



# EU Civil security research and innovation

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# EU R&I on civil security: overview

# HORIZON EUROPE - CLUSTER 3



**Pillar 1**  
Excellent Science

European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures



**Pillar 2**  
Global Challenges and European  
Industrial Competitiveness

Clusters

1. Health
2. Culture, Creativity and Inclusive Society
3. **Civil Security for Society**
4. Digital, Industry and Space
5. Climate, Energy and Mobility
6. Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre



**Pillar 3**  
Innovative Europe

European Innovation Council

European innovation  
ecosystems

European Institute of Innovation  
and Technology

Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

# EU Security R&I funding

- **3+ billion EUR and 700+** projects since 2007
- Tech for law enforcement, border management, civil protection, customs, disaster risk management, pandemic preparedness, maritime security, protection of critical infrastructures...
- Much of today's civil security tech from European companies and users (**dark web crawlers, automated border gates, fingerprint readers, cargo scanners, CBRN detectors, sensors, early disaster warning** etc) come from this programme
- Participation of practitioners (police, border and coast guards, customs authorities, civil protection, firefighters, emergency units...) with industry (incl. SMEs), academia and civil society
- Serving various EU policies as well as international (UN)
- **Horizon Europe: 2021-2027**

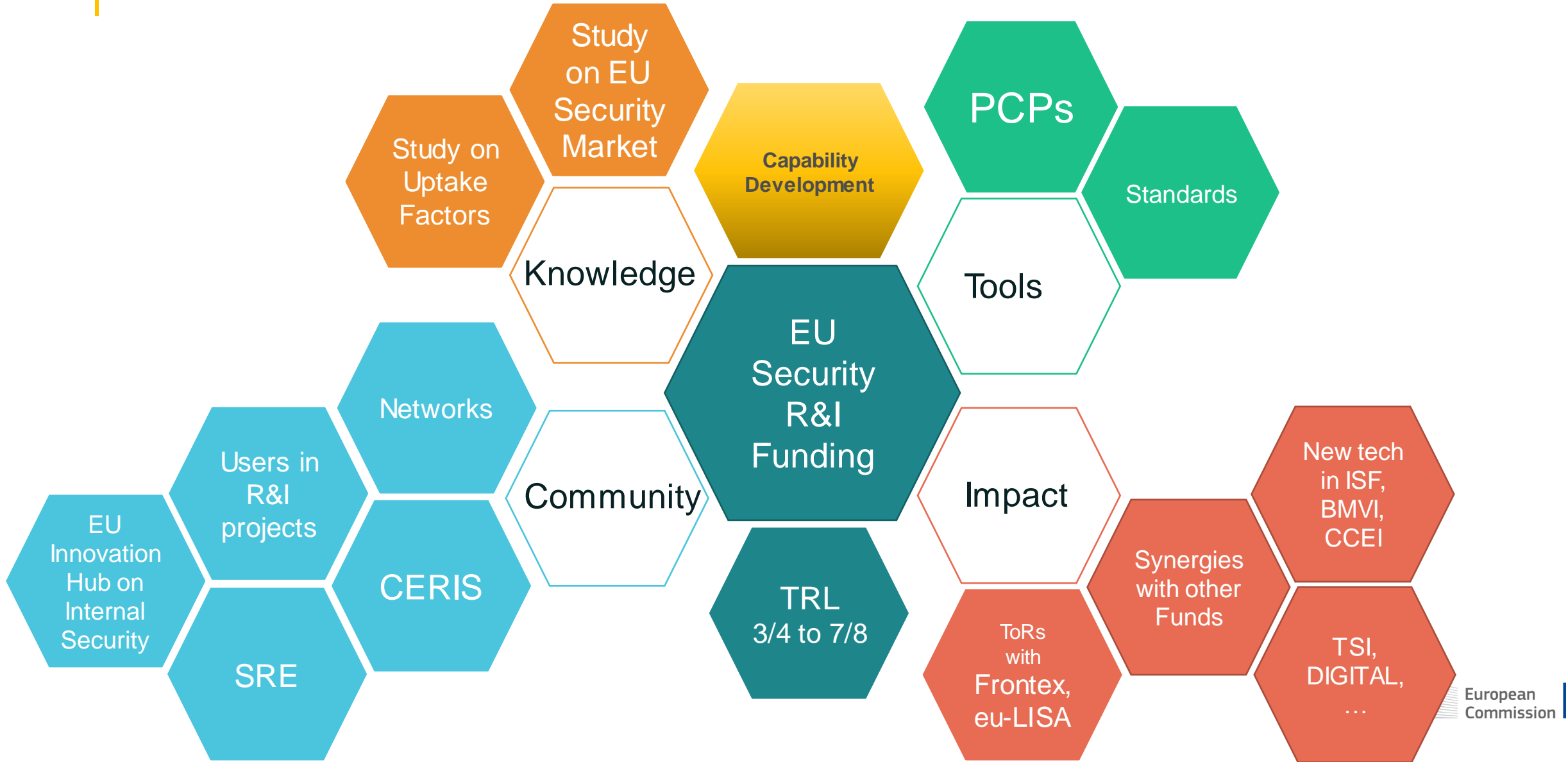
# HE CLUSTER 3: Civil Security for Society

- A work programme structured in 6 destinations

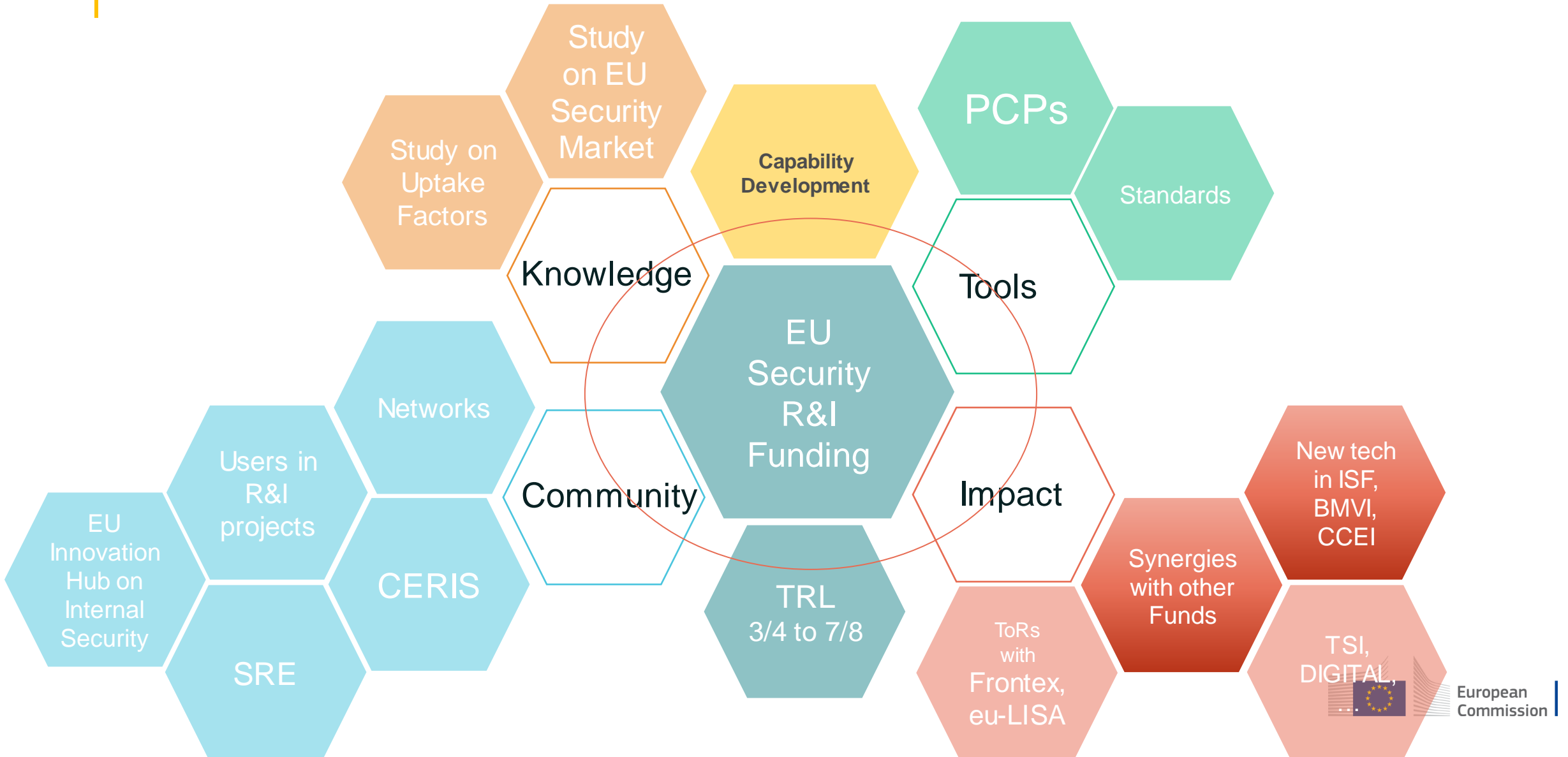


*Capability-based approach*  
*End-User oriented*  
*Societal dimension*  
*Synergies and market creation*

# Addressing civil security innovation in the EU



# Addressing civil security innovation in the EU



# Funding priorities:

# Work Programme 2023-24



# Cluster 3 Work Programme 2023-2024



Topics under calls 2023 (open 29 June / close 23 November 2023)

Topics under calls 2024 (open 27 June / close 20 November 2024)

FCT sub-areas	Topic	EUR (mil.)	EUR (mil.) per grant	Type of Action / TRL
Modern information analysis for fighting crime and terrorism	Processing of large, complex and unstructured datasets resulting from criminal investigations, while reconciling big data analysis and data protection	7		IA / 7-8
	Mitigating new threats and adapting investigation strategies in the era of Internet of Things	5		RIA / 5-6
Improved forensics and lawful evidence collection	A harmonized European forensics approach on drugs analysis	9	4.5	IA / 6-7
	Open topic	9	4.5	RIA / 5-7
	Lawful evidence collection in online child sexual abuse investigations, including undercover	3.7		RIA / 5-6
Enhanced prevention, detection and deterrence of societal issues related to various forms of crime	New methods and technologies in service of community policing and transferable best practices	4		RIA / 6-7
	Radicalisation and gender	3		RIA / 5-6
	Combating hate speech online and offline	8		IA / 6-7
	Open Topic	6	3	RIA / 5-6
Increased security of citizens against terrorism, including in public spaces	Open topic	4		RIA / 5-7
	CBRN-E detection capacities in small architecture	6		IA / 6-8
Organised crime prevented and combated	Crime as a service	4		RIA / 5-6
Citizens are protected against cybercrime	Enhancing tools and capabilities to fight advanced forms of cyber threats and cyber-dependent crimes	8	4	RIA / 5-6
	Tracing of cryptocurrencies transactions related to criminal purposes	6		IA / 6-7
<b>BM sub-areas</b>				
	Open topic	6	3	RIA / 4-6
Efficient border surveillance and maritime security	Capabilities for border surveillance and situational awareness	8	4	IA
	Identify, inspect, neutralise Unexploded Ordnance (UXO) at sea	5		RIA
	Interoperability for border and maritime surveillance and situational awareness	6	6	IA
Secured and facilitated crossing of external borders	Beyond the state-of-the-art "biometrics on the move" for border checks	6	3	RIA
	Advanced user-friendly, compatible, secure identity and travel document management	6		IA
	Integrated risk-based border control that mitigates public security risk, reduces false positives and strengthens privacy	5		IA
Better customs and supply chain security	Interoperability of systems and equipment at tactical level; between equipment and databases; and/or between databases of threats and materials	6		IA
	Detection and tracking of illegal and trafficked goods	6	3	RIA

# Cluster 3 Work Programme 2023-2024

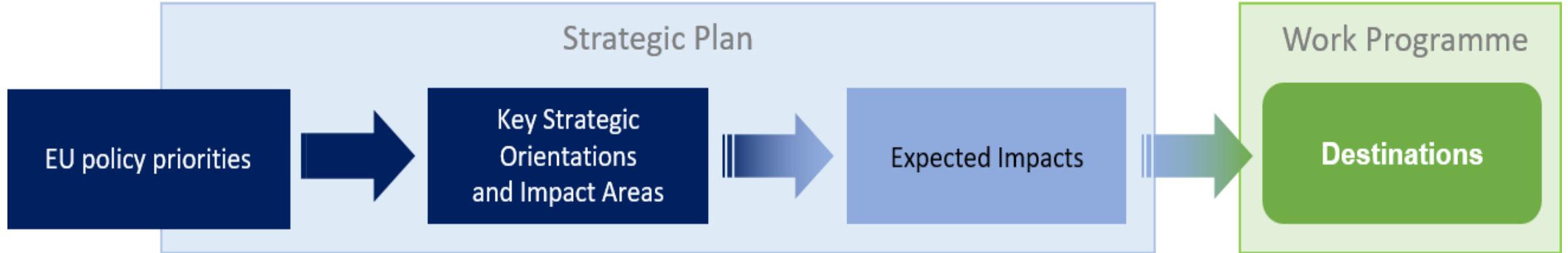


INFRA sub-areas	Topic	EUR (mil.)	EUR (mil.) per grant	Type of Action / TRL
Improved preparedness and response for large-scale disruptions of European infrastructures	Facilitating strategic cooperation to ensure the provision of essential services	5		IA / 6-8
	Supporting operators against cyber and non-cyber threats to reinforce the resilience of critical infrastructures	9.5	4.75	IA / 6-8
	Open topic	5		IA / 6-8
Resilient and secure urban areas and smart cities	Resilient and secure urban planning and new tools for EU territorial entities	6		IA / 6-8
	Advanced real-time data analysis used for infrastructure resilience	5		RIA / 5-6
<b>DRS sub-areas</b>				
Societal Resilience: Increased risk Awareness and preparedness of citizens	Improving social and societal preparedness for disaster response and health emergencies	8	4	RIA
Improved Disaster Risk Management and Governance	Design of crisis prevention and preparedness actions in case of digital breakdown (internet, electricity etc.)	4		RIA
	Prevention, detection, response and mitigation of chemical, biological and radiological threats to agricultural production, feed and food processing, distribution and consumption	8	4	RIA
	Open topic	6	3	RIA
Improved harmonisation and/or standardisation in the area of crisis management and CBRN-E	Operability and standardisation in response to biological toxin incidents	6		RIA
	Internationally coordinated networking of training centres for the validation and testing of CBRN-E tools and technologies in case of incidents, with consideration of human factors	4		IA
	Harmonised / Standard protocols for the implementation of alert and impact forecasting systems as well as transnational emergency management in the areas of high-impact weather / climatic and geological disasters	6	3	IA
Strengthened capacities of first and second responders	Robotics: Autonomous or semi-autonomous UGV systems to supplement skills for use in hazardous environments	8	4	RIA / 6-8
	Increased technology solutions, institutional coordination and decision-support systems for first responders of last-kilometer emergency service delivery	3.5		RIA
	Hi-tech capacities for crisis response and recovery after a natural-technological (NaTech) disaster	4		RIA / 5-7
	Cost-effective sustainable technologies and crisis management strategies for RN large-scale protection of population and infrastructures after a nuclear blast or nuclear facility incident	6		RIA / 6-8
<b>SSRI sub-area</b>				
Increased innovation uptake	Open grounds for pre-commercial procurement of innovative security technologies	2	1	CSA
	Accelerating uptake through open proposals for advanced SME innovation	4.5	1.5	IA / 6-8
	Demand-led innovation through public procurement	10.5	5.25	PCP / 6-8
	Accelerating uptake through open proposals for advanced SME innovation	6	1.5	IA / 6-7
<b>CS sub-areas</b>				
Systems Security and Security Lifetime Management, Secure Platforms, Digital Infrastructures	Secure Computing Continuum (IoT, Edge, Cloud, Dataspaces)	28	4-6	IA
	Approaches and tools for security in software and hardware development and assessment	37	4-6	IA
Privacy-preserving and identity technologies	Privacy-preserving and identity management technologies	15,7	2-4	IA
Cryptography	Post-quantum cryptography transition	23,4	4-6	RIA
Secured disruptive technologies	Security of robust AI systems	15	4-6	RIA

# Horizon Europe

# Strategic Plan 2025-2027

# Horizon Europe Strategic Plan



- key strategic orientations for R&I support, including a description of expected impacts, cross-cluster issues and intervention areas covered;
- identification of European Partnerships, and of missions;
- areas for international cooperation; (...)

