

# Horizon Europe Cluster 4: Digital, Industry and Space

5<sup>th</sup> July 2023

[www.ktn-uk.org](http://www.ktn-uk.org)



Innovate UK  
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## Agenda

### **Welcome and Innovate UK KTN European Programmes support.**

*Jane Watkins, Regional Lead – Europe, Innovate UK KTN*

### **Navigating application and award process: Practical tips and support for applicants.**

*Chris Young, National Contact Point - Legal and Financial Innovate UK*

### **Introduction to Cluster 4 and Upcoming Horizon Europe Industry Call Topics**

*Cherie Gardiner, National Contact Point – Industry, Innovate UK*

### **Upcoming Horizon Europe Space Call Topics.**

*Catherine Holt, National Contact Point- Space, Innovate UK*

### **Upcoming Horizon Europe Digital Call Topics –**

*Craig Sharp, National Contact Point – Digital, Innovate UK*

- **Q&A**

- **Close and next steps – Jane Watkins, Innovate UK KTN**



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## Global Alliance: European Programmes

We support UK organisations in **engaging with International R&I initiatives** (i.e. Horizon Europe and EUREKA, among them) and help shape future funding priorities by:

- ◆ Organising consortium building activities / events in selected topics
- ◆ Managing international collaboration platforms
- ◆ Engaging with International Partnerships and Technology Platforms
- ◆ Providing sector specific advice on market opportunities and project impact

***We work closely with the National Contact Points, Innovate UK Edge and the FCDO / Science Innovation Network.***

***Further support:*** Belen Rebollo-Garcia - [belen.rebollo-garcia@iuk.ktn-uk.org](mailto:belen.rebollo-garcia@iuk.ktn-uk.org)



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# Welcome! Horizon Europe

## Housekeeping

- To avoid background noise all participants will be muted, and cameras will be off.
- Please use the **chat** to introduce yourself. Please note due to GDPR we cannot share the chat.
- Please also use the **Q&A function** to submit your questions.
- If you have any technical problems, please use the chat to seek advice from the host (Michael Foster)

***PLEASE NOTE – THE WEBINAR IS BEING RECORDED***



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# Horizon Europe and the UK situation

**Chris Young**

Horizon Europe UK Legal and Financial National Contact Point

[christopher.young@iuk.ukri.org](mailto:christopher.young@iuk.ukri.org)



# Points to discuss

- Official UK status with regards to Horizon Europe
- How UK applicants should be represented in proposals
- What happens post-evaluation
- UK Government Horizon Europe Guarantee
- Practical matters including:
  - The Consortium Agreement
  - How UK partners are funded
- Questions and Answers

# UK Government continues to seek Association to Horizon Europe

- In reference to Horizon Europe, Copernicus and Euratom: "We never wanted to leave those programmes and we still don't. We're still pushing for that association to be formalised"

*11<sup>th</sup> January 2023*



# UK is a ‘third country negotiating association to the programme’ (1)

- [List of Participating Countries in Horizon Europe](#) states:

“Until association agreements start producing legal effects either through provisional application or their entry into force ... transitional arrangements apply” while “association negotiations are being processed or where association is imminent” as set out in the General Annexes to the Horizon Europe Work Programme 2023-2024 (for the entire Programme, including ERC, EIC (grant only), EIT and the institutionalised European partnerships)”

# UK is a ‘third country negotiating association to the programme’ (2)

- [General Annexes](#) states:

“... third countries can also become associated to Horizon Europe during the programme. **For the purposes of the eligibility conditions**, applicants established in Horizon 2020 Associated Countries or in other third **countries negotiating association to Horizon Europe will be treated as entities established in an Associated Country**, if the Horizon Europe association agreement with the third country concerned applies at the time of signature of the grant agreement.”

# UK is a ‘third country negotiating association to the programme’ (2)

- [General Annexes](#) states:

“In addition, other third countries can also become associated to Horizon Europe during the programme. For the purposes of the eligibility conditions, applicants established in Horizon 2020 Associated Countries or in other third countries negotiating association to Horizon Europe will be treated as entities established in an Associated Country, if the **Horizon Europe association agreement with the third country concerned applies at the time of signature of the grant agreement.**”



## UK is a candidate Associate Country:

- UK organisations **are** fully eligible to apply to Horizon Europe and **must** request funding from the EU as a potential Beneficiary
- UK organisations **are** eligible to coordinate proposals
- UK organisations **are** classed as one of the minimum three different legal entities from three different eligible countries as long as at least one consortium member is also from a Member State for proposal eligibility

# If the UK's association has not completed at the date of Grant Agreement signature:

- UK organisations are **not** eligible to receive funding from the EU, but UK organisations can still take part!
- UK organisations **cannot** coordinate projects
- UK organisations **are not** classed as one of the minimum three different legal entities from three different eligible countries and so another country needs to be included for project eligibility
- UK Horizon Europe Guarantee funds UK partners  
<https://www.ukri.org/apply-for-funding/apply-for-horizon-europe-guarantee-funding/>



Your cat seems to have  
thought outside the box  
Dr Schrödinger

# In Practice for Proposals

- UK organisations must be included as potential beneficiaries and request funding from the EU
- UK organisations must complete the budget tables in full (Part A and Part B)
- If coordinator, **ensure a back up** – can remain technical/scientific coordinator
- Organisations from Associate Countries, including the UK, can be Work Package Leads – see [FAQ 18452](#)
- Note any Topic Specific points: almost all Topics are open to UK participation, any exceptions will include this information in the Topic Description
- Ensure eligibility conditions are fulfilled (non association) – **3xMS/AC + UK**

