Europe' (9 June 2021). Recorded session
- 'How to prepare a successful innovation procurement proposal for Horizon Europe' (22 June 2021).
   Recorded session
- 'Horizon Europe: key changes to the Ethics Appraisal Process' (18 July 2021). Recorded session
- R&I Days 2021: workshop on 'Tips and tricks while writing your HE proposal' (23 June 2021). Recorded session
- Thematic info-days per cluster (June July 2021). Event page





# Thank you!

## # HorizonEU

http://ec.europa.eu/horizon-europe