# Main phases in strategic planning 2025-2027

Creating the analytical foundation for the plan;  
collecting data and consulting stakeholders

Until end of  
Q1 2023



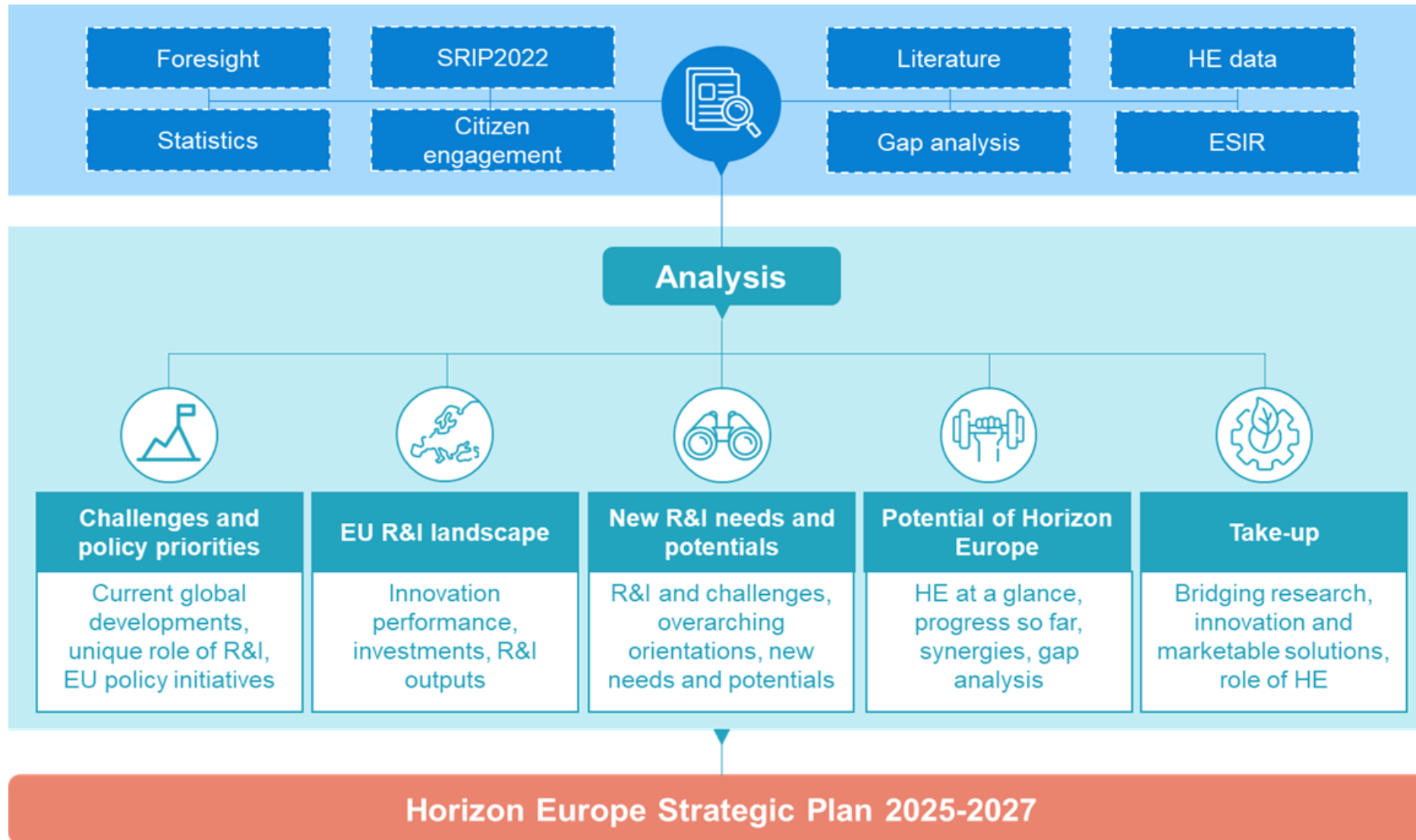
Drafting the Strategic Plan

Q2 2023 - Q4 2023

Adoption

Q1 2024

# HE Strategic Plan 2025-2027 Analysis



# Public Consultation

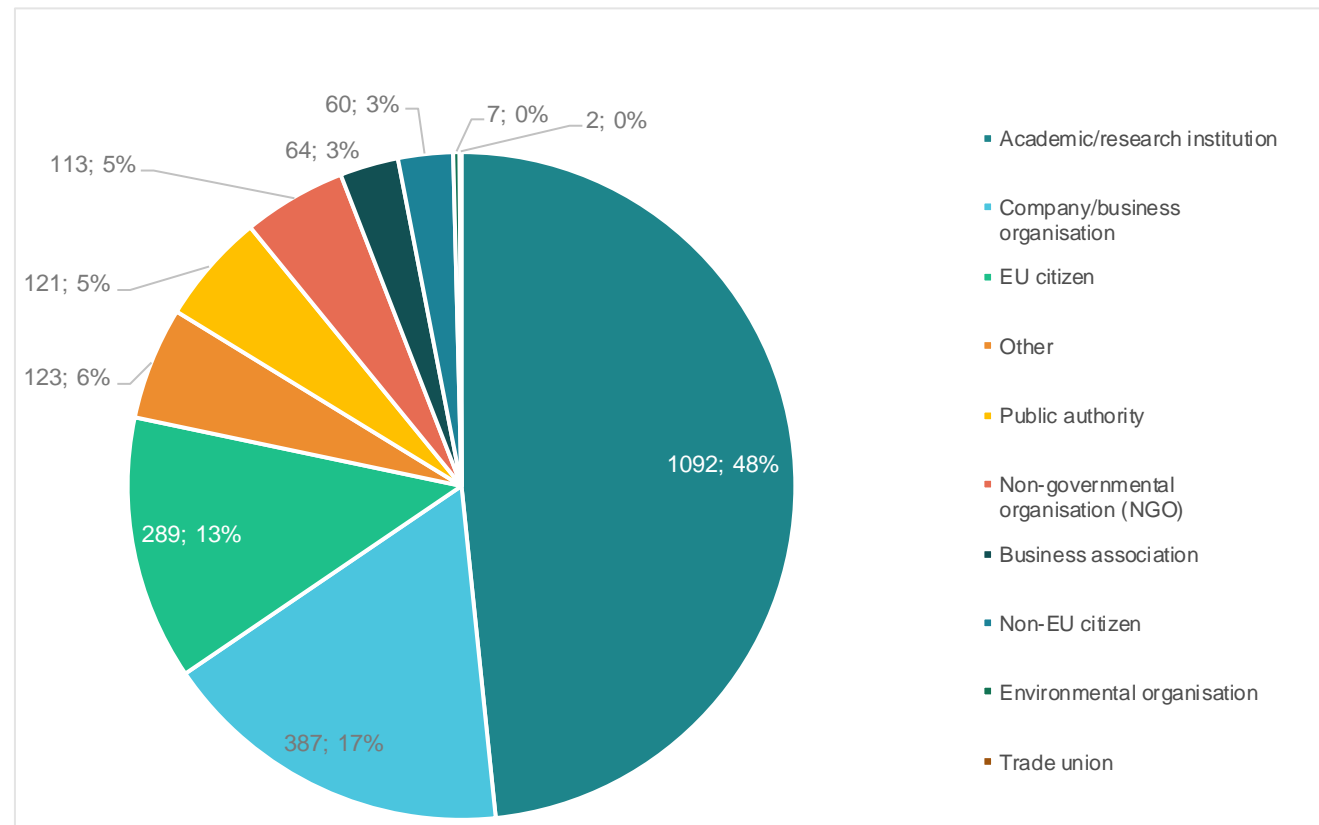
Responses, overall submissions:  
2773

Responses for the Strategic Plan:  
2258

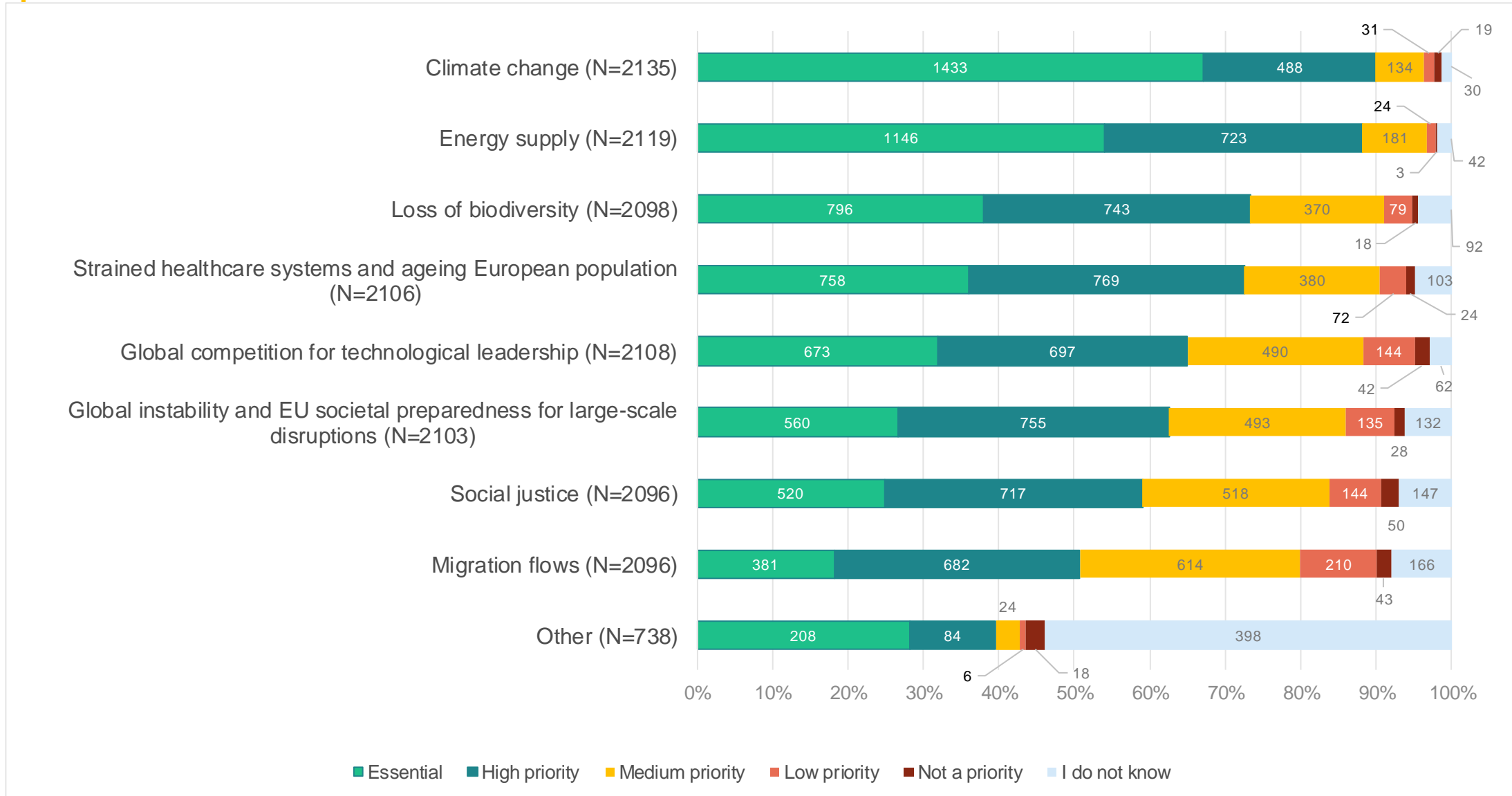
Position papers, overall submissions:  
265

Position papers for the Strategic Plan  
(filtered):  
108

## Types of respondents



# In the next ten years, which societal challenges should be the focus of EU investments for research and innovation activities?





# 2nd Strategic Plan 2025-2027, Cluster 3:

1<sup>st</sup> SP 2021-2024 as starting point:

- well-established areas: DRS, BM, FCT, INFRA, CS and SSRI;
- continue to involve end-users.

Adapting priorities to the evolving geo-political context:

- more frequent/more serious climate-related extreme events,
- war against Ukraine,
- technological developments (e.g. synthetic biology, AI, immersive technologies), (...)

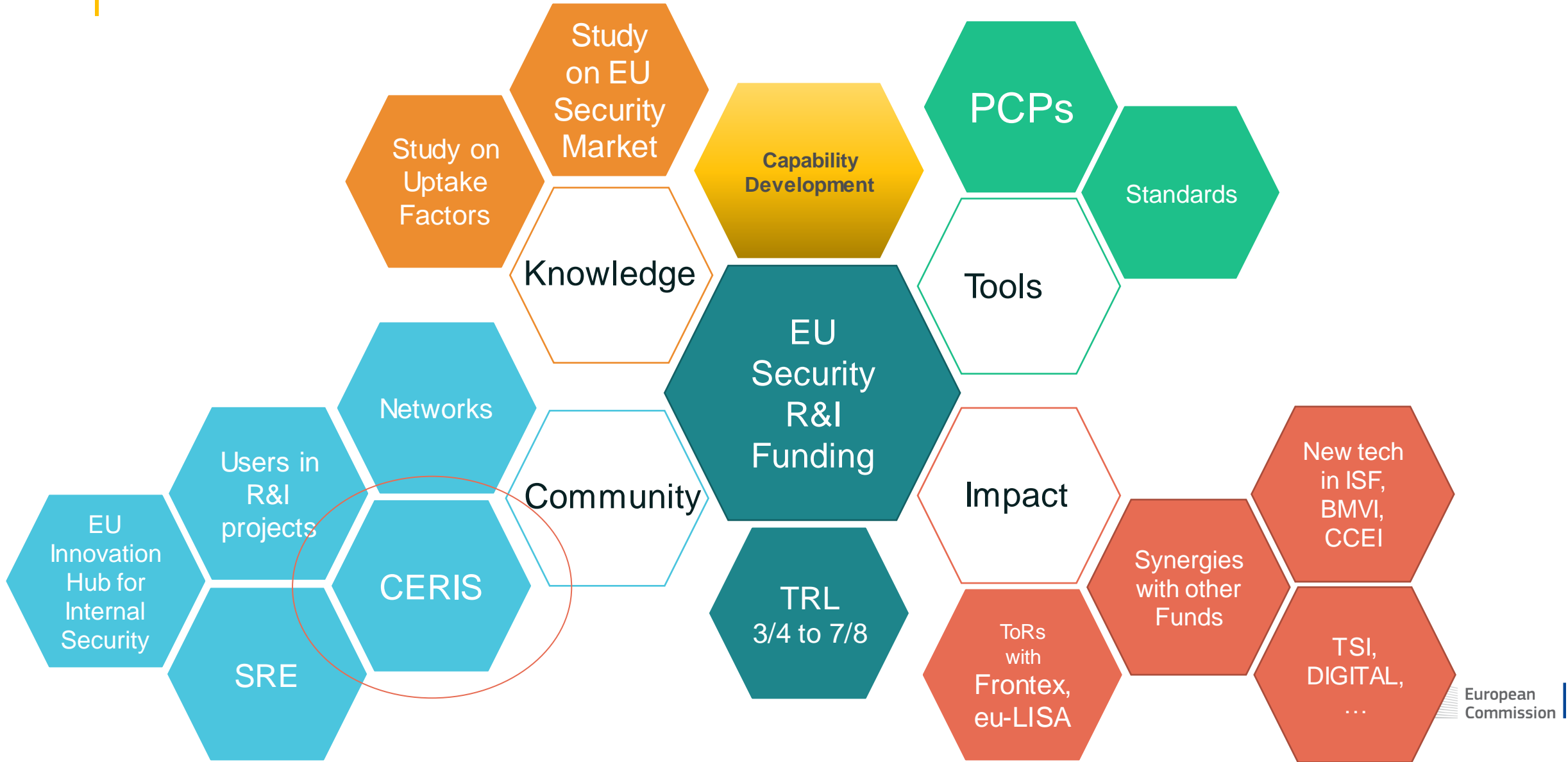
Other elements:

- EU open strategic autonomy and competitiveness of the EU civil security industrial base,
- developing foresight activities,
- involving European citizens as owners of their own security

EU R&I on civil security:

Networking, deployment, further  
funding

# Addressing civil security innovation in the EU



# Community for Research and Innovation for Security (CERIS)



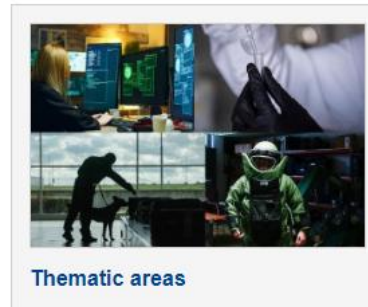
## CERIS - Community for European Research and Innovation for Security

Aiming to facilitate interactions within the security research community and users of research outputs, in 2014 the Commission established the **Community of Users for Safe, Secure and Resilient Societies (CoU)**, which gathered around 1,500 registered stakeholders (policy makers, end-users, academia, industry and civil society) and regularly held thematic events with the security research community. Now named the **Community for European Research and Innovation for Security (CERIS)**, this platform continues and expands the work of the CoU, in light of the forthcoming Horizon Europe developments between 2021-2027.

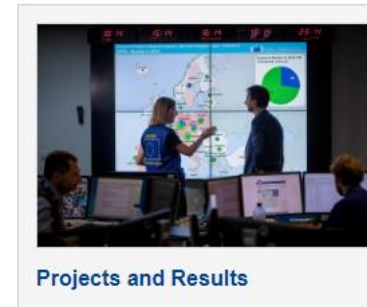
### The objectives of CERIS are to

- analyse identified **capability needs and gaps** in the corresponding areas
- identify **solutions** available to address the gaps
- translate capability gaps and potential solutions into **research needs**
- identify **funding opportunities and synergies** between different funding instruments
- identify **standardisation** research-related needs
- integrate the **views of citizens**

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Thematic areas



Projects and Results



EU security market study



News

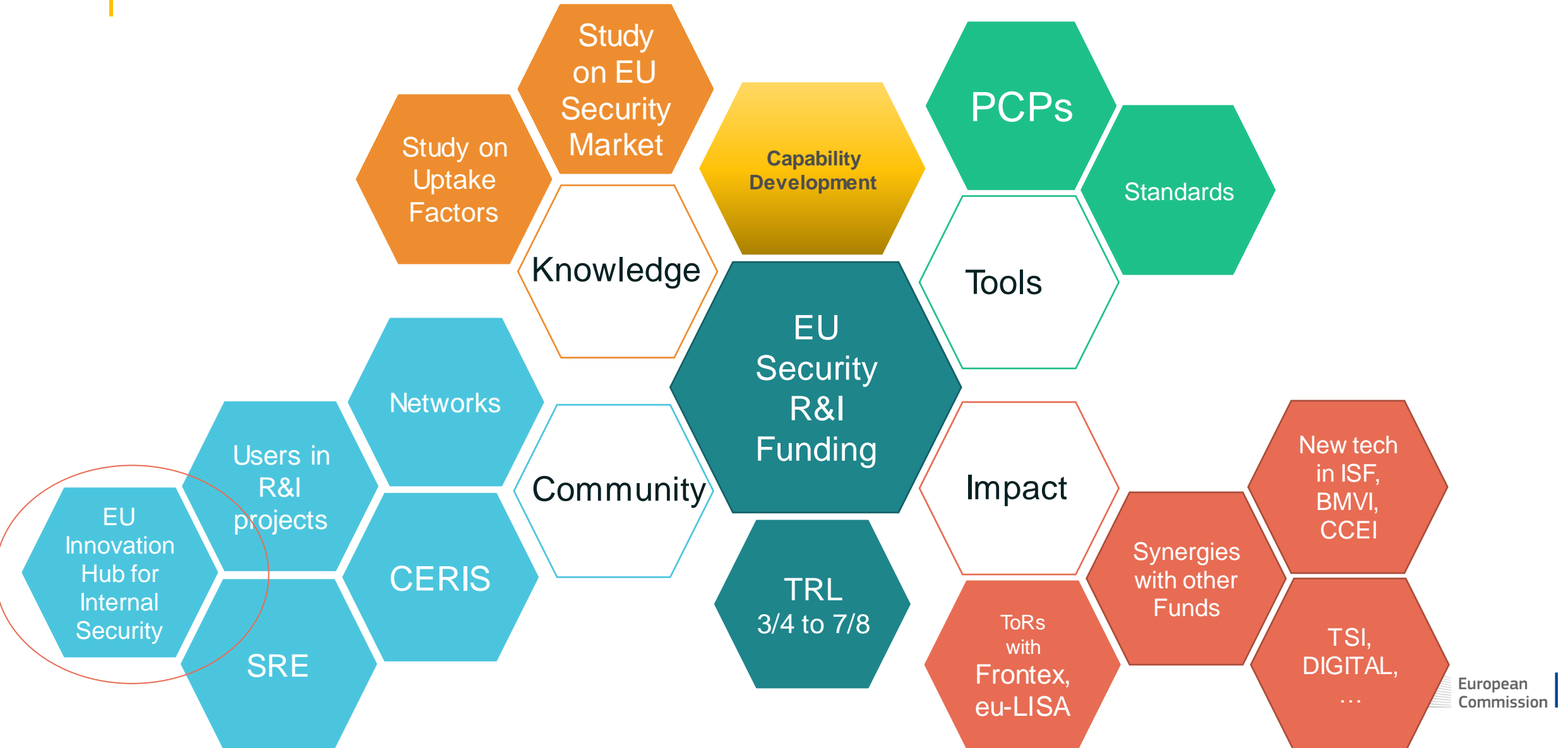


Events



About CERIS

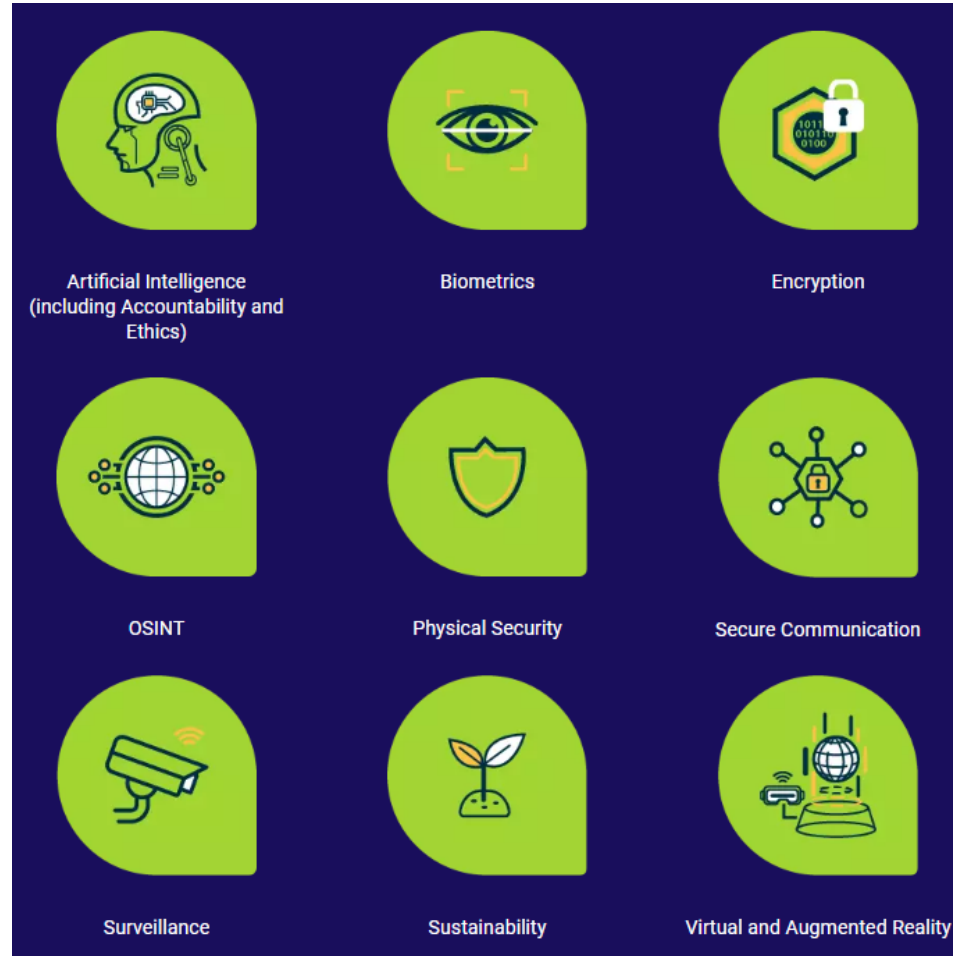
# Addressing civil security innovation in the EU