# Post-Evaluation if proposal successful

- Once the celebrations are over, all entities, including those from UK, sign the Declaration of Honour (but note timing of Commission standard success letter)
- Preparation for Grant Agreement signature proceeds with no change to UK partner status until signature becomes imminent - hope is that UK association will complete first
- UK partner status is then changed to that of Associated Partner (standard success letter issued by EC prompts this change)
- UK partner applies for UK Horizon Europe Guarantee (post GA signature)

# Standard European Commission text following successful evaluation

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1. If Consortium ineligible due to too few eligible partners: identify and add new eligible participant (anticipated at submission)
2. Change UK partner to Associated Partner  
or
2. Redistribute tasks to existing beneficiaries and/or new participant and UK partner removed

Accordingly, your proposal will be declared ineligible and the Grant preparation terminated, unless you consider the steps suggested below.

To address the ineligibility of your proposal, I am inviting you to take the following possible actions so the Grant preparation of your proposal can continue:

## **Step1.** Identification of new participant

Identify a new participant(s) established in a Member State or an Associated Country not present in the original proposal to make sure that the proposal complies with the minimum eligibility conditions for participation. This new participant must take over some of the tasks (possibly including the tasks of the UK participants).

The redistribution of the budget and tasks will be accepted as non-substantial change unless these changes would put into question the results of the evaluation.

## **Step2.** Change of status of the participant from beneficiary to associated partner

Provided that the legal entities established in the United Kingdom are able to fund their tasks, their status may change from a beneficiary into an associated partner within the meaning of Article 9.1 of the Horizon Europe Model Grant Agreement. The total EU funding to the project will be reduced accordingly, except for tasks taken over by the new or existing eligible beneficiaries.

A redistribution of the remaining budget and tasks may be requested and should be accepted as non-substantial change unless it would put into question the results of the evaluation.

The entity may be later re-established as a beneficiary through a grant amendment if the association agreement with the United Kingdom becomes applicable and if requested by the consortium. If the association agreement provides for retroactive application prior to the start of the action and if the status changes to beneficiary, such conditions will apply.

## **Alternative step 2:** Withdrawal of the legal entities from participation in the proposal

The tasks of the legal entities established in the United Kingdom are taken over either by the remaining other beneficiaries of the proposal, subject to the fulfilment of the minimum eligibility conditions for participation of the proposal, or by one or more additional new beneficiaries established in a Member State or an Associated country. The legal entity established in the United Kingdom is withdrawn from the project. The total EU funding to the project may remain unchanged.

# Clarification of 'Associate' definitions

- Organisations from **Associate Countries** participate in projects as Beneficiaries and receive funding from the EU
- Organisations that **do not receive funding from the EU are called Associate Partners:**
  - Do implement action tasks
  - Do not sign the Grant Agreement but are full members of the consortium
  - Grant Agreement mentions them and defines their responsibilities in the project
  - Do sign the Consortium Agreement with some clauses from the Grant Agreement included

# The Consortium Agreement

- UK participants change from potential Beneficiaries to Associated Partners, note access rights on portal, no right to Grant Agreement
- No direct right of EC to enforce - Consortium is responsible for the implementation of the actions tasks by the Associated Partner
- Provisions from the Grant Agreement inserted in the Consortium Agreement – Many projects use [DESCA](#) (AP version 1, July 2022)
  - Grant Agreement - Article 9.1
- Associated Partners sign the Consortium Agreement – director or equivalent
- Belgium law applies (insurance)

# The UK Horizon Europe Guarantee

- Implemented by [UKRI](#) – over £1 billion committed already by end April 2023
- Funds successful UK partners to deliver their tasks within the existing project
- Funding at same rate, using very similar rules (only exception is no pre-financing, always quarterly in arrears on proof of costs incurred)
- There is a publicly available webinar [Grant Preparation for Projects with UK Organisations](#) produced by UKRO, UKRI's team in Brussels

# Latest statistics for the Horizon Europe guarantee

Number of applications and grant offers made through the Horizon Europe guarantee up to 30 April 2023.

Guarantee Grant Type	Applications submitted and verified	Value of grants requested in verified applications	Grant offer letters issued	Value of grant offers issued
Collaborative Horizon Europe Guarantee Grants (on Innovation Funding Service)	1503	£661.3 million	1429	£613.7 million
European Research Council Guarantee Grants	246	£346.9 million	244	£344.6 million
Marie Skłodowska-Curie Actions Guarantee Grants	405	£90.7 million	390	£88.2 million
<b>TOTAL</b>	<b>2154</b>	<b>£1098.9 million</b>	<b>2063</b>	<b>£1046.5 million</b>

Note: figures to the nearest £0.1 million.