# EU Innovation Hub for Internal Security

## WHAT IS THE EU INNOVATION HUB FOR INTERNAL SECURITY?

The EU Innovation Hub coordinates all relevant actors in the field of innovation, to create synergies between existing structures and projects on internal security. It gathers representatives from EU agencies, institutions and Member States, and serves as a joint platform for:



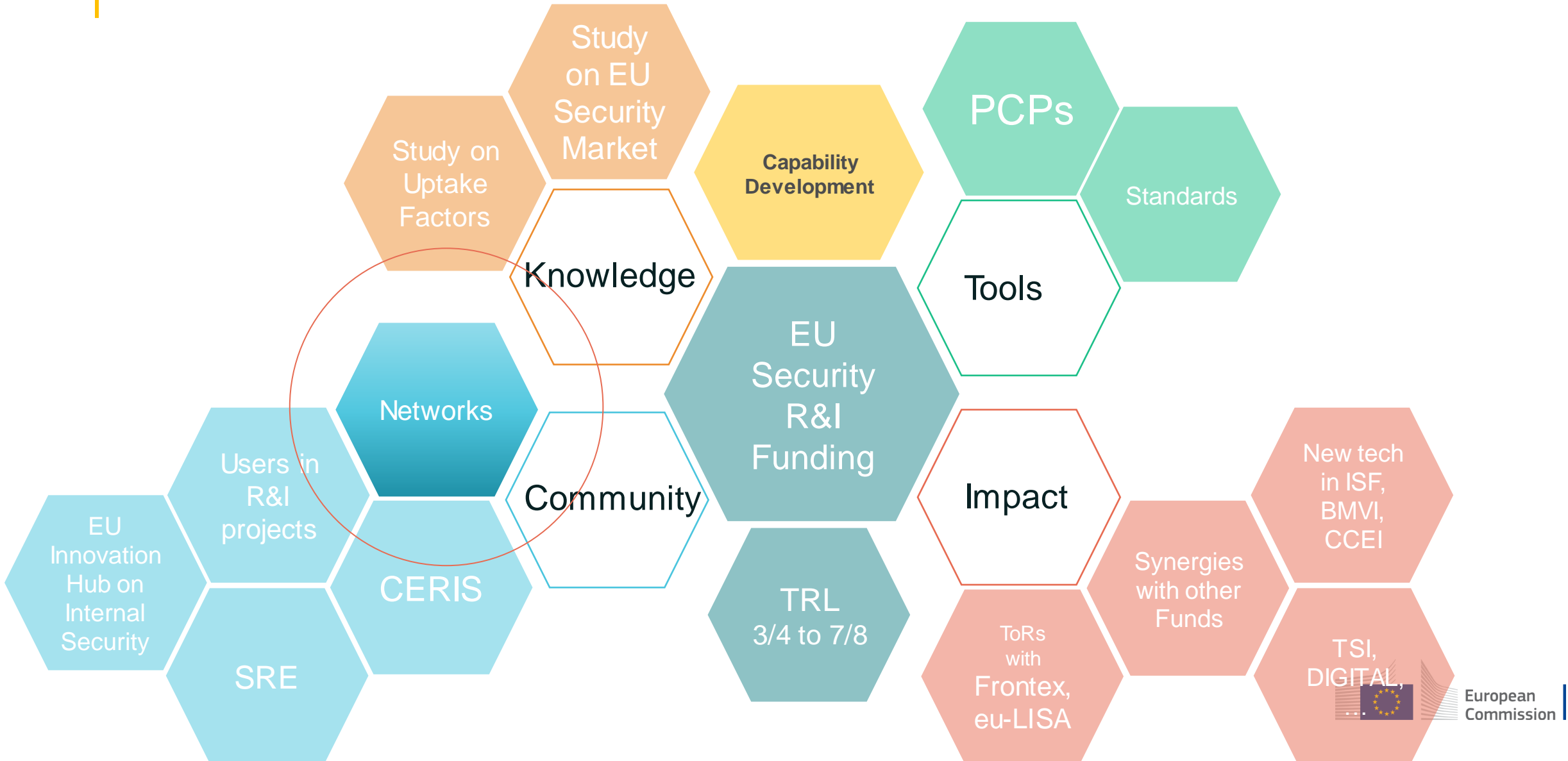
**EU INNOVATION HUB** FOR INTERNAL SECURITY

## Who are the members of the EU Innovation Hub?





# Addressing civil security innovation in the EU

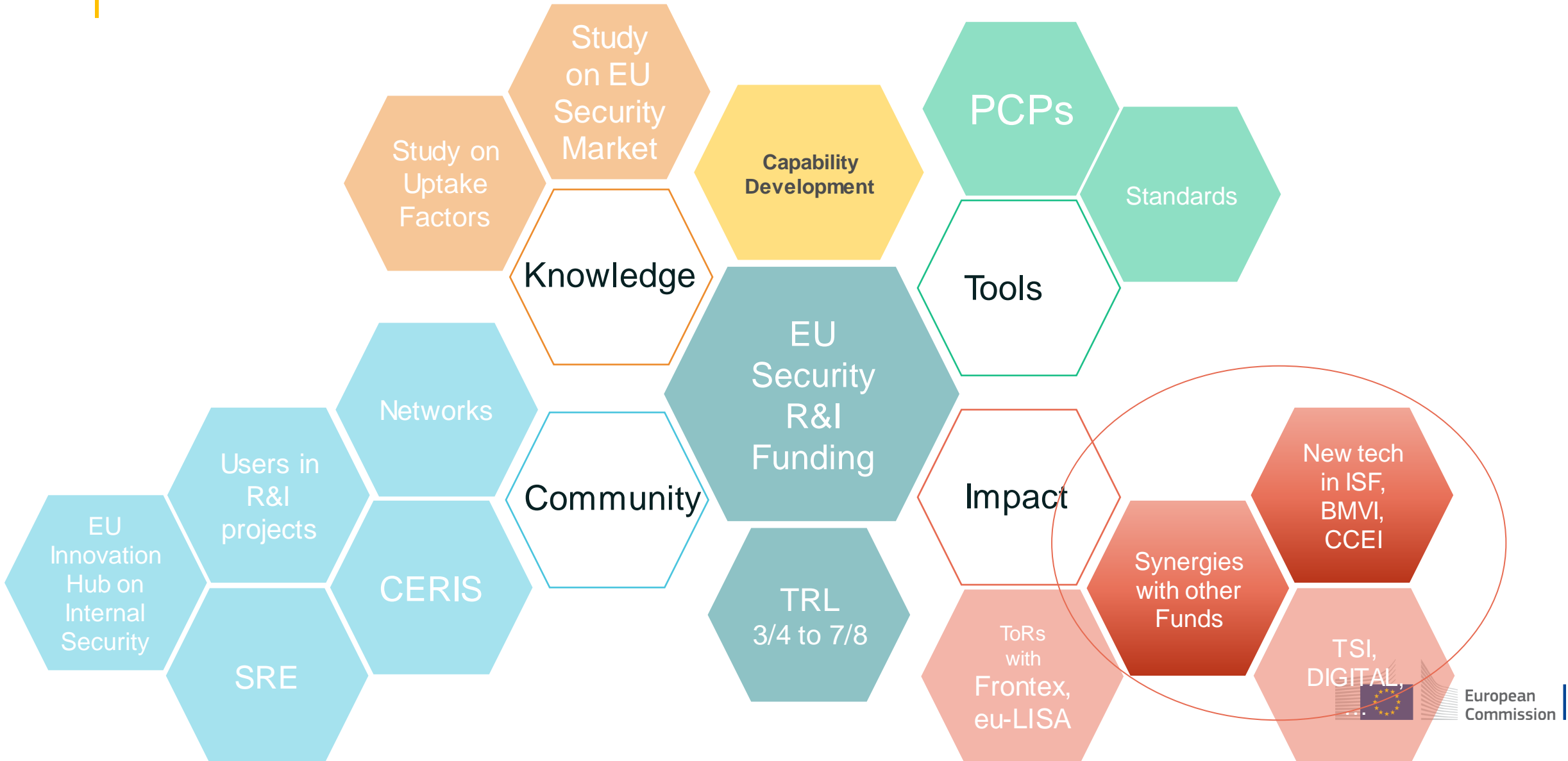


# Innovation Pan-European Networks of Practitioners and other actors in the field of security

	Acronym	Name	CORDIS	Project website
REGIONAL	<b>MEDEA</b>	Mediterranean practitioners' network	<a href="#">Link</a>	<a href="https://www.medeaproject.eu/">https://www.medeaproject.eu/</a>
	<b>ARCSAR</b>	Arctic and North Atlantic Security and Emergency Preparedness Network	<a href="#">Link</a>	<a href="https://arcsar.eu/">https://arcsar.eu/</a>
	<b>DARENET</b>	DAnube river region Resillience Exchange network	<a href="#">Link</a>	<a href="http://www.darenetproject.eu/">www.darenetproject.eu/</a>
THEMATIC	<b>Fire-IN</b>	Fire and rescue Innovation Network	<a href="#">Link</a>	<a href="https://fire-in.eu/">https://fire-in.eu/</a>
	<b>eNotice</b>	European Network of CBRNE Training Centres	<a href="#">Link</a>	<a href="https://www.h2020-enotice.eu/">https://www.h2020-enotice.eu/</a>
	<b>ILEANET</b>	Innovation by Law Enforcement Agencies networking	<a href="#">Link</a>	<a href="https://www.ileanet.eu/">https://www.ileanet.eu/</a>
	<b>I-LEAD</b>	Innovation - Law Enforcement Agencies Dialogue	<a href="#">Link</a>	<a href="https://i-lead.eu/">https://i-lead.eu/</a>
	<b>EXERTER</b>	Security of Explosives pan-European Specialists Network	<a href="#">Link</a>	<a href="http://www.exerter-h2020.eu">www.exerter-h2020.eu</a>
	<b>NO-FEAR</b>	Network Of practitioners For Emergency medicAl systems and cRitical care	<a href="#">Link</a>	<a href="http://no-fearproject.eu/">http://no-fearproject.eu/</a>
	<b>PEN-CP</b>	Pan-European Network of Customs Practitioners	<a href="#">Link</a>	<a href="https://www.pen-cp.net/">https://www.pen-cp.net/</a>
	<b>INCLUDING</b>	Innovative Cluster for Radiological and Nuclear Emergencies	<a href="#">Link</a>	<a href="https://including-cluster.eu/">https://including-cluster.eu/</a>
	<b>CYCLOPES</b>	Fighting Cybercrime – Law Enforcement Practitioners' Network	<a href="#">Link</a>	-
	CROSS-C	<b>EU-HYBNET</b>	Empowering a Pan-European Network to Counter Hybrid Threats	<a href="#">Link</a>
<b>iProcureNet</b>		European Procurer Networking for security research services	<a href="#">Link</a>	<a href="https://www.iprocurenet.eu/">https://www.iprocurenet.eu/</a>
<b>NOTIONES</b>		NetwOrk of inTelligence and securly practitiOners with iNdustry and acadEmia actorS	<a href="#">Link</a>	-



# Addressing civil security innovation in the EU



# Synergy with EU Home Affairs Funds

## Horizon Europe provisions (annex IV)

- "Synergies with the Internal Security Fund and the instrument for border management as part of the Integrated Border Management Fund will ensure that:
  - (a) ...
  - (b) the **Internal Security Fund** and the **Integrated Border Management Fund** support the deployment of innovative new technologies and solutions, **in particular those resulting from the Framework Programmes for research and innovation in the field of security research.**"

## Internal Security Fund provisions

- "Synergies will be sought in particular with ... the security research part of the **Horizon Europe programme**... **Synergies should be sought in particular on security of infrastructure and public spaces, cybersecurity and the prevention of radicalisation.** Effective coordination mechanisms are essential to maximise the effective achievement of policy objectives, exploit economies of scale and avoid overlaps between actions."
- Annex III eligible activities: "actions developing innovative methods or deploying new technologies with a potential for transferability to other Member States, **especially projects aiming at testing and validating the outcome of Union-funded security research projects**"

## Border Management and Visa Instrument provisions

- "actions **developing innovative methods or deploying new technologies with a potential for transferability to other Member States, especially projects aiming at testing and validating the outcome of Union-funded security research projects**"
- Annex III eligible activities: "actions developing innovative methods or deploying new technologies with a potential for transferability to other Member States, **in particular deploying the results of security research projects where such deployment has been identified by the European Border and Coast Guard Agency...**"
- Note Annex IV(5): "Measures deploying, transferring, testing and validating new methodology or technology, including pilot projects and follow-up measures to Union-funded security research projects" **qualify for higher Union co-financing!**

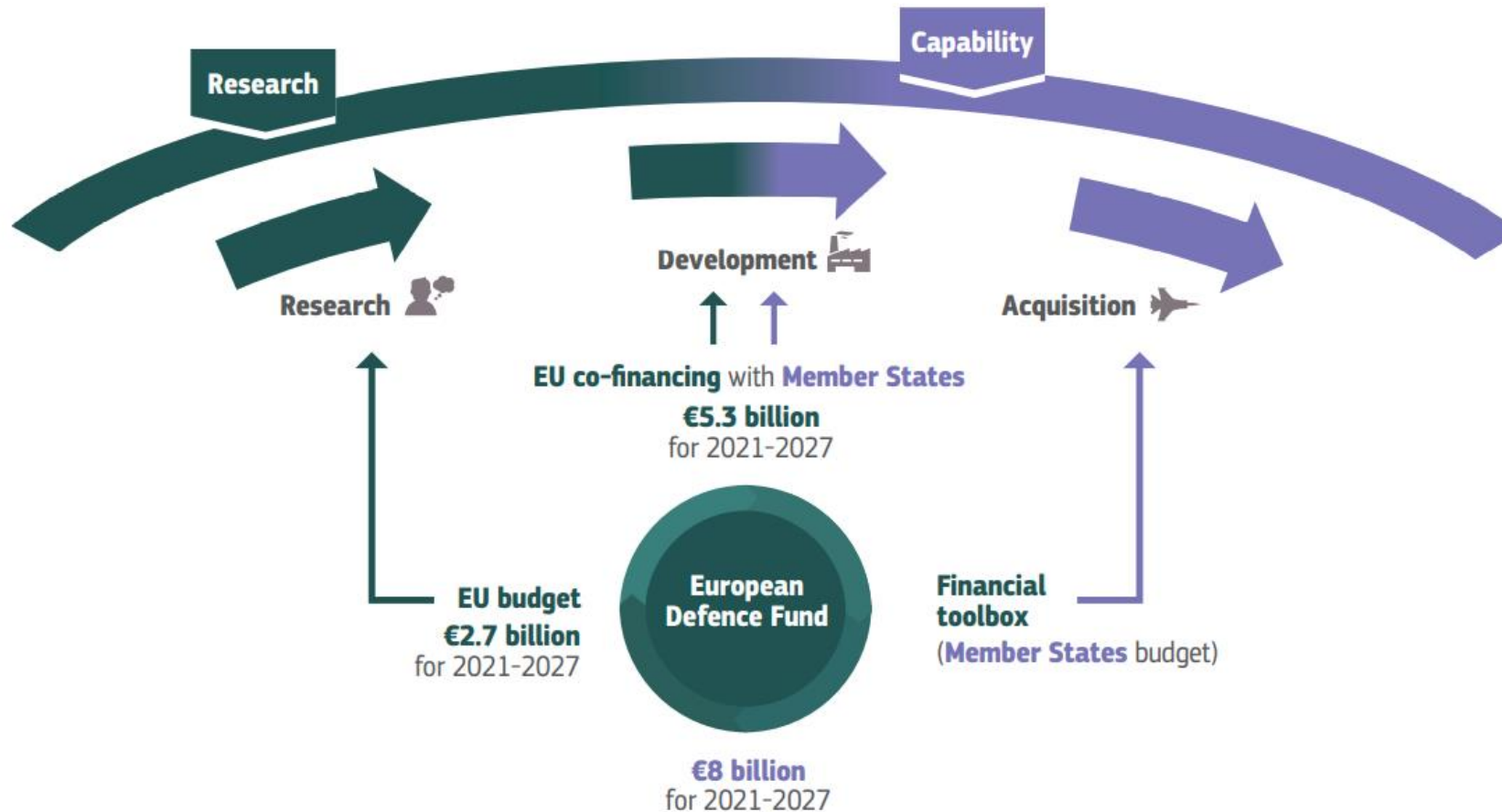
## Customs Control Equipment Instrument provisions

...support the purchase or upgrade of customs control equipment for testing new pieces of equipment or new functionalities ... before Member States start large-scale purchases of such new equipment. Testing in operational conditions should follow up in particular on the outcomes of research of customs control equipment in the framework of [Framework Programme]

**Note: similar provisions already between Horizon 2020 and ISF-P/ISF-B for 2014-2020 !!**

# The European Defence Fund

The European Defence Fund incentivises and supports collaborative, cross-border research and development in the area of defence. The Fund will increase the EU's technological edge and develop the capabilities that are key for the strategic autonomy and resilience of the Union and its Member States and the protection of its citizens



# SYNERGIES between civil, defence and space

COMMUNICATION Brussels, 22.02.2021 COM(2021) 70 - final **Action Plan on synergies** between civil, defence and space industries. In March 2020 the Industrial Strategy for Europe announced the [Action Plan](#) laying the ground to deliver concrete policy actions under three headline objectives:

- Enhancing complementarity between relevant EU programmes and instruments to increase efficiency of investments and effectiveness of results (the ‘**synergies**’);
- Promoting that EU funding for research and development, including on defence and space, has economic and technological dividends for EU citizens (the ‘**spin-offs**’) 4 ;
- Facilitating the use of civil industry research achievements and civil-driven innovation in European defence cooperation projects (the ‘**spin-ins**’).

# From the Action Plan

From the 11 actions that will promote synergies at EU level:

**Capability-driven approach (CDA)** where users define what capability they need and then they express their intention to procure products that, once developed, will offer the desired capability.

**Critical technologies and technology roadmaps** to achieve technological sovereignty and maintain competitiveness of the European industry.

**Standardisation** by the Commission, in close cooperation with other key stakeholders, to present a plan to promote the use of existing hybrid civil/defence standards and the development of new ones

**Promoting synergies and cross-fertilisation** via flagship projects which offer great potential at programme level, through technology and through innovation and SMEs

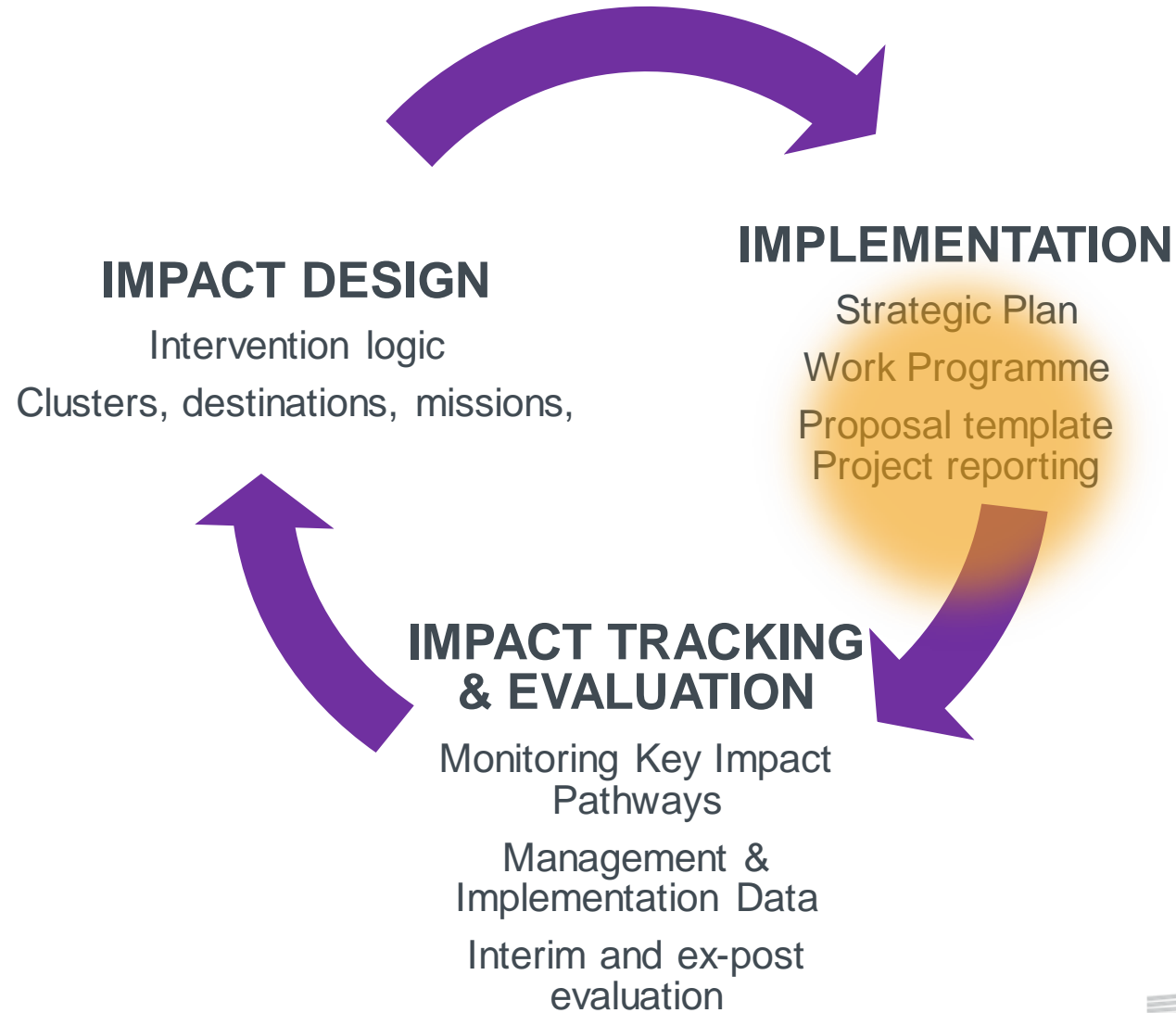
# Practical advice to proposers

## Key areas of attention

- Eligibility criteria (11% not eligible/admissible in 2022!)
- Impact pathways
- Artificial Intelligence
- Gender dimension in R&I, Gender equality plan
- Format changes / formatting aspects
- Exclusive focus on civil applications

# HORIZON EUROPE CYCLE

Impact-driven Framework Programme





# Link between policy priorities and project results

Strategic Planning and Programming  
(EC)



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



Application process (researchers)

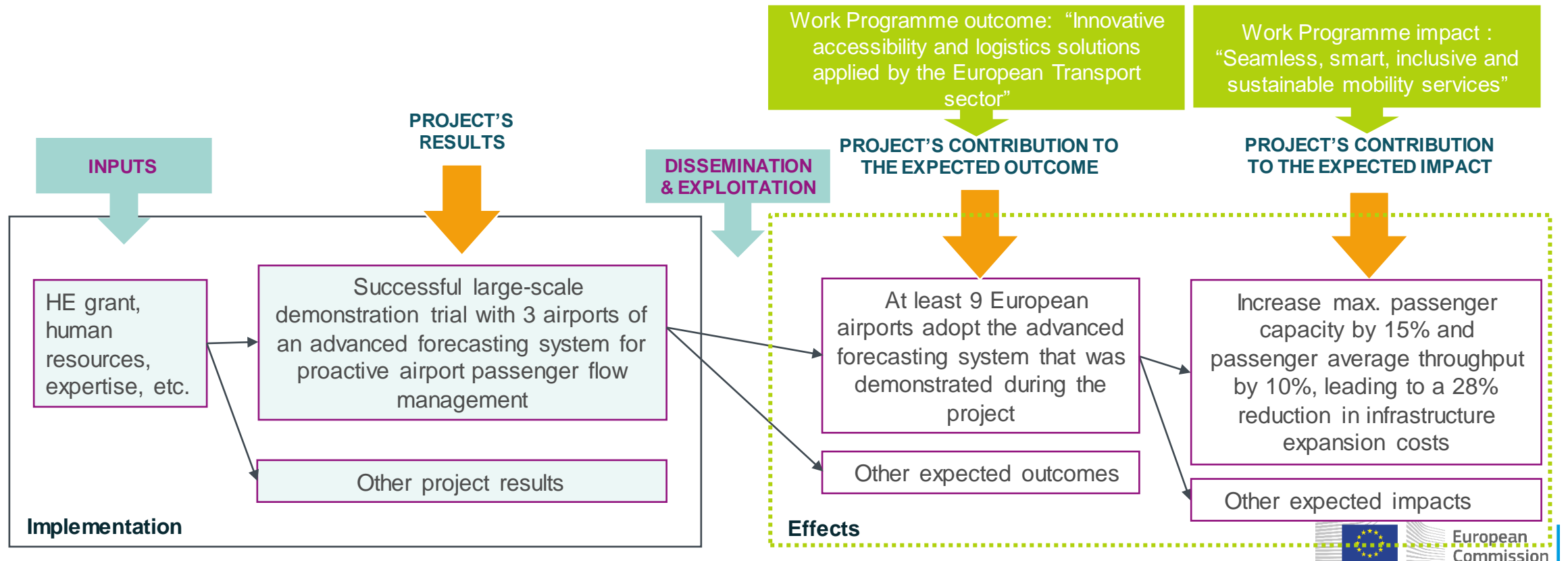




# Describing the impact of your proposal

**Project's pathway towards impact**

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





# Dual use and Exclusive focus on civil applications

- Participants will have to confirm, as part of the **declarations in proposal part A** that the proposal has an exclusive focus on civil applications. Activities intended to be used in military application or aiming to serve military purposes cannot be funded.
- In H2020 the assessment of the **'dual use'** and **'exclusive focus on civil applications'** was part of the ethics review of the proposal.
- **In Horizon Europe:**
  - the assessment on **'exclusive focus on civil applications'** aspects is carried out by the technical evaluators in the form of additional question to their individual assessment of proposals.
  - For **'dual use'**, we do not ask an additional question for experts in the evaluation. The declaration mentioned above will be sufficient with no further checks in evaluation or grant management.
- See also: [guidance-note-research-focusing-exclusively-on-civil-applications\\_he\\_en.pdf \(europa.eu\)](#)

The approach to follow for the question on **'exclusive focus on civil applications'** is the same as the process for activities not eligible for funding. **Opinion of experts** indicating if removing the activities that do not have an exclusive focus on civil applications would lead to lower evaluation scores.

# More Information and resources



[EU Innovation and Industry for Security](#)



[Community for European Research and Innovation for Security \(CERIS\)](#)



[Annual Security Research Event](#)



[National Contact points for EU security research](#)



[@EUHomeAffairs](#)

[#EUSecurityResearch](#) [#SecureSocieties](#)



[EUHomeAffairs](#)



[Enhancing security through R&I CSWD\(2021\)422](#)



[Frontex on EU research](#)



[Eu-LISA on EU research](#)



[EU Innovation Hub for Internal Security](#)



[Horizon Europe Cluster 3 “Civil Security for Society” \(2023-2024 Work Programme\)](#)



[EU Funding & Tenders Portal](#)

# Thank you



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# Annex

# Additional eligibility conditions 1/2

The participation of practitioners (or other categories of participants) is a mandatory criterion in many **FCT, DRS, BM, INFRA, SSRI** topics.

Pay attention – where applicable – to the detailed footnotes:

*“In the context of this Destination, ‘Police Authorities’ means public authorities explicitly designated by national law, or other entities legally mandated by the competent national authority, for the **prevention, detection and/or investigation of terrorist offences or other criminal offences**, specifically excluding police academies, forensic institutes, training facilities as well as border and customs authorities.”*

# Additional eligibility conditions 2/2

## INFORMATION ABOUT SECURITY PRACTITIONERS

*(To be filled in for the consortium and uploaded as part of the application for the topics where this is required in the Work Programme. Mention only the participants with practitioner status.)*

INFORMATION ABOUT SECURITY PRACTITIONERS			
Project name and acronym:		[project title] — [acronym]	
Participant number and short name <i>(<u>same</u> as on Submission System screens)</i>	Category of practitioner <i>(<u>police</u> authority, first-responder, fire-brigade, etc.)</i>	Department/ service/ units that will contribute	In which role(s) will the participant contribute to the action? How does this serve the aim of the eligibility condition as outlined in topic conditions?
[number] — [short name]			
[number] — [short name]			
[number] — [short name]			





# Artificial intelligence

- Experts must answer an additional question as part of their individual evaluations on whether the activities proposed involve the **use and/or development of AI-based systems and/or techniques**.
- The aim is to bring to **experts' attention** that they must **assess the technical robustness** of the proposed AI-system as part of the excellence criterion (if applicable).
- Also the answer to this question aims at ensuring a **proper follow-up** of any aspects related to **Artificial Intelligence** in projects funded under Horizon Europe.

Under Horizon Europe, the **technical robustness\*** of the proposed AI based systems is evaluated under the **excellence** criterion.

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



# Gender dimension in R&I content

## Gender Dimension

Addressing the gender dimension in research and innovation entails taking into account sex and gender in the whole research & innovation process.

The **integration of the gender dimension** into R&I content is **mandatory**, unless it is explicitly mentioned in the topic description

## Why is gender dimension important?

- Why do we observe differences between women and men in infection levels and mortality rates in the COVID-19 pandemic?
- Does it make sense to study cardiovascular diseases only on male animals and on men, or osteoporosis only on women?
- Does it make sense to design car safety equipment only on the basis of male body standards?
- Is it responsible to develop AI products that spread gender and racial biases due to a lack of diversity in the data used in training AI applications?
- Is it normal that household travel surveys, and thus mobility analysis and transport planning, underrate trips performed as part of caring work?
- Did you know that pheromones given off by men experimenters, but not women, induce a stress response in laboratory mice sufficient to trigger pain relief?
- And did you know that climate change is affecting sex determination in a number of marine species and that certain populations are now at risk of extinction?

# Gender Equality Plan 1-2

For calls with deadlines in 2022 and onwards, having a Gender Equality Plan (GEP) will be an eligibility criterion for all public bodies, higher education institutions and research organisations from EU Member States and associated countries wishing to participate in Horizon Europe.

## Mandatory requirements for a GEP

1. Be a public document
2. Have dedicated resources
3. Include arrangements for data collection and monitoring
4. Be supported by training and capacity-building

# Gender Equality Plan 2-2

Five thematic areas are recommended for content.

1. Work-life balance and organisational culture
2. Gender balance in leadership and decision-making
3. Gender equality in recruitment and career progression
4. Integration of the gender dimension into research and teaching content
5. Measures against gender-based violence including sexual harassment

The Commission's gender equality strategy: [https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/democracy-and-rights/gender-equality-research-and-innovation\\_en](https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/democracy-and-rights/gender-equality-research-and-innovation_en)

Horizon Europe guidance on gender equality plans: <https://op.europa.eu/en/publication-detail/-/publication/ffc06c3-200a-11ec-bd8e-01aa75ed71a1>

[The Gender Equality Plan eligibility criterion in Horizon Europe: Who is concerned? How to comply with it? \(23 June 2022\) \(europa.eu\)](#)

Frequently Asked Questions:

[https://ec.europa.eu/info/sites/default/files/research\\_and\\_innovation/strategy\\_on\\_research\\_and\\_innovation/ec\\_rtd\\_gep-faqs.pdf](https://ec.europa.eu/info/sites/default/files/research_and_innovation/strategy_on_research_and_innovation/ec_rtd_gep-faqs.pdf)

# Page limit

- **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**
- The page limit will be applied automatically. **At the end of the document, you can see the structure of the actual proposal that you need to submit, please remove all instruction pages that are watermarked**
- If you attempt to upload a proposal longer than the specified limit before the deadline, you will receive an automatic warning and will be advised to shorten and re-upload the proposal
- After the deadline, **excess pages** (in over-long proposals/applications) **will be automatically made invisible** and will not be taken into consideration by the experts. The proposal is a self-contained document. Experts will be instructed to ignore hyperlinks to information that is specifically designed to expand the proposal, thus circumventing the page limit
- Please, **do not consider the page limit as a target!** It is in your interest to keep your text as concise as possible, since experts rarely view unnecessarily long proposals in a positive light

# Formatting conditions

The following formatting conditions apply:

- The **reference font** for the body text of proposals is **Times New Roman** (Windows platforms), Times/Times New Roman (Apple platforms) or Nimbus Roman No. 9 L (Linux distributions).
- The use of a different font for the body text is not advised and is subject to the cumulative conditions that **the font is legible and that its use does not significantly shorten the representation** of the proposal in number of pages compared to using the reference font (for example with a view to bypass the page limit).
- **The minimum font size allowed is 11 points.** Standard character spacing and a minimum of single line spacing is to be used. This applies to the body text, including text in tables.
- Text elements other than the body text, such as **headers, foot/end notes, captions, formula's**, may deviate, but **must be legible**.
- The page size is A4, and **all margins** (top, bottom, left, right) **should be at least 15 mm** (not including any footers or headers).

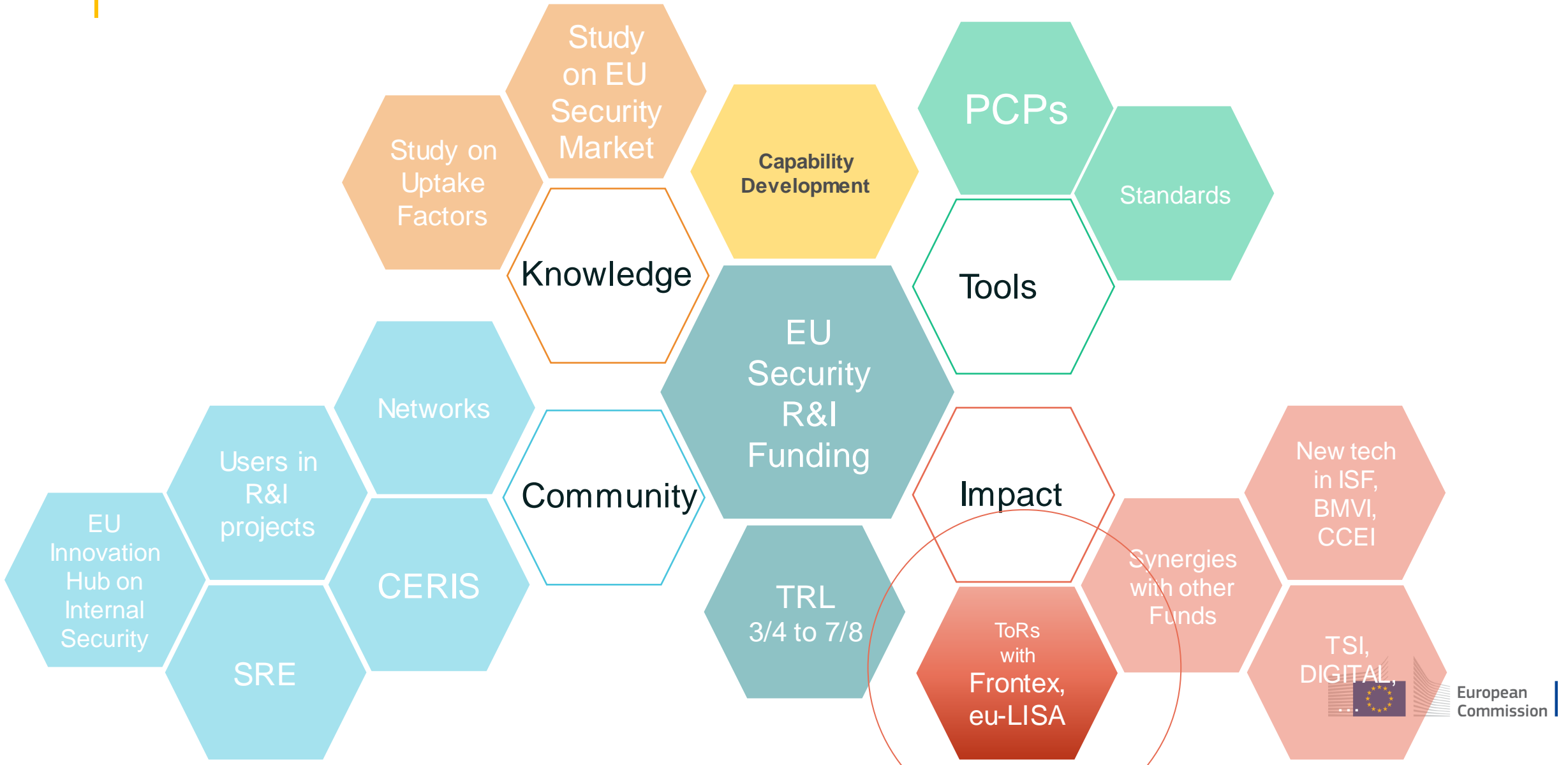
# Final Tips!