# If UK Association is finalised, agreed, approved

- UK contributes funding to the EU (approx. 15% addition to existing Horizon Europe budget)
  - EU decides where to allocate UK government contribution (paragraph 50 of [Regulation establishing Horizon Europe](#)) “When allocating associated countries' financial contributions to the Programme, the Commission should take into account the level of participation of legal entities of those third countries in the different parts of the Programme.”
- Except in *very* few Topics that are restricted to Member States only:
  - UK organisations **are** fully eligible to coordinate proposals **and** projects
  - UK organisations **are** classed as one of the minimum three different legal entities from three different eligible countries, as long as at least one consortium member is also from a Member State, for proposal **and** project eligibility
  - UK organisations **would** be funded by EU as project participants/beneficiaries

# If UK does not Associate to the Programme

- UK organisations **can** continue to participate in those parts of the programme open to Third Countries
  - Cannot (usually) coordinate proposals or projects
  - Do not count as one of the three different organisations for consortium eligibility
  - Would not be funded by EU (except in exceptional circumstances)\*

[UK Government Policy Paper published July 2022](#): **Supporting UK R&D and collaborative research beyond European programmes**

*“...the government will fund all eligible UK entities participating in any such consortia signing grant agreements before 31 March 2025. The government will consider our approach to funding for Third Country Participation beyond this date and make an announcement by October 2024...”*

# Supplementary Frequently Asked Questions about UK participation

- Horizon Europe [FAQ 18452](#) “Associated partners can become work package leaders in collaborative projects.”
- [GDPR](#): “Commission concludes that the United Kingdom ensures an adequate level of protection for personal data transferred within the scope of Regulation (EU) 2016/679 from the European Union to the United Kingdom.”
- [EU/UK Security Agreement](#) “Against this background, the EU and the UK have concluded a Security of Information Agreement. The Agreement will allow the EU and the UK to exchange classified information, applying strong guarantees as to the handling and protection of the exchanged information.”
- **State Aid/Subsidy** – For Enterprises, UKRI considers the grant awarded to any recipient acting economically (an Enterprise) as a compliant subsidy under the UK-EU TCA and where the recipient is not an enterprise or in not acting as an enterprise (HRO, government bodies, charities etc), UKRI will not consider the grant awarded to the recipient to be a subsidy



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# Questions?





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# Horizon Europe

**Cherie Gardiner**

*Horizon Europe UK National Contact Point for Industry,*

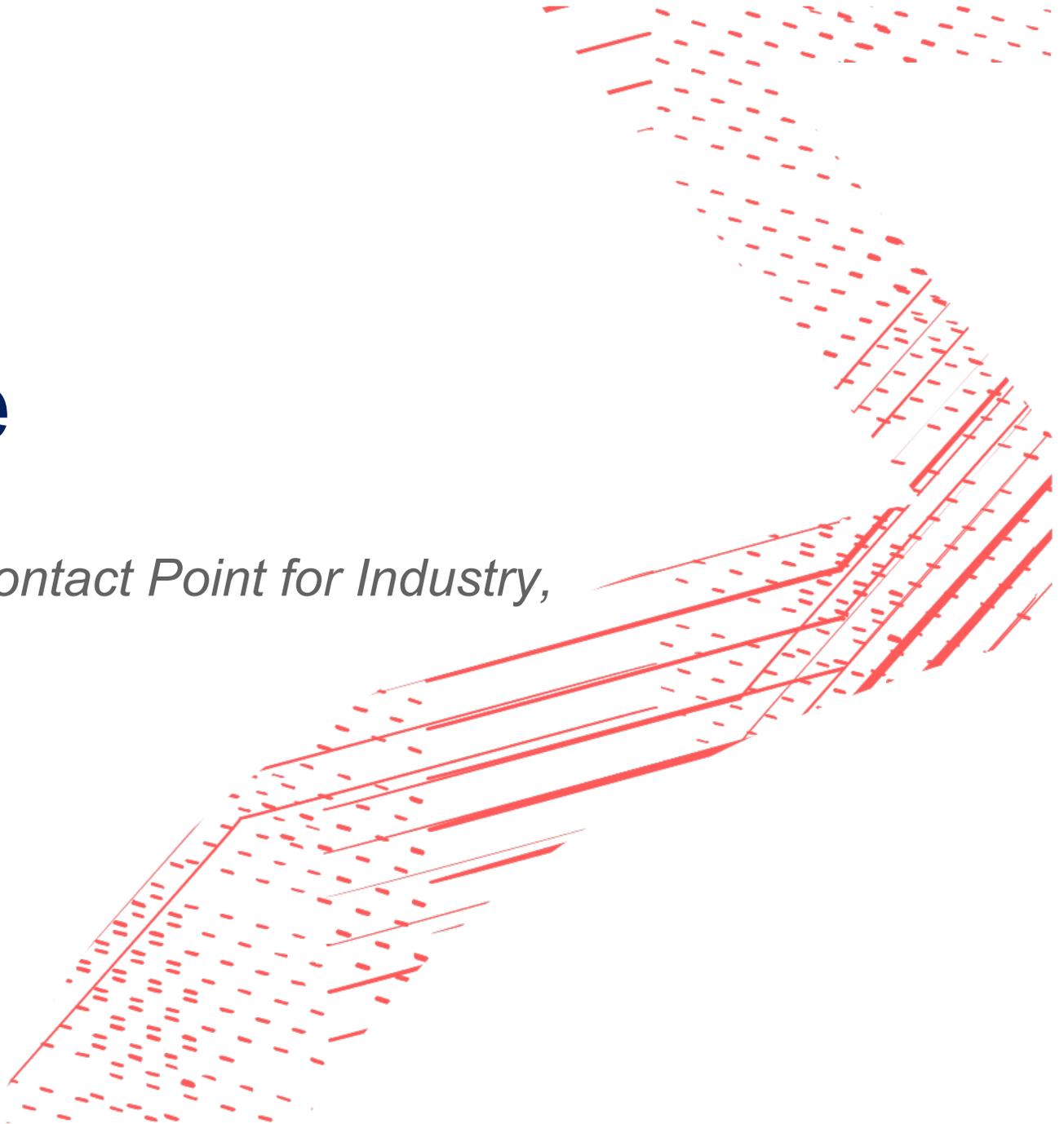
*Cluster 4*

[cherie.gardiner@iuk.ukri.org](mailto:cherie.gardiner@iuk.ukri.org)