- ✓ Check carefully **[incl. additional!]** admissibility and eligibility conditions
- ✓ Read carefully the topic description ("scope", "expected impact") – will your proposal match the expectations?
- ✓ Use the proposal templates and follow the instructions
- ✓ Address thoroughly the selection and award criteria
- ✓ Respect the page limits
- ✓ Clearly describe what you will achieve and how you will do it
- ✓ Choose your consortium based on your project needs (e.g. no duplications or partners without clear responsibilities,...)
- ✓ Describe carefully the impact (expected, societal, economic [IA: business analysis, market potential,..])
- ✓ Submit (a first version) well before the final deadline

# EU R&I on civil security: overview



# Addressing civil security innovation in the EU



# Collaboration with Frontex



European Commission > Migration and Home Affairs > European research & innovation to support secure

## Migration and Home Affairs

Home | What's New | Financing | Who We Are | What We Do | E-Library

News | Public consultations | Work in progress | EU law monitoring

European research & innovation to support secure and efficient EU external borders

Thursday, 6 February, 2020



# Collaboration with eu-LISA



Migration and Home Affairs >

Security and research: the Commission improves collaboration with Eu-LISA for secure and efficient IT systems in the area of freedom, security and justice

## Migration and Home Affairs

Home | What's New | Financing | Who We Are | What We Do | E-Library

News | Public consultations | Work in progress | EU law monitoring

Security and research: the Commission improves collaboration with Eu-LISA for secure and efficient IT systems in the area of freedom, security and justice

Tuesday, 16 March, 2021

European Commission

eu-LISA

### Signing of the Terms of Reference for improved collaboration on research and innovation relevant to IT systems in the area of freedom, security and justice

16 March 2021

*Ensuring that research funded by the EU provides state of the art technologies, solutions and knowledge to eu-LISA and, through them, to Member States.*

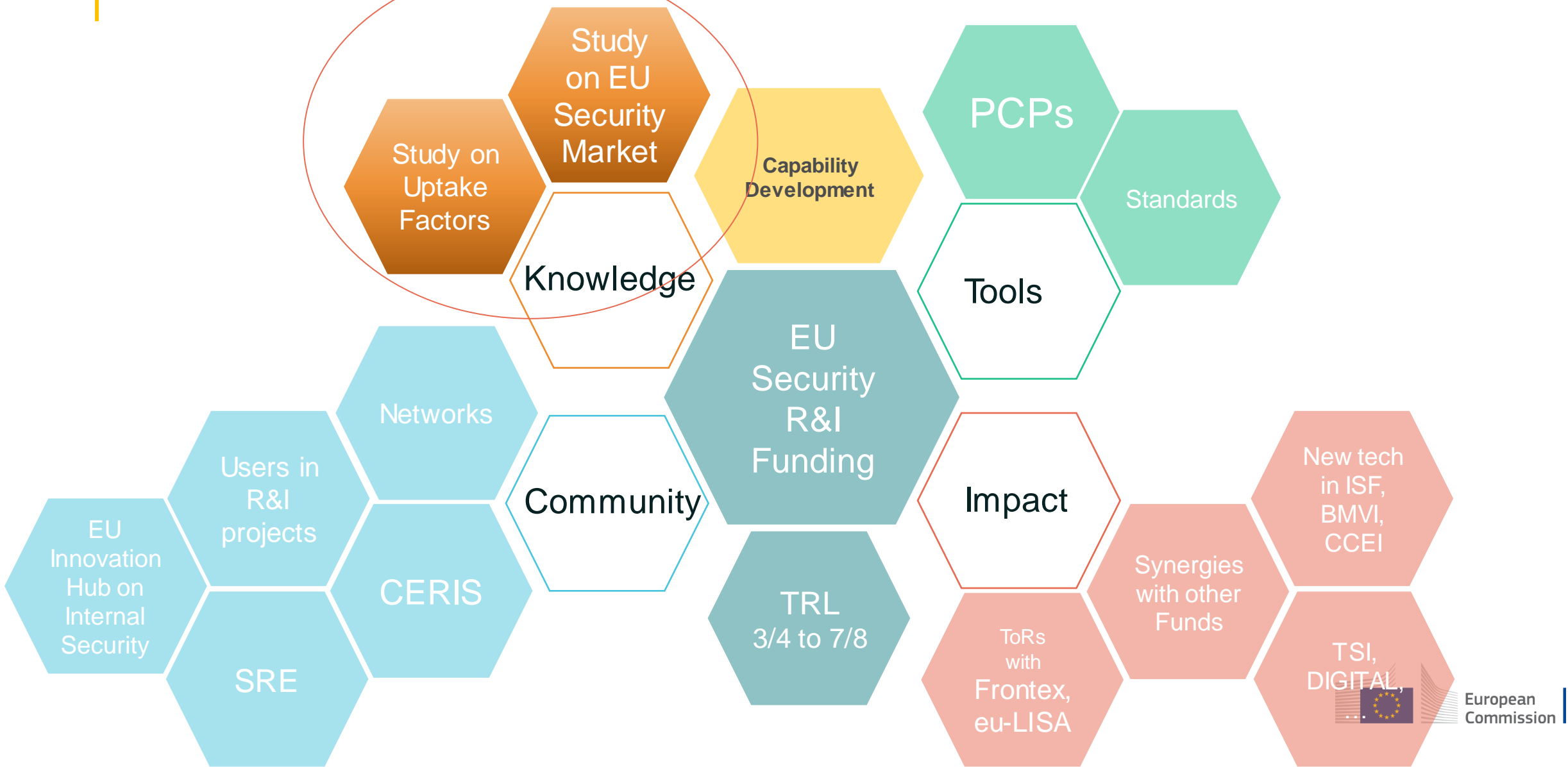
**Monique Pariat**  
Director-General for Migration and Home Affairs  
DG-HOME, European Commission

**Krum Garkov**  
Executive Director  
eu-LISA

#StrongerTogether for #ASaferEurope



# Addressing civil security innovation in the EU





# EU Security Market Study



## EU security market study

The security market in the EU remains largely under-studied and fragmented across geographies, security areas and industries. The objective of the EU Security Market study is to provide a sound overview of the situation of the civil security market in the EU and generate the necessary data allowing for a better analysis of its dynamics, including trends regarding its evolution.

To do so, the study is structured around several interrelated activities: first, the study characterises the EU Security Market by developing a market segmentation rationale, a mapping and catalogue stakeholders and a taxonomy of security products and services. Next, it provides a comprehensive view on the dynamics of the market in terms of value, supply and demand, competition and trends now and in the future. Finally, it brings forward conclusions and recommendations for the security market in terms of policymaking, technology, investment and data. An important consideration for this study is the alignment between security research, the industry itself and the EU priorities in security policy.

The [market study](#) uses the four main security research areas of the European Commission as a reference to structure the security landscape: (1) disaster risk management; (2) resilience of critical infrastructure; (3) border management and (4) the fight against crime and terrorism. These four security areas are an integral part of the market segmentation rationale, and are therefore a structuring element for all outputs of the study.



EU civil security stakeholder catalogue



EU civil security taxonomy and taxonomy explorer



EU civil security market segmentation model



EU civil security market future-looking scenarios

# Synergies with other programmes

# Synergies with the ISF and IBMF

- [Internal Security Fund](#) (ISF) 2021-2027 – 1,93 billion euros
- [Integrated Border Management Fund](#) (IBMF) 2021-2027
  - [Border Management and Visa Instrument](#) (BMVI) – 6,38 billion euros
    - About 60%: national Member States programmes, programmed and implemented by national Managing Authorities
    - About 40%: Thematic Facility, programmed and implemented by the Commission, + mid-term review by Member States
  - [Customs Control Equipment Instrument](#) (CCEI) - 1,00 billion
    - Calls for funding eligible for national customs authorities

# Synergies Horizon Europe Cluster 3 with ISF and BMVI - Legal bases

## Horizon Europe provisions

- "Synergies with the ISF and the instrument for BM as part of the IBMF will ensure that:
  - R&I needs in the areas of security and integrated border management are identified and established during the Programme's strategic research and innovation planning process;
  - ISF and IBMF support the deployment of innovative new technologies and solutions, in particular those resulting from the Framework Programmes for research and innovation in the field of security research."

## Internal Security Fund provisions

- "Synergies will be sought in particular with ... **the security research part of the Horizon Europe programme**... on security of infrastructure and public spaces, cybersecurity and the prevention of radicalisation. Effective coordination mechanisms are essential to maximise the effective achievement of policy objectives, exploit economies of scale and avoid overlaps between actions."
- "actions developing innovative methods or deploying new technologies with a potential for transferability to other Member States, **especially projects aiming at testing and validating the outcome of Union-funded security research projects**"

## Border Management and Visa Instrument provisions

- "actions developing innovative methods or deploying new technologies with a potential for transferability to other Member States, especially projects aiming at **testing and validating** the outcome of Union-funded security research projects
- "actions developing innovative methods or deploying new technologies with a potential for transferability to other Member States, in particular **deploying the results of security research projects** where such deployment has been identified by the European Border and Coast Guard Agency, acting under Article 66 of Regulation [EBCG], as contributing to the development of operational capabilities of the European Border and Coast Guard"

## Customs Control Equipment Instrument provisions

- **Testing in operational conditions** should follow up in particular on the outcomes of research of **customs** control equipment in the framework of Regulation [Horizon Europe]



# Scopes

## Internal Security Fund

- Information Systems
- Terrorism
- Cybercrime
- Organised Crime
- Anti-Corruption
- Migrant Smuggling
- Firearms
- Prevention of radicalisation
- Protection of critical infrastructure
- CBRN-E
- Combating terrorist financing
- Protection of public spaces
- Law Enforcement Cooperation
- Prevention of child sexual abuse
- Fraud and counterfeiting of non-cash means of payment
- Trafficking in human beings
- Drugs
- Training
- ...

## Integrated Border Management Fund

### Border Management and Visa Instrument

- Strong and effective European integrated border management at external borders
- Safeguarding free movement of persons within Union's borders
- Facilitate legitimate border crossings
- Prevent and detect illegal immigration and cross-border crime
- Effectively manage migratory flows
- Border checks
- Border surveillance
- Situational awareness
- ...

### Custom Control Equipment Instrument

- Customs equipment at BCPs
- Equipment for customs laboratories
- Mobile customs laboratories
- Non-Intrusive inspection equipment
- Detection equipment
- Scanners
- Automated number plate detection systems
- Sniffer dogs
- Indication of hidden objects on humans
- Radiation detection and nuclide identification
- Sampling and field analysis of samples
- Handheld search
- ...

# A few other points

- Member States which participate in EU civil security R&I projects are expected to **programme and use ISF and IBMF to take up new technologies and innovation** coming from research, when research is successful and arrived to a high TRL.
- ISF and IBMF should be **exploited** through
  - Union Actions (programmed and managed by the Commission)
  - Specific Actions (programmed by the Commission but managed by Member States)
  - National programmes (programmed and managed by Member States)
- This needs a capability-based planning, **beyond the individual research project**, and **coordination at national level**.

# Strategic Plan 2025-27

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# HORIZON EUROPE

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## Horizon Europe Strategic Planning – the way to future R&I priorities



Montse Badia  
European Commission, DG Research and Innovation,  
Common Strategic Planning & Programming Service

# In this presentation

- **WHAT IS THE HORIZON EUROPE STRATEGIC PLAN?**
- **PROCESS OF DEVELOPING THE STRATEGIC PLAN 2025-2027 AND THE NEXT STEPS**
- **FROM STRATEGIC PLAN TO WORK PROGRAMME**

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# What is the Horizon Europe Strategic Plan?



# Six Commission priorities for 2019-24

## **A European Green Deal**

Europe aims to be the first climate-neutral continent by becoming a modern, resource-efficient economy.

## **A Europe fit for the digital age**

The EU's digital strategy will empower people with a new generation of technologies.

## **An economy that works for people**

The EU must create a more attractive investment environment, and growth that creates quality jobs, especially for young people and small businesses.

## **A stronger Europe in the world**

The EU will strengthen its voice in the world by championing multilateralism and a rules-based global order.

## **Promoting our European way of life**

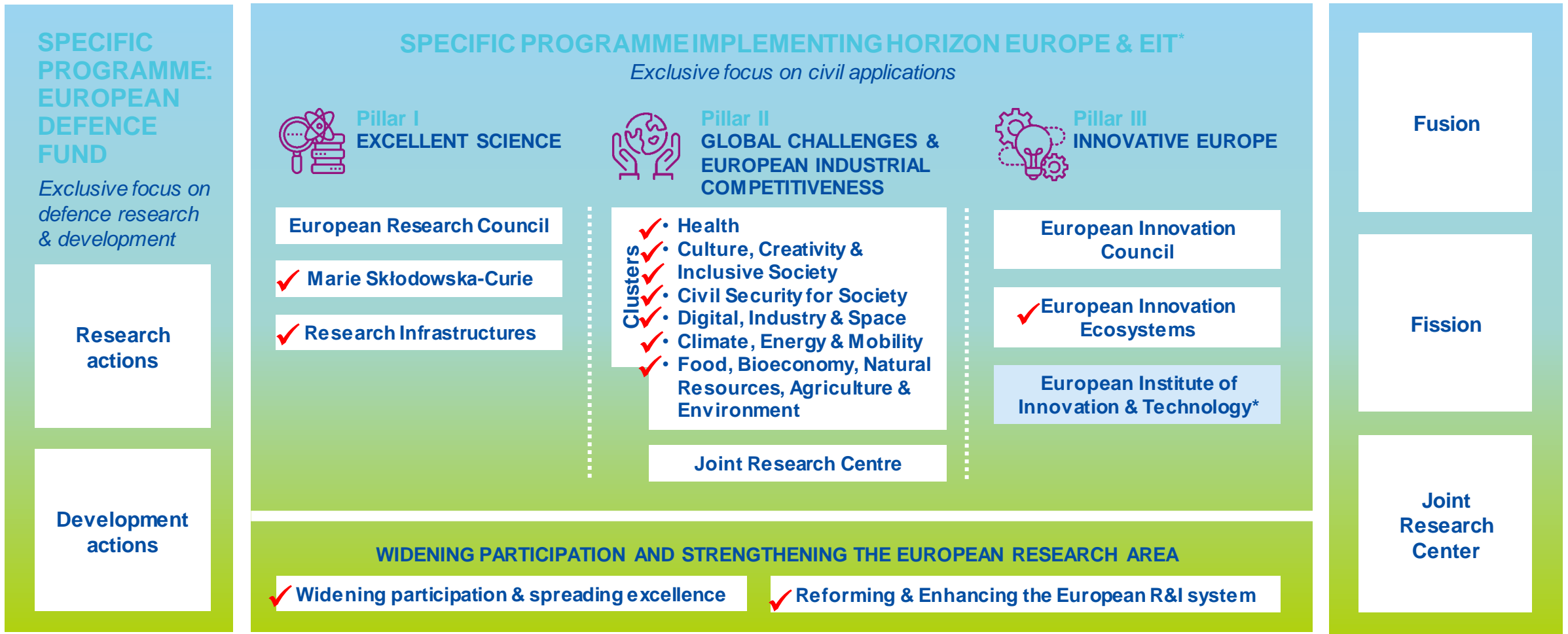
Europe must protect the rule of law if it is to stand up for justice and the EU's core values.

## **A new push for European democracy**

We need to give Europeans a bigger say and protect our democracy from external interference such as disinformation and online hate messages

# HORIZON EUROPE

# EURATOM



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

✓ = covered by the 'main' Horizon Europe work programmes, together with a General Introduction, WP part on Missions, and General Annexes



# Overview



# Rationale for strategic planning

- **Research and innovation projects** funded by Horizon Europe can make a great contribution to key **EU policy priorities**
- What is required is an **effective interface** between EU policy priorities and programme activities ⇒ **Strategic Plan**
- Strategic plan as intermediate step towards the work programme:
  - Defines **key strategic orientations**
  - Outlines important **approaches and instruments** for the implementation
  - A chance to interact with stakeholders and citizens on research priorities

# Benefits of strategic planning – increasing the impact of investments in R&I

- The Strategic Plan acts as a **reference document** with which Member States and associated countries can align activities, ensuring better coordination;
- The Strategic Plan is **co-created** with Commission services (including executive services) and **co-designed** with citizens and stakeholders and in an extensive exchanges with the Member States and the European Parliament;
- The plan takes into account inputs from **stakeholder consultations**, helping to identify and fine-tune priorities to fit societal needs.

For stakeholders strategic planning represents:

- A chance for **interaction on R&I priorities** in an open forum;
- Greater **transparency and continuity** on priorities for the work programmes.

# Content and process is set out in the Horizon Europe Specific Programme

- **Article 6:** “[...] *the implementation of the Specific Programme shall be facilitated by a multiannual Strategic Plan of R&I activities, also promoting consistency between the work programmes, EU priorities and national priorities. The result of the strategic planning shall be set out in a multiannual Strategic Plan, for preparing the content in the work programmes, [...]*”
- **Coverage:** In particular Pillar II, 'Global Challenges and European Industrial Competitiveness' and cover also relevant activities in other pillars and the Widening Participation and Strengthening the European Research Area part.
- **Content:** Key strategic orientations for R&I support, including a description of expected impacts, identification of co-programmed and co-funded European Partnerships and Missions; Areas for international cooperation; Specific issues such as SSH, Gender, Ethics etc.
- **Process:** Early involvement and extensive exchanges the Member States; extensive exchanges with the European Parliament, complemented by consultation with stakeholders and the general public.
- **Analysis** to be taken into account.

# Strategic Plan 2021-2024

- The [Horizon Europe Strategic Plan 2021-2024](#) was adopted in March 2021. It contains:
  - **key strategic orientations** for research and innovation support and their **expected impacts**
  - identification of European co-funded and co-programmed **partnerships**
  - identification of EU **missions**
  - areas of **international cooperation**
  - orientations on **specific issues** like gender, the EU taxonomy and other cross-cutting issues
  - detailed **Cluster-specific annexes**



# 2021-2024: Four key strategic orientations

## Key Strategic Orientation A

Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains to accelerate and steer the digital and green transitions through human-centred technologies and innovations

## Key Strategic Orientation B

Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources to ensure food security and a clean and healthy environment

## Key Strategic Orientation C

Making Europe the first digitally enabled circular, climate-neutral and sustainable economy through the transformation of its mobility, energy, construction and production systems

## Key Strategic Orientation D

Creating a more resilient, inclusive and democratic European society, prepared and responsive to threats and disasters, addressing inequalities and providing high-quality health care, and empowering all citizens to act in the green and digital transitions

# Strategic Plan 2021-2024

EU  
MISSIONS

## Five EU Missions

Adaptation to  
Climate Change



Cancer

Climate-neutral  
and Smart Cities



Restore our  
Ocean and Waters



Soil Deal  
for Europe



# Strategic Plan 2021-2024

## New approach to Partnerships

New generation of **strategic** and **more ambitious** partnerships in support of **agreed EU policy objectives**

Strategic Planning: identification of priorities to be addressed by partnerships

### CO-PROGRAMMED

Based on Memoranda of Understanding/contractual arrangements; implemented independently by the partners and by Horizon Europe



Topics included in the 'main' work programmes

### CO-FUNDED

Based on a joint programme agreed and implemented by partners; commitment of partners for financial and in-kind contributions



Initial co-funding included in the 'main' work programmes  
-> partnerships then implement

### INSTITUTIONALISED

Based on long-term dimension and need for high integration; partnerships based on Art 185/187 of TFEU and the EIT legal acts for 2021-2027



# Strategic Plan 2021-2024: 49 candidate European Partnerships

## PILLAR II - Global challenges & European industrial competitiveness

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen
Global Health Partnership	Smart Networks & Services	Clean Aviation
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3
Chemicals risk assessment	European Metrology (Art. 185)	Europe's Rail
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility (CCAM)
Rare diseases*	Photonics	Batteries
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport
Pandemic Preparedness* <i>Co-funded or co-programmed</i>	Processes4Planet	Built4People
	Global competitive space systems**	Clean Energy Transition
		Driving Urban Transitions

## PILLAR III - Innovative Europe

EIT	SUPPORT TO INNOVATION ECOSYSTEMS
InnoEnergy	Innovative SMEs
Climate	
Digital	
Food	
Health	
Raw Materials	
Manufacturing	
Urban Mobility	
Cultural and Creative Industries	
<b>CROSS-PILLAR II AND III</b>	
European Open Science Cloud	

- Institutionalised Partnerships (Art 185/7)
- Institutionalised partnerships / EIT KICs
- Co-Programmed
- Co-Funded

\* Calls with opening dates in 2023-24

\*\* Calls with opening dates not before 2022

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# PROCESS OF DEVELOPING THE STRATEGIC PLAN 2025-2027 AND THE NEXT STEPS



# Strategic planning process officially launched during R&I Days on 28 September 2022



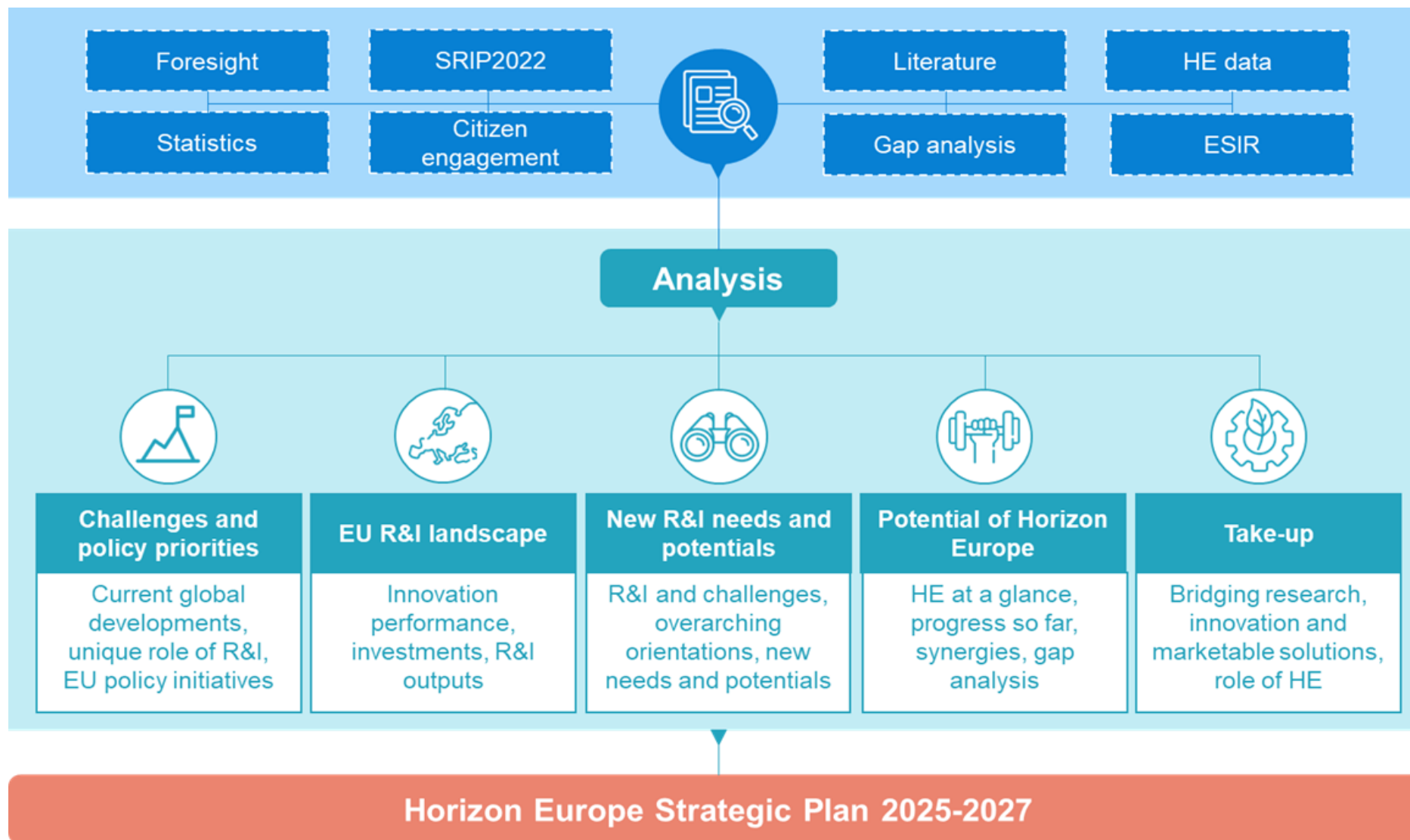
## Speakers:

- Commissioner for Innovation, Research, Culture, Education and Youth Mariya Gabriel
- Member of the European Parliament and Chair of the Committee on Industry, Research and Energy Cristian Buşoi
- Deputy Minister for Higher Education, Science and Research in the Czech Republic Radka Wildová

## References:

- [Commission's news article](#)
- [Web page on the Strategic Plan](#)

# HE Strategic Plan 2025-2027 Analysis



# Analysis supporting the Strategic Plan

## Specific Programme requires the analysis to cover:

- **political, socio-economic and environmental drivers** relevant for Union and Member States' policy priorities;
- contribution of research and innovation to the realisation of **Union policy objectives, studies, scientific evidence**; other relevant initiatives incl. partnerships;
- evidence from **foresight, science, technology and innovation indicators, international developments** and **feedback from implementation**, incl. on **SMEs** and **widening synergies** with other Union programmes;
- a description of the **various approaches for stakeholder consultation and citizen engagement** to develop the work programme;
- complementarities with the EIT Knowledge and Innovation Communities (**KICs**).

# Sources of content for the analysis

- Analytical work and data from
  - Foresight for Strategic Plan 2025-2027, and other foresight work within the Commission services (e.g., [from JRC](#)), <https://www.futures4europe.eu>
  - Report on Science, Research and Innovation Performance of the EU ([SRIP report](#))
  - Other analysis, data from evaluations
- Stakeholder consultation and citizen engagement
- Selected key messages:
  - investments in R&I to strengthen EU's resilience;
  - under performance in digital technologies;
  - improving the EU's ability to take up scientific discoveries into market solutions is a priority.

# Citizens' engagement workshop

- **Date:** 1 December 2022 in Brussels
- **Concept:** held in the context of the feedback event of the Conference on the Future of Europe (CoFE)
- **Goal:** discuss how citizens' recommendations could influence R&I priorities for the next 3 years and beyond
- **Results:** lively discussions on three main topics (Green transition – Digital transition – Resilience), which will feed into the Strategic Plan analysis
- **Participants:** Representative group of around 70 citizens (and 25 Commission expert)

# Public online consultation

- **Structure:** to maximise participation and reduce stakeholder fatigue, the consultation covers the following three elements:
  - Performance of the past programme Horizon 2020 (Horizon 2020 ex-post evaluation)
  - Performance of Horizon Europe (input to Horizon Europe interim evaluation)
  - **Looking into the R&I future priorities 2025-2027 (Horizon Europe Strategic Plan)**
- **Duration and timeline:** 12 weeks, 1 December 2022 – 23 February 2023 on the [Have your say portal](#).
- **Results:** will be published in the Strategic Plan Analysis (by May)



# Results of the Public Consultation

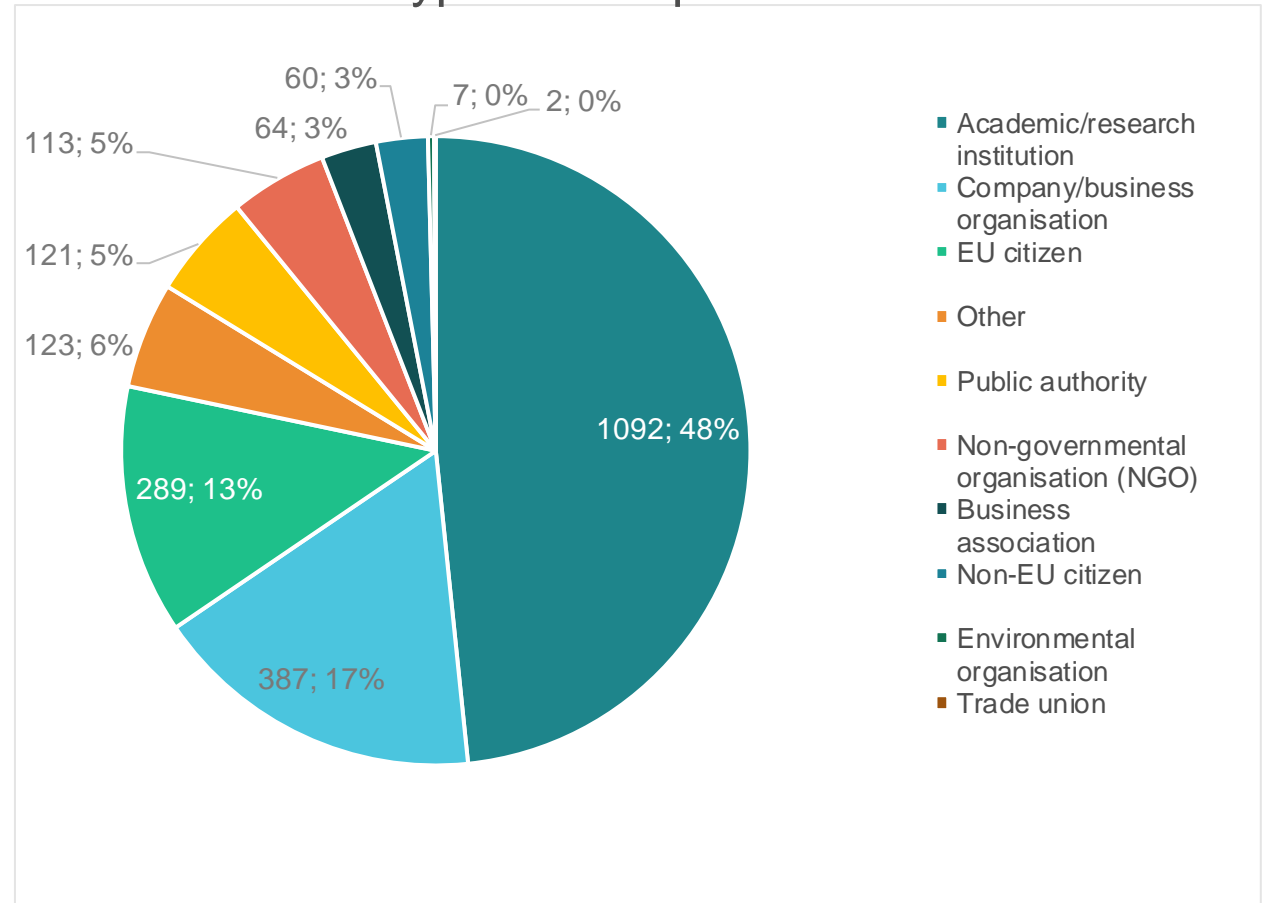
**Responses, overall submissions:**  
2788

**Responses for the Strategic Plan:**  
2258

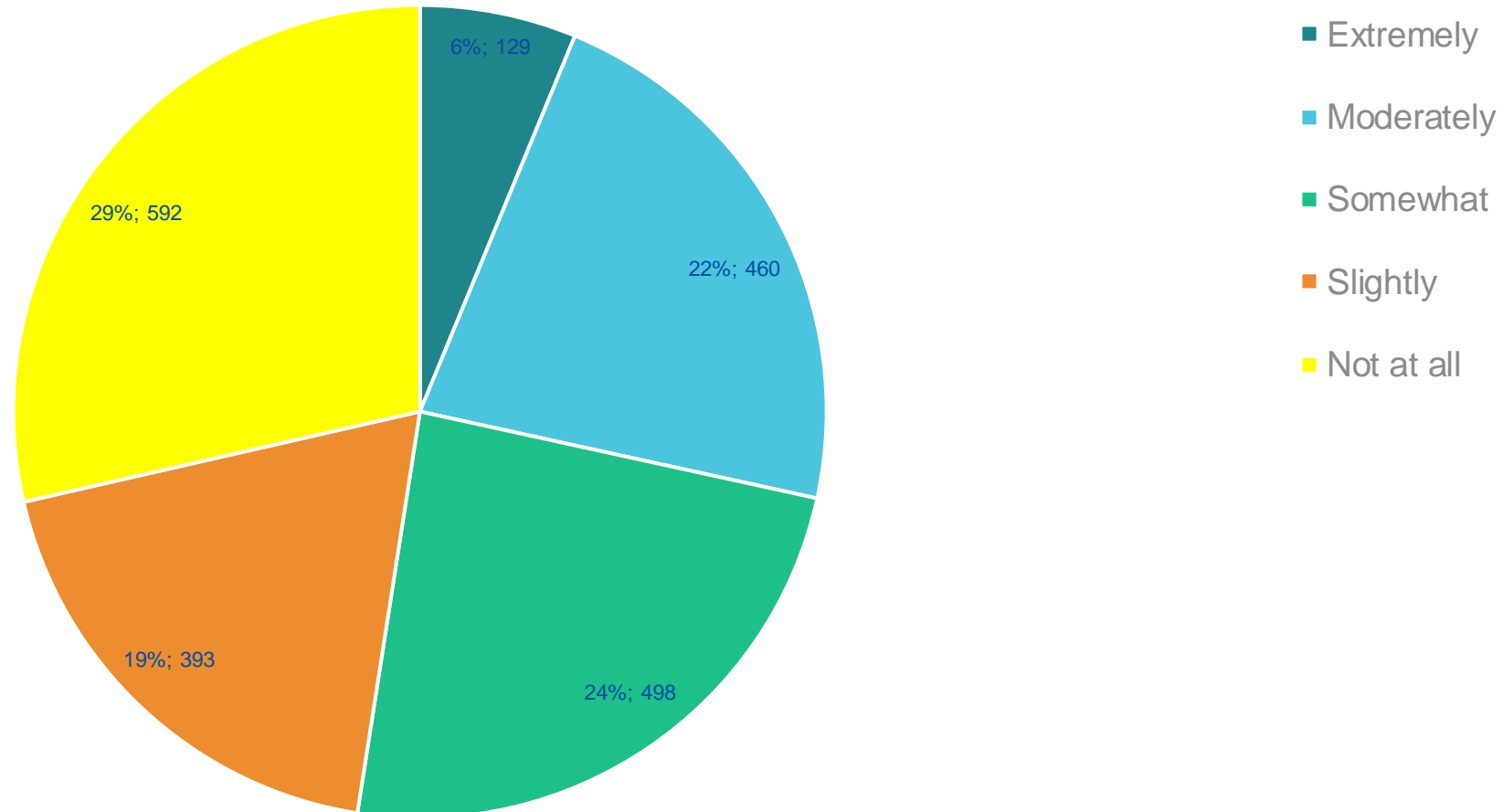
**Position papers, overall submissions:**  
265