**HORIZON EUROPE**

THE NEXT EU RESEARCH & INNOVATION  
PROGRAMME (2021 – 2027)



# Horizon Europe National Contact Points (NCPs)

Team of country based, sector specific, advisors to support everyone to successfully participate in EU Framework Programmes

- Raising awareness of the programme
- Finding the right topic
- Identifying the best ways to find partners
- Navigating the portal
- Developing the proposal
- Answering questions

[List of UK National Contact Points](#)

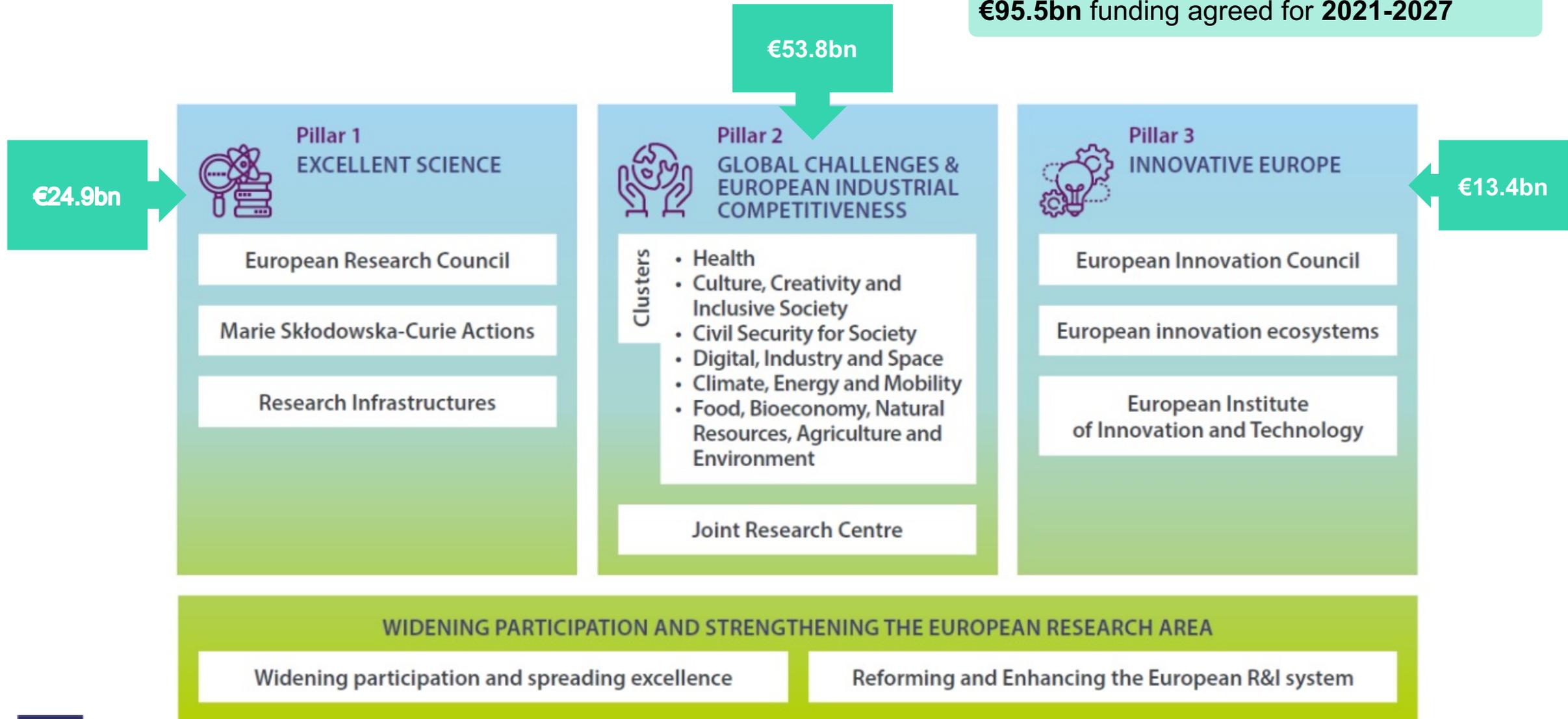
[NCPs for Europe and the rest of the world](#)