**Position papers for the Strategic Plan (filtered):**  
108

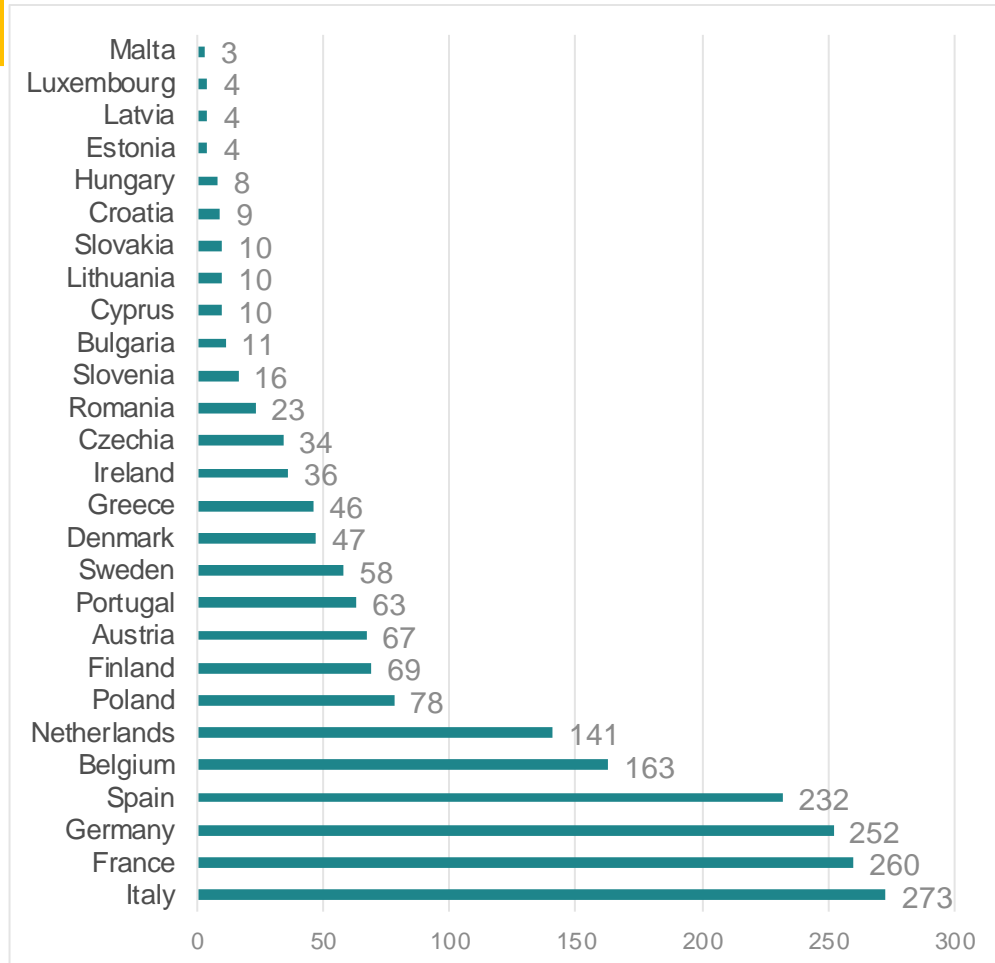
Types of respondents



# Knowledge of Strategic Plan (N = 2072)



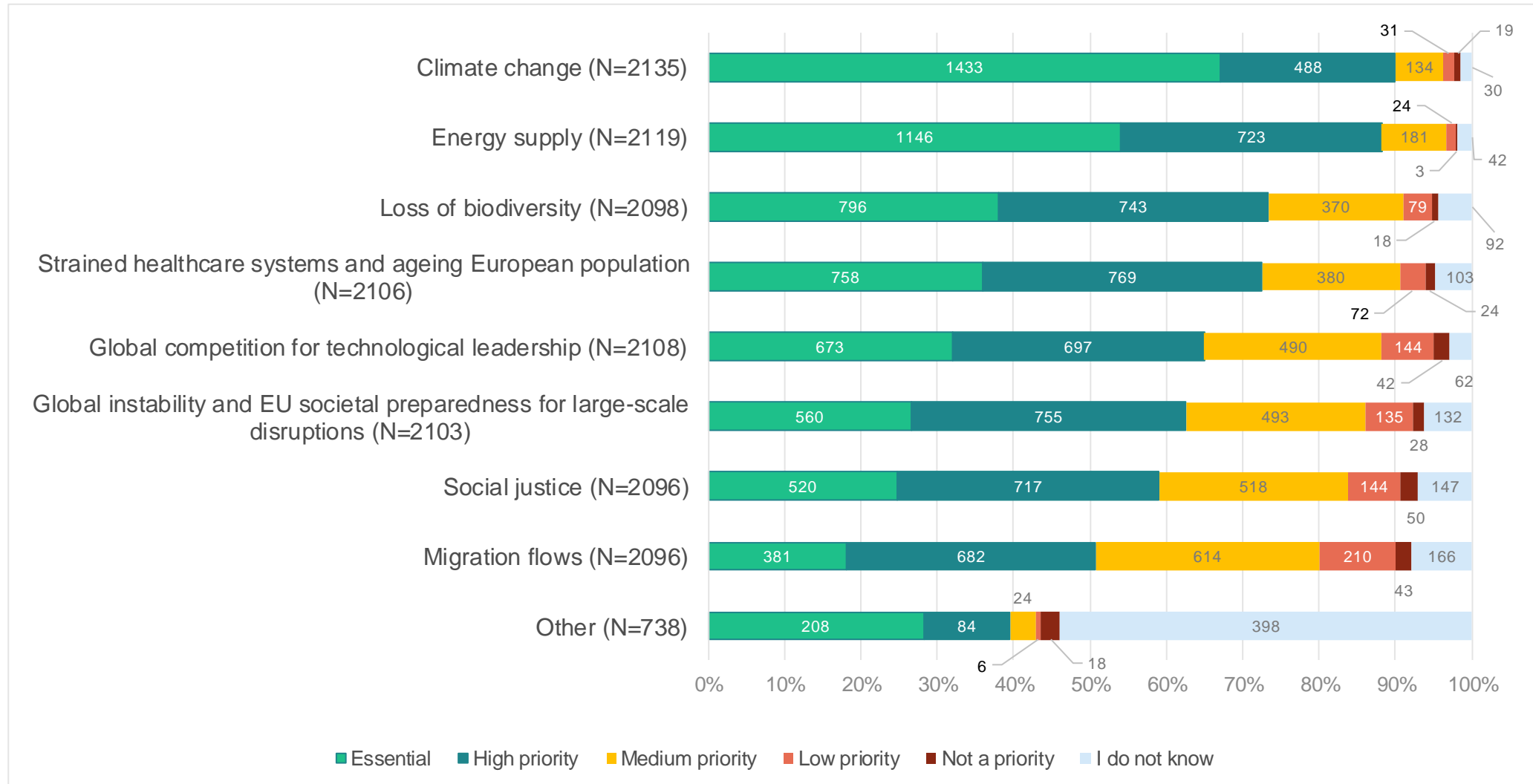
## Number of respondents by EU27 Member State (N=1 931)



## Experience with the European Union Research and Innovation programmes (N=2 258)

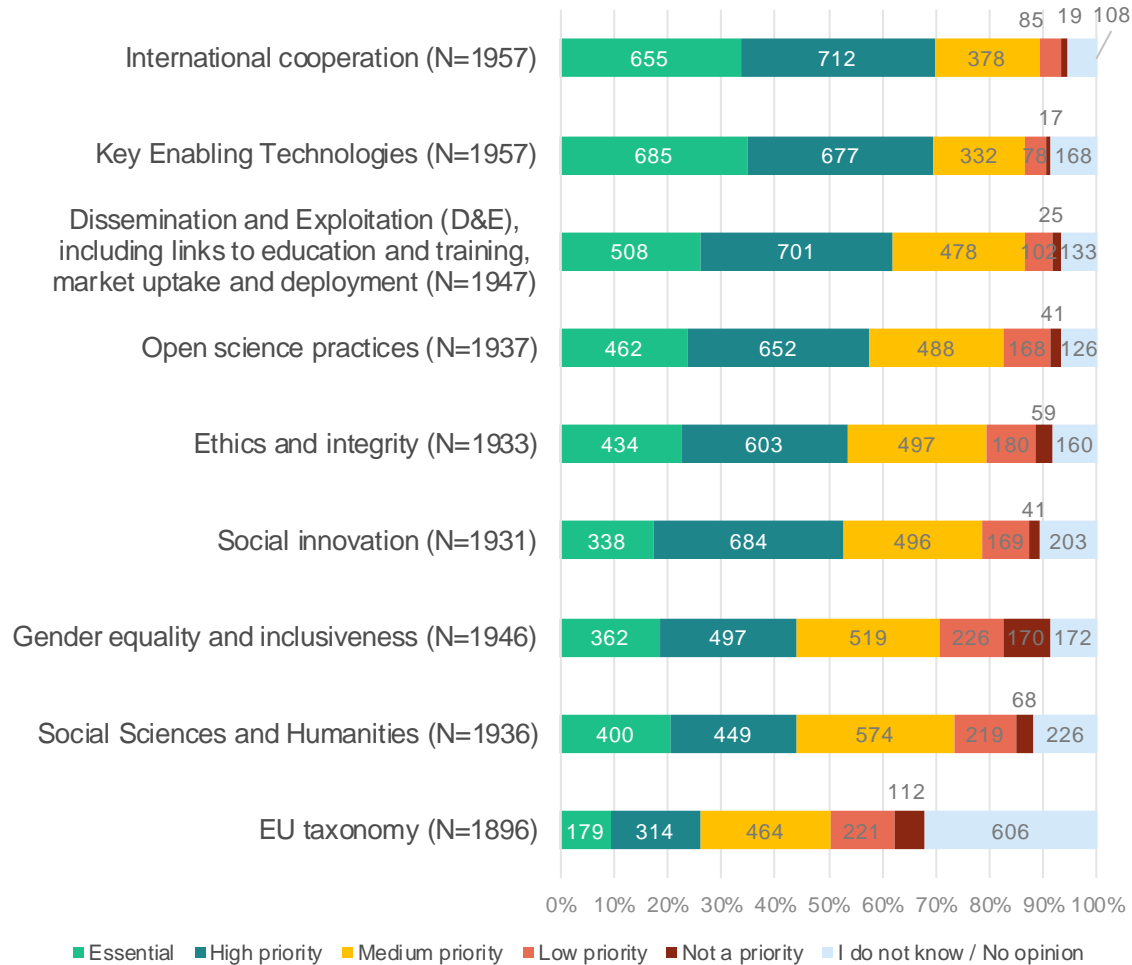


# In the next ten years, which societal challenges should be the focus of EU investments for research and innovation activities?

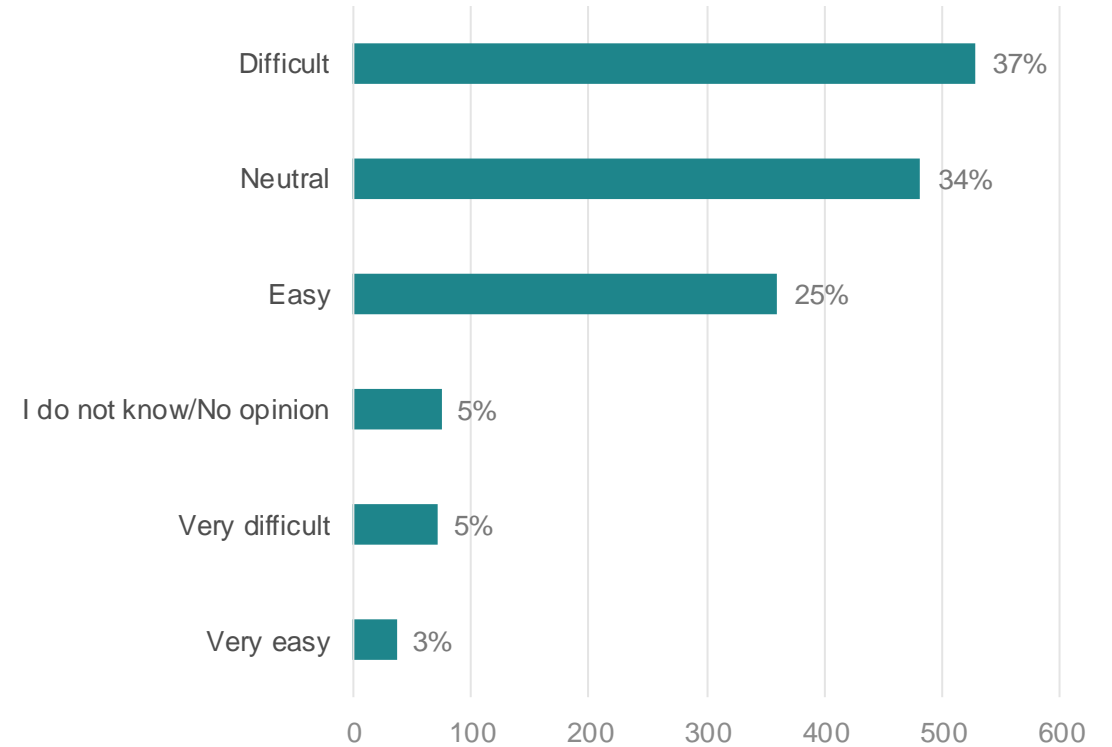




## Should any of these specific themes be further elaborated for the Strategic Plan 2025-2027?



## How easy is it to understand this structure the Horizon Europe's 2021-2024 Strategic Plan's structure? (N=1 554)



# Open questions and position papers

## **Need to simplify the structure by reducing the number of layers:**

Better describe impact areas and expected impacts

Reduce the number of impacts / prioritise the importance of the expected impacts

Provide definitions of the terms used

Avoid using official or technical jargon

## **Specific issues on KSOs:**

The KSOs are difficult to understand because they are too broad and merge too many, sometimes not strongly linked concepts. Limiting the number of KSOs is a positive objective but it should not harm the understanding of their meaning

The KSOs encompass too many impacts, making it difficult to understand the link with the work programmes

The four KSOs partially overlap, which makes it difficult to understand what should be covered by one or the other

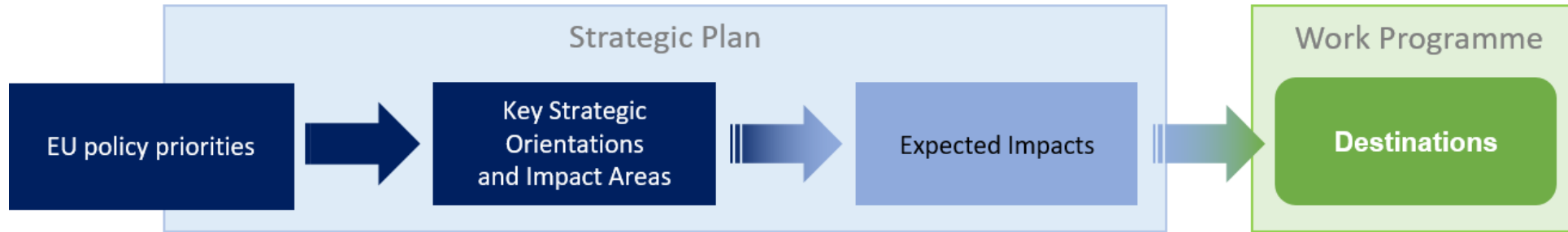
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# From Strategic Plan to Work Programme





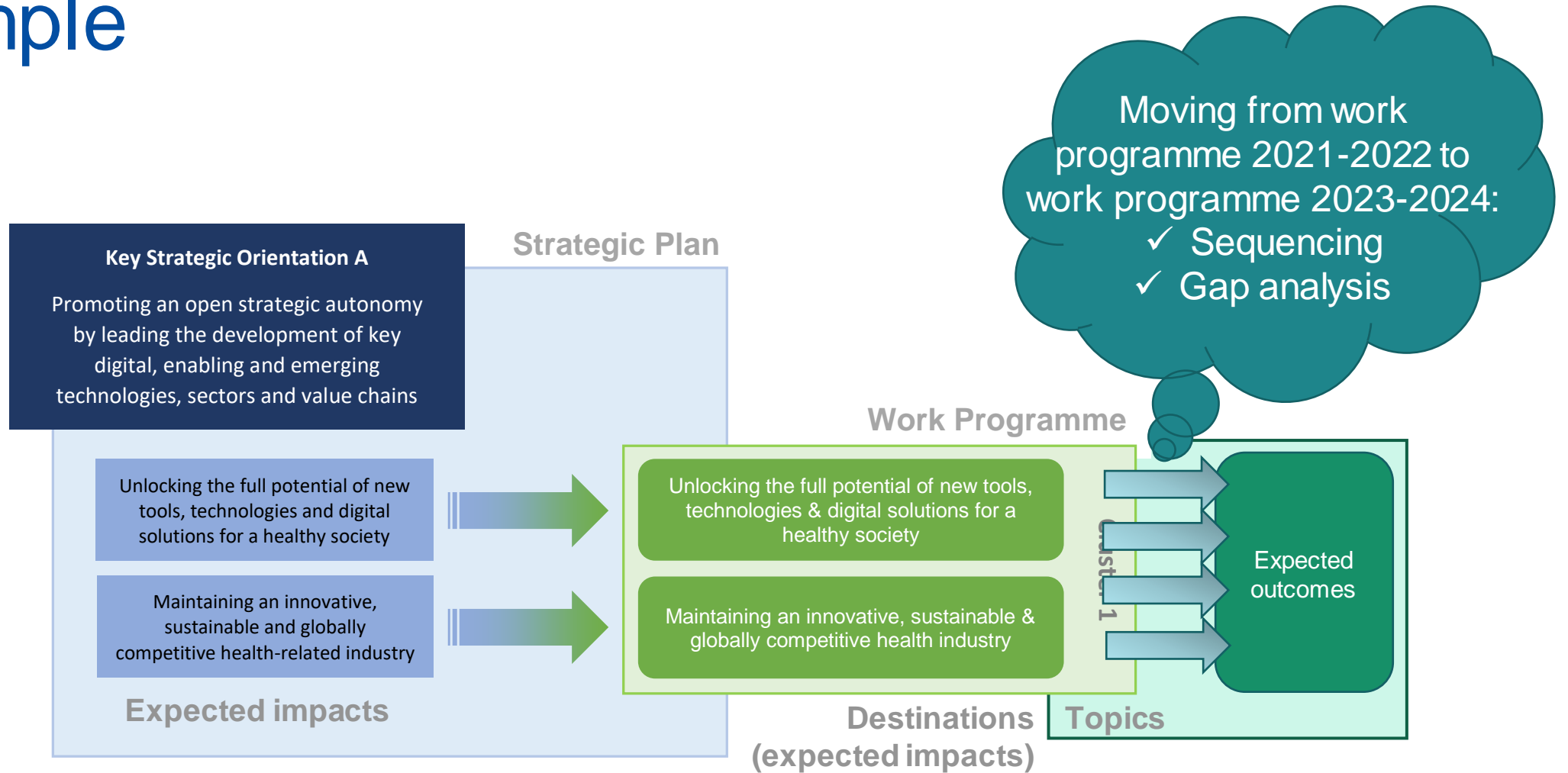
# From policy priorities to work programme



- The work programme parts are structured in sections called ‘Destinations’.
- Each ‘Destination’ in the Cluster work programme parts mirrors one specific expected impact of the strategic plan
- The expected impacts of the strategic plan cover the 4-year period 2021-2024, so are reflected in the ‘Destinations’ of the work programmes for 2021-2022 **and** 2023-2024

# From policy priorities to work programme - example

Cluster 1



# Work Programme 2023-2024 in a nutshell

- Total budget appr. **€13.5 billion** for research and innovation (R&I)
- Support to the **green and digital transitions**:
  - climate objectives and biodiversity
  - digital transition in a wide range of sectors and core digital technologies
- Investment in EU's **safety, security and resilience**:
  - recovery from the COVID-19 pandemic
  - clean energy transition and reducing energy dependency
  - pandemic preparedness
  - fighting physical and cyber threats
- Targeted support for **Ukraine**