**Supporting you to succeed**



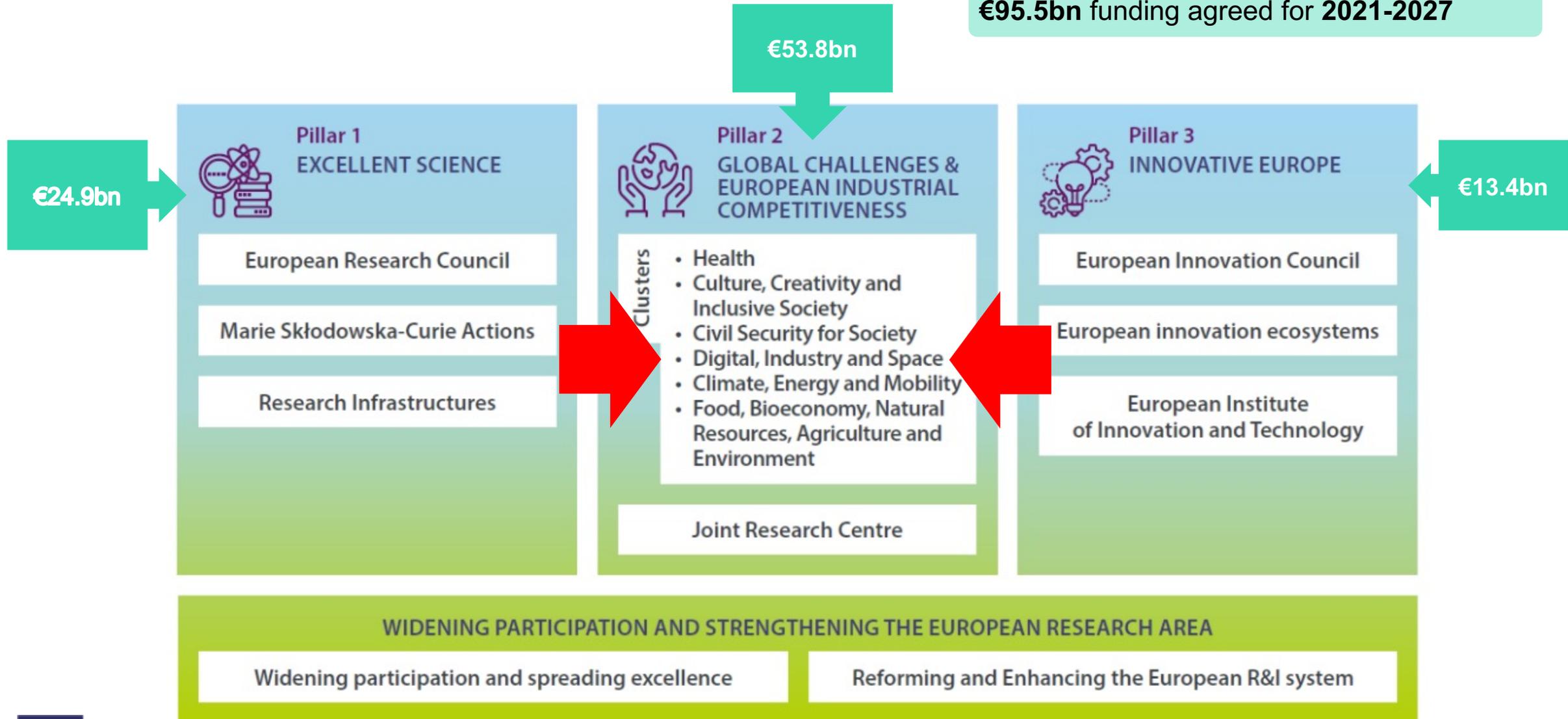
# Horizon Europe

€95.5bn funding agreed for 2021-2027



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# Funding Rates and Main Types of Action

## Research and Innovation Action (RIA)

- Typically, **low(ish) Technology Readiness Level**
- Consortium of at least three different legal entities from three different eligible countries (all UK legal entities are classed as eligible). At least one consortium member must be from a Member State (MS)
- All participants receive **100%** of eligible direct costs plus 25% for indirect costs

## Innovation Action (IA)

- Typically, **high(er) Technology Readiness Level**
- Consortium of at least three different legal entities from three different eligible countries. At least one must be from a MS
- All not-for-profit participants receive 100% of eligible direct costs plus 25% for indirect costs
- All for-profit participants receive **70% (60% if co-programmed partnerships)** of eligible direct costs plus 25% for indirect costs

## Coordination and Support Action (CSA)

- As name suggests, for coordinating and supporting activities such as working groups, networking, regulation review, communications, organising EU conferences, etc
- Formally do not need a collaborative approach but often do to meet the scope. Must have at least one from a MS
- All participants receive **100%** of eligible direct costs plus 25% for indirect costs

# Horizon Europe Strategic Plan (2021-2024)

## The first Horizon Europe Strategic Plan (2021-2024)

The first Strategic Plan sets out the key strategic orientations for the targeting of investments in the programme's first four years.

1. 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
2. Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources to ensure food security and a clean and healthy environment
3. Making Europe the first digitally enabled circular, climate-neutral and sustainable economy through the transformation of its mobility, energy, construction and production systems
4. 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.

# Work Programmes 2023 - 2024

European Commission have published the Digital, Industry and Space Work Programme for 2023-2024.



# Destinations within Cluster 4

Under pillar II of Horizon Europe, Cluster 4 focuses on digital, industry and space and aims to deliver on the following 6 Destinations matching the Strategic Plan:

1. Climate neutral, circular and digitised production
2. Increased autonomy in key strategic value chains for resilient industry
3. World leading data and computing technologies
4. Digital and emerging technologies for competitiveness and fit for the Green Deal
5. Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data
6. A human-centred and ethical development of digital and industrial technologies.

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6. A human-centred and ethical development of digital and industrial technologies.

# Destinations 1 and 2

## **Destination 1: Climate neutral, Circular and Digitised Production**

Proposals for topics under this Destination should set out a credible pathway to the following expected impact of Cluster 4: Global leadership in clean, climate-neutral and resilient industrial value chains, circular economy and climate-neutral and human-centric digital systems and infrastructures, through innovative production and manufacturing processes and their digitisation, new business models, sustainable-by-design advanced materials and technologies enabling the switch to decarbonisation in all major emitting industrial sectors, including green digital technologies.

## **Destination 2: Increased Autonomy in Key Strategic Value Chains for Resilient Industry**

Proposals for topics under this Destination should set out a credible pathway to contributing to the following expected impact of Cluster 4: Industrial leadership and increased autonomy in key strategic value chains with security of supply in raw materials, achieved through breakthrough technologies in areas of industrial alliances, dynamic industrial innovation ecosystems and advanced solutions for substitution, resource and energy efficiency, effective reuse and recycling and clean primary production of raw materials, including critical raw materials, and leadership in the circular economy.

# Partnerships and Networks within Cluster 4

The aim of European Partnerships with EU and associated countries, the private sector, foundations and other stakeholders is to deliver on global challenges and modernise industry.

The following partnerships are within the area of industry, cluster 4:

- **Made in Europe** – EFFRA
- **European Partnership for Clean Steel** - Low Carbon Steelmaking - ESTEP
- **European Partnership on Metrology** - EURAMET
- **Processes4Planet** – A.SPIRE

More information on [European Partnerships in digital, industry and space](#)

The **NCP4Industry** network of National Contact Points is the main structure to provide guidance, practical information and assistance on all aspects of participation in Horizon Europe Cluster 4 – Industry.

- Proposal idea check
- Information on the proposal, consortium and evaluation process
- Brokerage events



# Two Stage 2024 Calls for Destinations 1 and 2

Destinations	Call Topic Identifier	Call Topic	Type of Action	Budget (m)	No. of projects to be funded	Opening Date	Closing Date (First Stage)	Closing Date (Second Stage)
D1 - Climate neutral, Circular and Digitised Production	<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-01</u></a>	Bio-intelligent manufacturing industries*	RIA	€ 25.00	5	19/09/2023	07/02/2024	24/09/2024
D1 - Climate neutral, Circular and Digitised Production	<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-12</u></a>	Enhanced assessment, intervention and repair of civil engineering infrastructure*	RIA	€ 12.00	2	19/09/2023	07/02/2024	24/09/2024
D2 - Increased Autonomy in Key Strategic Value Chains for Resilient Industry	<a href="#"><u>HORIZON-CL4-2024-RESILIENCE-01-35</u></a>	Biodegradable polymers for sustainable packaging materials*	IA	€ 31.00	4	19/09/2023	07/02/2024	24/09/2024
D2 - Increased Autonomy in Key Strategic Value Chains for Resilient Industry	<a href="#"><u>HORIZON-CL4-2024-RESILIENCE-01-36</u></a>	Advanced biomaterials for the Health Care*	IA	€ 31.00	4	19/09/2023	07/02/2024	24/09/2024

# 2024 Calls for Destination 1

Call Topic Identifier	Call Topic	Type of Action	Budget (m)	No. of projects to be funded	Opening Date	Closing Date
<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-03</u></a>	Manufacturing as a Service: Technologies for customised, flexible, and decentralised production on demand	RIA	€ 35.00	5	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-05</u></a>	Technologies/solutions to support circularity for manufacturing	RIA	€ 36.00	6	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-32</u></a>	Optimisation of thermal energy flows in the process industry	IA	€ 30.00	2	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-34</u></a>	Renewable hydrogen used as feedstock in innovative production routes	RIA	€ 20.00	2	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-35</u></a>	Turning CO2 emissions from the process industry to feedstock	IA*	€ 30.00	2	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-38</u></a>	Hubs for circularity for industrialised urban peripheral areas	IA	€ 40.00	2	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-41</u></a>	Breakthroughs to improve process industry resource efficiency	RIA	€ 30.00	3	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-44</u></a>	Digital transformation and ensuring a better use of industrial data, which can optimise steel supply chains	IA	€ 10.00	2	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-TWIN-TRANSITION-01-46</u></a>	CO2-neutral steel production with hydrogen, secondary carbon carriers and electricity OR innovative steel applications for low CO2 emissions	RIA	€ 20.00	4	19/09/2023	07/02/2024

**\*Co-programmed partnership with Processes4planet –**

**All for-profit participants receive 60% of eligible direct costs plus 25% for**

# Destination 1 Synergies

## Advanced Manufacturing

Synergies are necessary between the Made in Europe Partnership and the Digital Europe Programme, primarily Industrial Data Spaces, Cybersecurity Centres and European Digital Innovation Hubs.

## Construction

Cluster 5 addresses the energy performance of buildings, under the destination 'Efficient, sustainable and inclusive energy use', as well as the Built4People co-programmed partnership for a 'people-centric sustainable built environment'.

## Energy Intensive Industries

Synergies for energy efficiency and the management of thermal energy in industry in Cluster 5, under 'Industries in energy transition'; and with the Clean Hydrogen partnership. As some necessary activities of the energy-intensive industries, such as first-of-a-kind plants, involve deployment beyond TRL 7, synergies with other EU programmes are essential in this context, in particular with the Innovation Fund, with the Life Plus Programme, and with the activities of the EIB. International cooperation in process industries will be strengthened through Mission Innovation 2.0

# 2024 Calls for Destination 2

Call Topic Identifier	Call Topic	Type of Action	Budget (m)	No. of projects to be funded	Opening Date	Closing Date
<a href="#"><u>HORIZON-CL4-2024-RESILIENCE-01-01</u></a>	Exploration of critical raw materials in deep land deposits	RIA	€ 20.00	4	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-RESILIENCE-01-04</u></a>	Technologies for processing and refining of critical raw materials	IA	€ 22.00	3	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-RESILIENCE-01-08</u></a>	Rare Earth and magnets innovation hubs	IA	€ 32.00	2	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-RESILIENCE-01-10</u></a>	Addressing due diligence requirements in raw materials supply chains.	CSA	€ 2.20	1	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-RESILIENCE-01-11</u></a>	Technologies for extraction and processing of critical raw materials	IA	€ 15.00	2	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-RESILIENCE-01-24</u></a>	Development of safe and sustainable by design alternatives	IA	€ 59.00	4	19/09/2023	07/02/2024
<a href="#"><u>HORIZON-CL4-2024-RESILIENCE-01-41</u></a>	'Innovate to transform' support for SME's sustainability transition	CSA	€ 10.00	2	19/09/2023	07/02/2024

# Destination 2 Synergies

## Raw Materials

Synergies with energy-intensive industries and in particular the circularity part; and with strategic innovation markets driven by advanced materials. A further synergy is with Cluster 5: Renewable energies and energy storage.