# Results of the Public Consultation

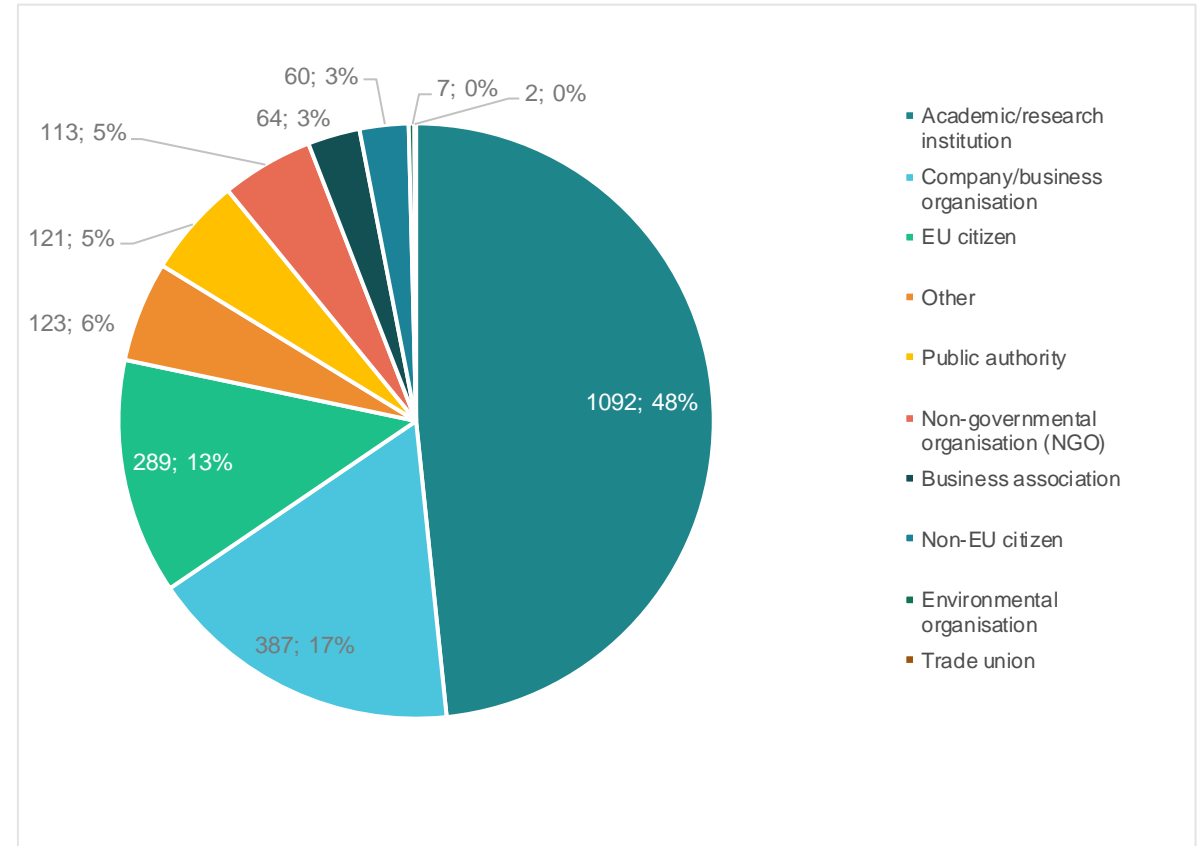
## Types of respondents

Responses, overall submissions:  
2773

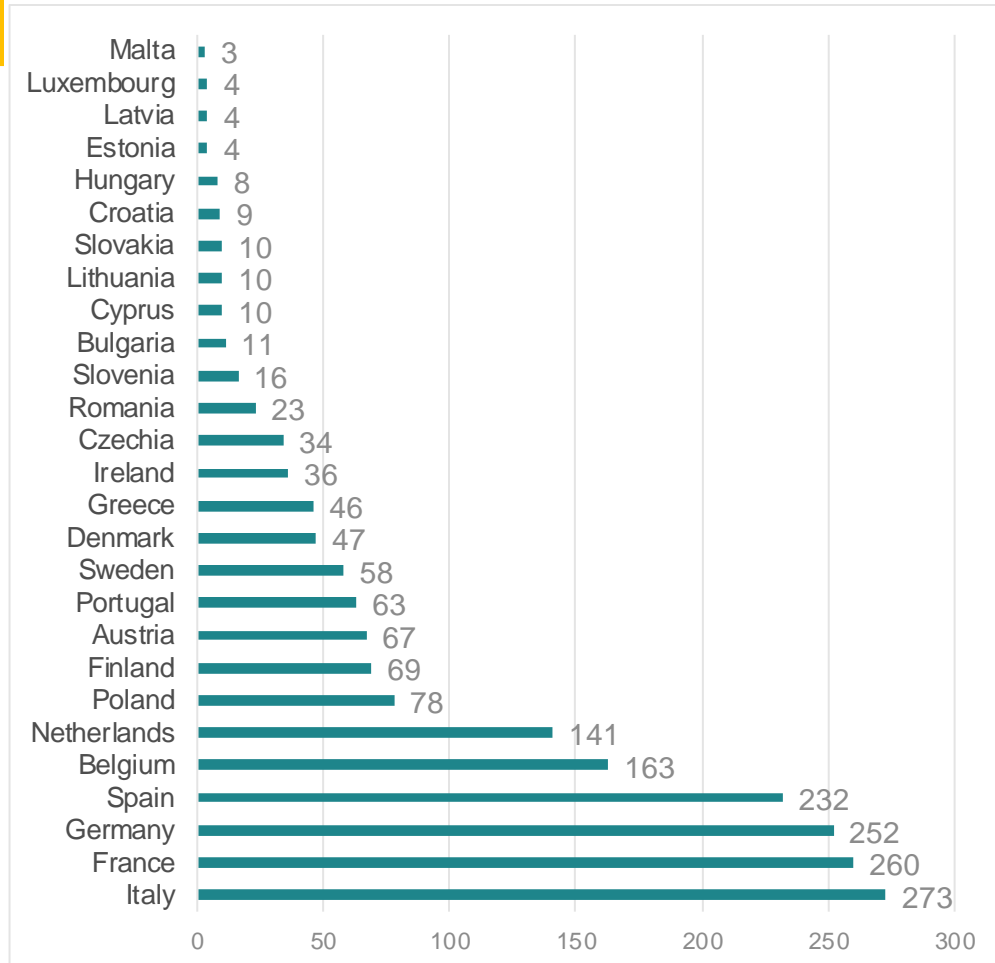
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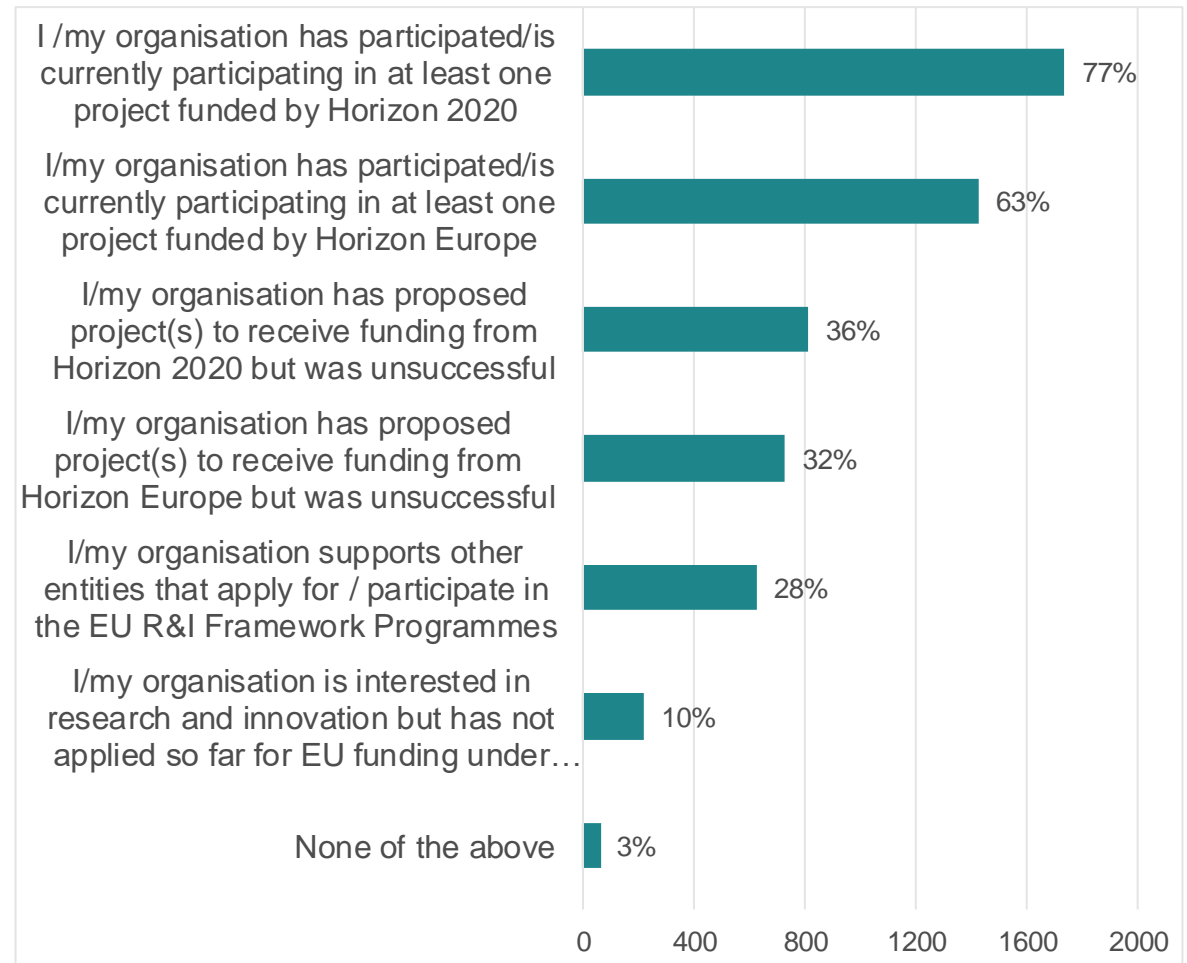
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Plan (filtered):  
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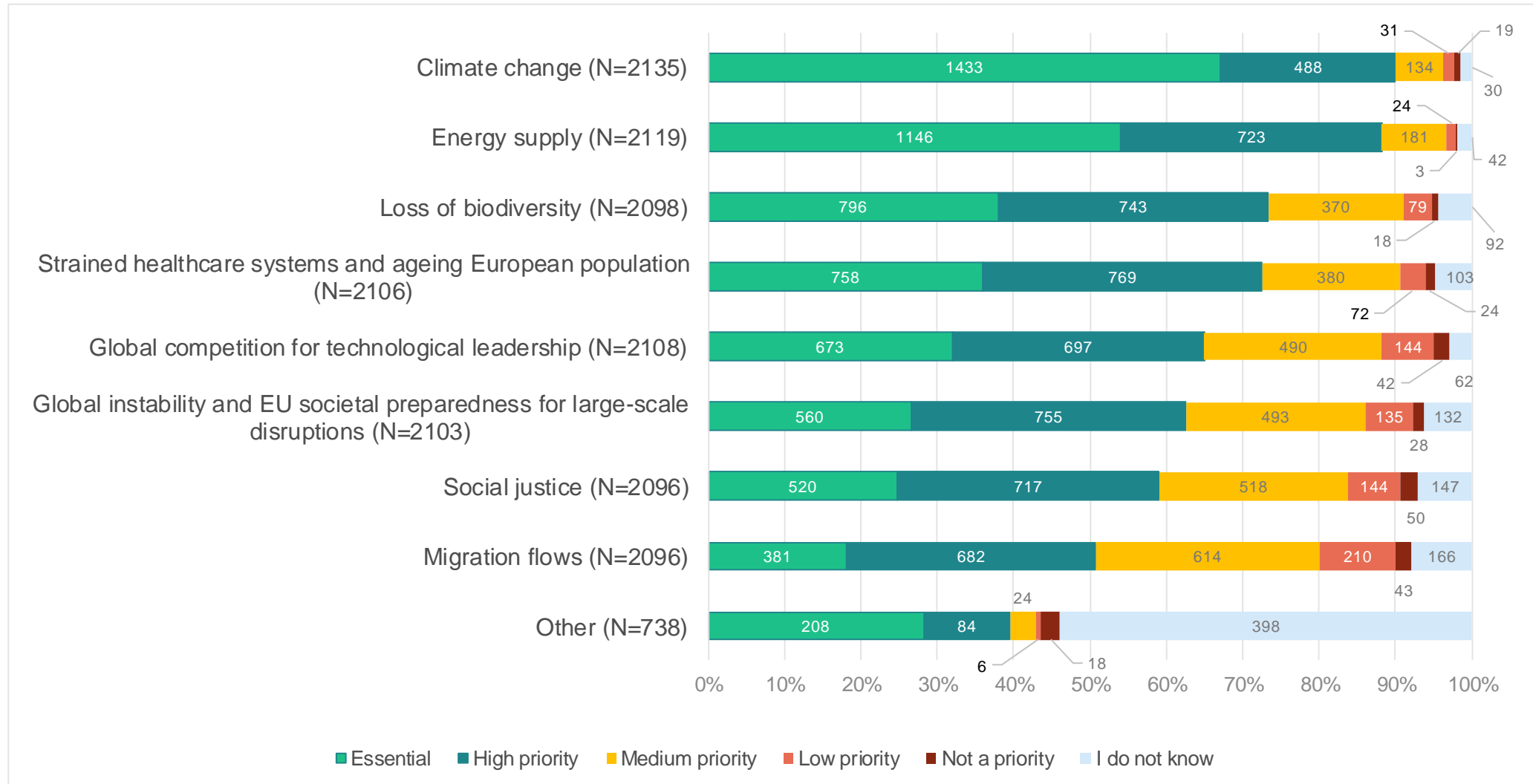
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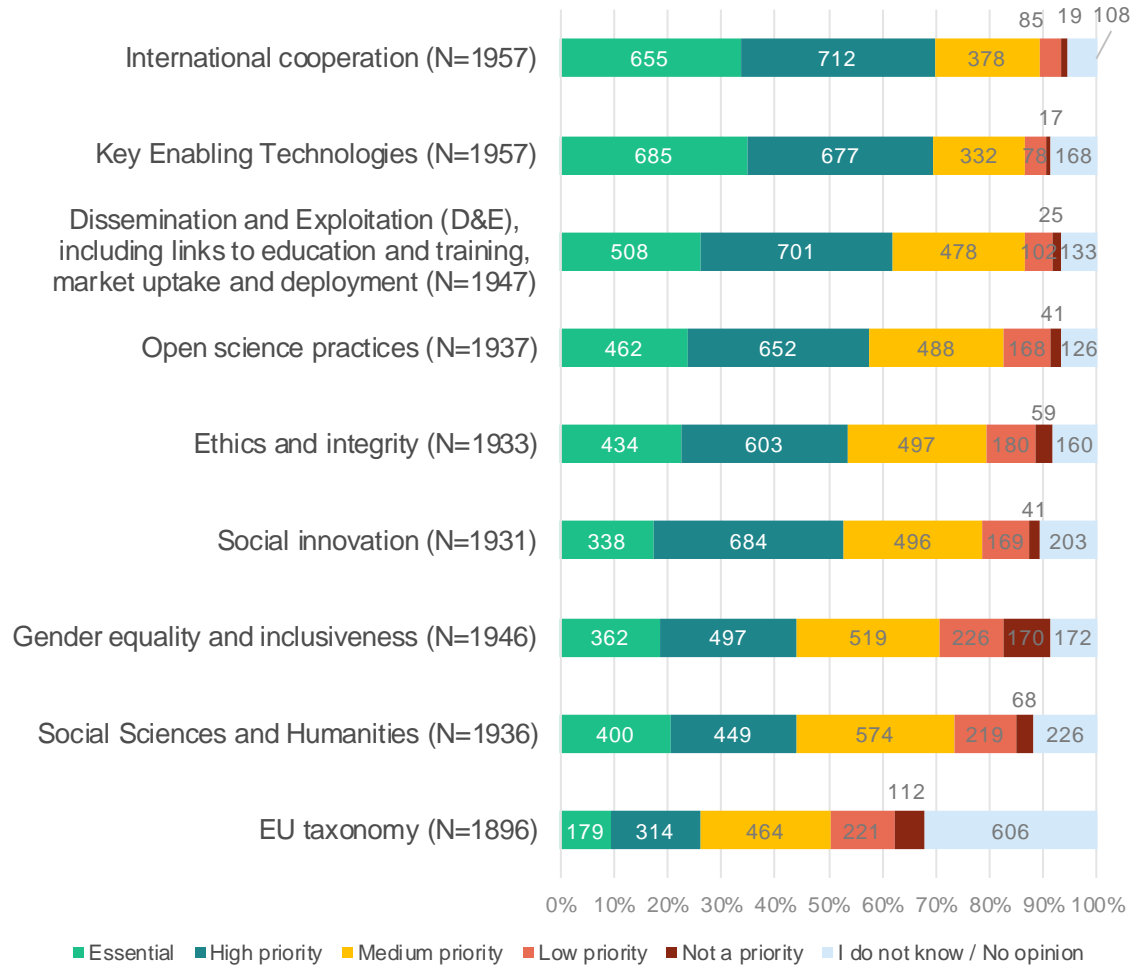
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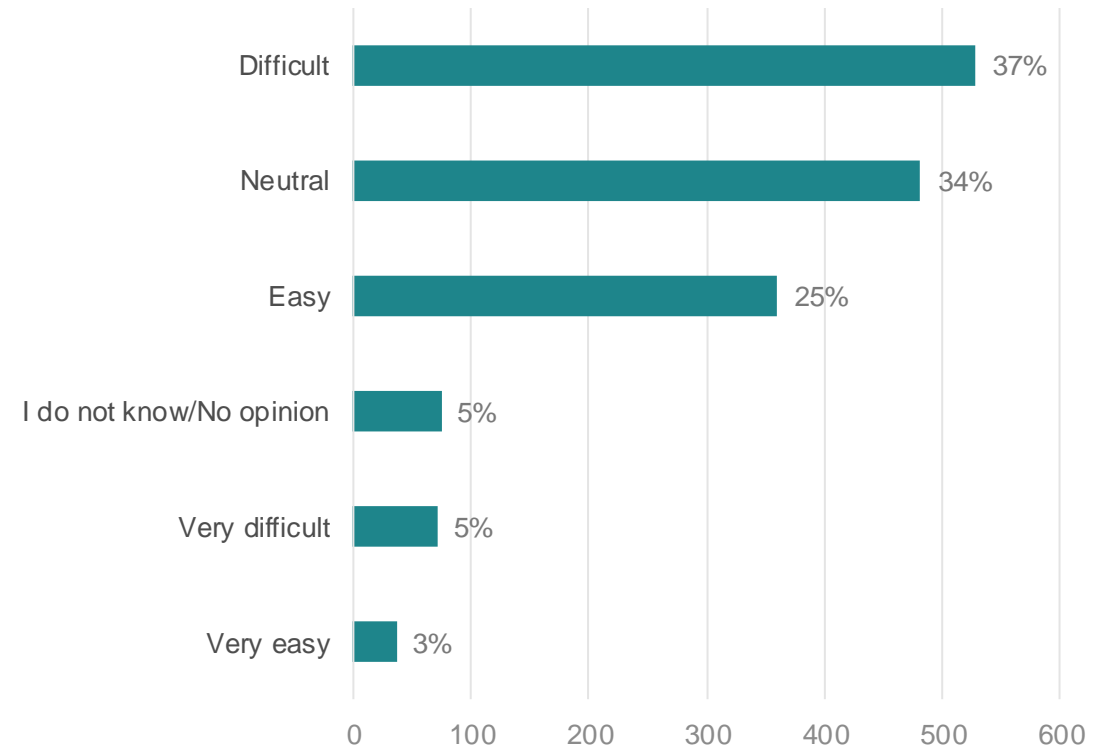
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# Thank you!

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