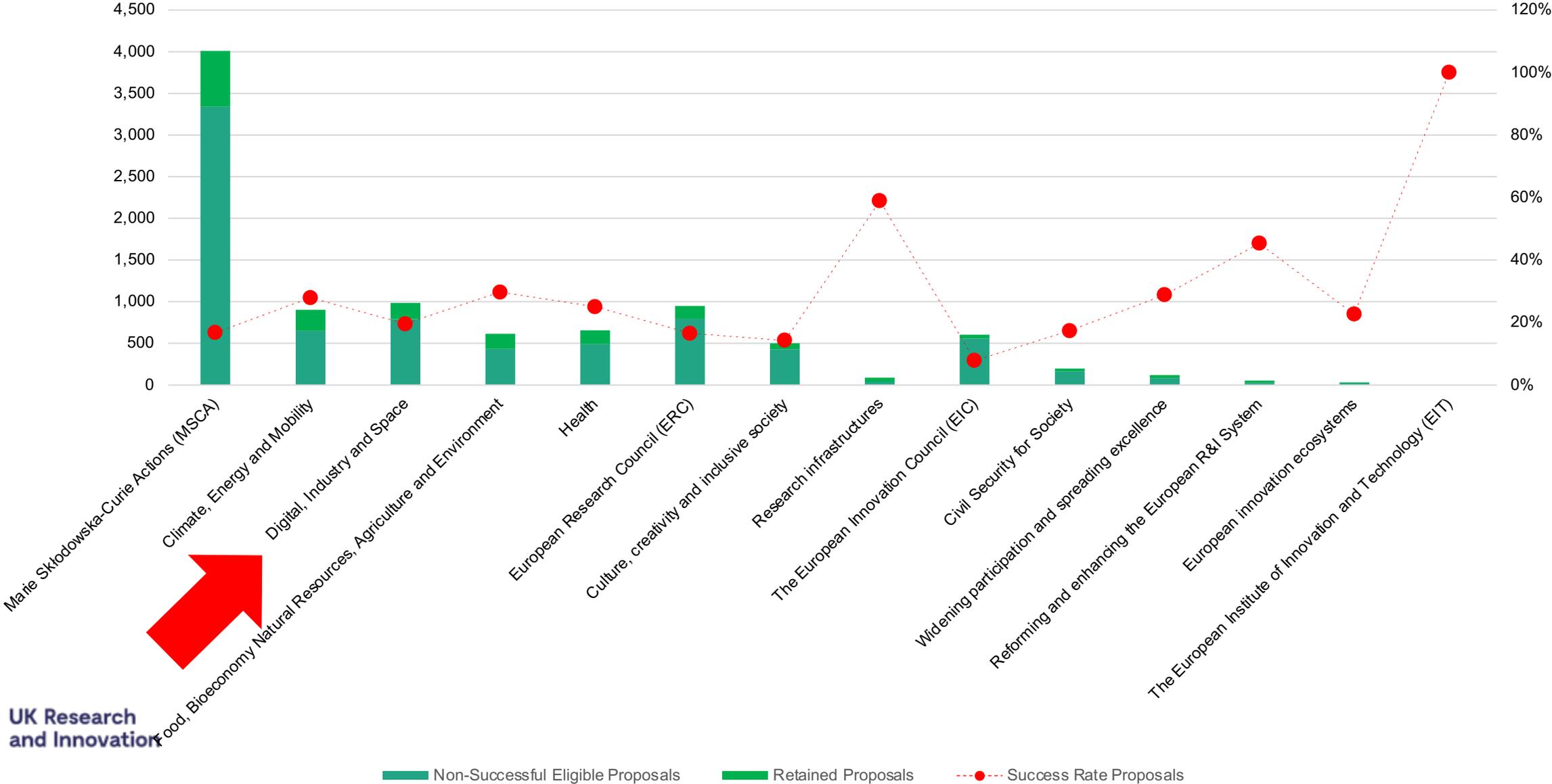
## Safe and Sustainable by Design

Synergies with Cluster 6 'Food, Bioeconomy, Natural Resources, Agriculture' in areas Bio-based Innovation Systems in the EU Bioeconomy and Circular Systems; Cluster 5 'Climate, Energy and Mobility' in view of areas on lightweight materials; Cluster 1 'Health', Destination 'Living and working in a health-promoting environment: research on impact of chemicals on human health'; and Horizon Europe Partnership on the Assessment of Risks from Chemicals (PARC): on exposure and hazard activities as well as the SSbD toolbox and case studies.

## Advanced Materials

Synergies with the energy-intensive and manufacturing industries, in view of both the circularity approaches and low-carbon technologies; and with Cluster 1 'Health', in view of areas on bio-based materials; Cluster 5 'Climate, Energy and Mobility' in view of areas on lightweight materials; Cluster 6 'Food, Bioeconomy, Natural Resources, Agriculture' in view of areas on agrochemicals. While focusing exclusively on civilian applications, there may be synergies with actions conducted under the European Defence Fund (EDF) or its precursor programmes (Preparatory Action on Defence Research and European Defence Industry Development Programme), notably in the field of advanced sensing and advanced materials.

# Horizon Dashboard – R+I Proposals



■ Non-Successful Eligible Proposals    
 ■ Retained Proposals    
 - - - ● - - - Success Rate Proposals

# Horizon Dashboard



Funding & tender opportunities  
Single Electronic Data Interchange Area (SEDIA)

English **EN**

Register

Login



SEARCH FUNDING & TENDERS

HOW TO PARTICIPATE

PROJECTS & RESULTS

WORK AS AN EXPERT

SUPPORT



Get started

Need help?

## HORIZON DASHBOARD

### Implementation figures

This section presents an overview on **evaluated proposals** (incl. success rates) and detailed statistics and data on **funded projects** and their participants in EU R&I programmes, broken down by countries and regions, research domain/programme part, organisation type, etc.

R&I Proposals

R&I Projects

### Country Profiles

Find out more about country-specific performance in EU R&I programmes: funding received, participations by region, top beneficiaries, collaboration with other countries, SME participation and more - all the information at your fingertips!

R&I Country Profiles

Country Summary fiches and success stories are also available on the [Europa website](#).

### Organisation Profile

Find out more about the performance of an organisation participating in EU R&I programmes: its projects, the amount of EU funds received, its collaborations.

Organisation Profile

### Specific aspects

This section provides views on specific policy priorities:

Find out more about the EIC! **The European Innovation Council (EIC)** supports top-class innovators, entrepreneurs, small companies and scientists with bright ideas and the ambition to scale up internationally.

European Innovation Council Pilot (EIC)

### Information and tutorials

- [Horizon Dashboard Quick Guide](#)
- [FAQ](#)
- [What is Horizon Dashboard?](#)
- [How to explore country profiles?](#) **New!**
- [Webinar on Key Features \(25 March 2020\)](#)
- [How to see H2020 participants?](#)
- [How to see SME participation in H2020?](#)
- [How to see Third Country participation in H2020?](#)
- [How to find details about specific H2020 participants?](#)

### News

Apr 16, 2023

#### How to secure your F&T Portal account with two-factor authentication – 10 May webinar for all F&T Portal users

The threats to cybersecurity are increasing. All users of the Funding & Tenders Portal are strongly encouraged to establish two-factor authentication for their EU Login account. Get first-hand information and guidance in a webinar in the morning of 10 May 2023. All details of the session are available on the [event website](#).

show more...



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# Hints and Tips

- Read the information under the call topic on the [Funding & tenders portal](#) carefully, including the 'show more' information.
- Complete background reading of the strategic documents listed under each call's topic descriptions.
- Contact your NCP(s).
- Check the [CORDIS](#) website for past and ongoing EU-funded projects to get insights into how these projects have been designed and partnerships established.
- Common mistakes to avoid when applying for Horizon Europe:
  - Getting ready to apply to EU funding
  - Formulate and plan your proposal correctly
  - Address the project's pathway towards impact



# Hints and Tips Continued

- Build a strong and multidisciplinary consortium.
  - Reach out to your pre-existing network
  - Work on building an active network within this interest area, attend relevant conferences and brokerage events.
  - Use the Partner Search tool to review an organisation based on their profile or previous application
- 
- Search or register your organisation as a participant to get a 9 digit Participant Identification Code (PIC). Steps:
    1. Create a personal login (top right)
    2. Register your organisation' (in 'Participant register' under 'How to participate')



A screenshot of the European Commission's 'Funding &amp; tender opportunities' portal. The browser address bar shows 'ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home'. The page header includes the European Commission logo and the text 'Funding &amp; tender opportunities Single Electronic Data Interchange Area (SEDIA)'. A navigation menu at the top has a yellow highlight under 'HOW TO PARTICIPATE', which has a dropdown menu open. A red arrow labeled '2' points to the 'Participant register' option in this dropdown. In the top right corner, there are 'Register' and 'Login' buttons, with a red arrow labeled '1' pointing to the 'Register' button. The main content area has a search bar and a 'Search' button. On the right, there are buttons for 'ERA corona platform', 'Brexit info', and 'Report fraud'. The UKRI logo is visible in the bottom left corner of the screenshot area.

# Upcoming Horizon Europe Info Days

This event aims to inform potential applicants about the funding opportunities of the 2024 calls of Horizon Europe Cluster 4 'Digital, Industry and Space' Work Programme 2023-2024.

During the 2-day event, speakers from the European Commission will present the call topics, the evaluation and the award process. Potential applicants will have an opportunity to ask questions.

**11 October 2023 – 12 October 2023**

[Event details including registration option](#)



# Upcoming Brokerage Events - TBC

The Horizon Europe Cluster 4 Brokerage Events will be organised by the European Networks of National Contact Points:

- Digital - organised by IDEAL-IST
- Industry - organised by NCP4Industry
- Space - organised by COSMOS4HE

The Brokerage Events provide unique opportunities for Horizon Europe proposers to establish future collaborations and consortia.

Please visit the websites of the NCP Networks to await further information and dates which should fall around October 2023.

# Space Calls

Catherine Holt

[ncp-space@innovateuk.ukri.org](mailto:ncp-space@innovateuk.ukri.org)

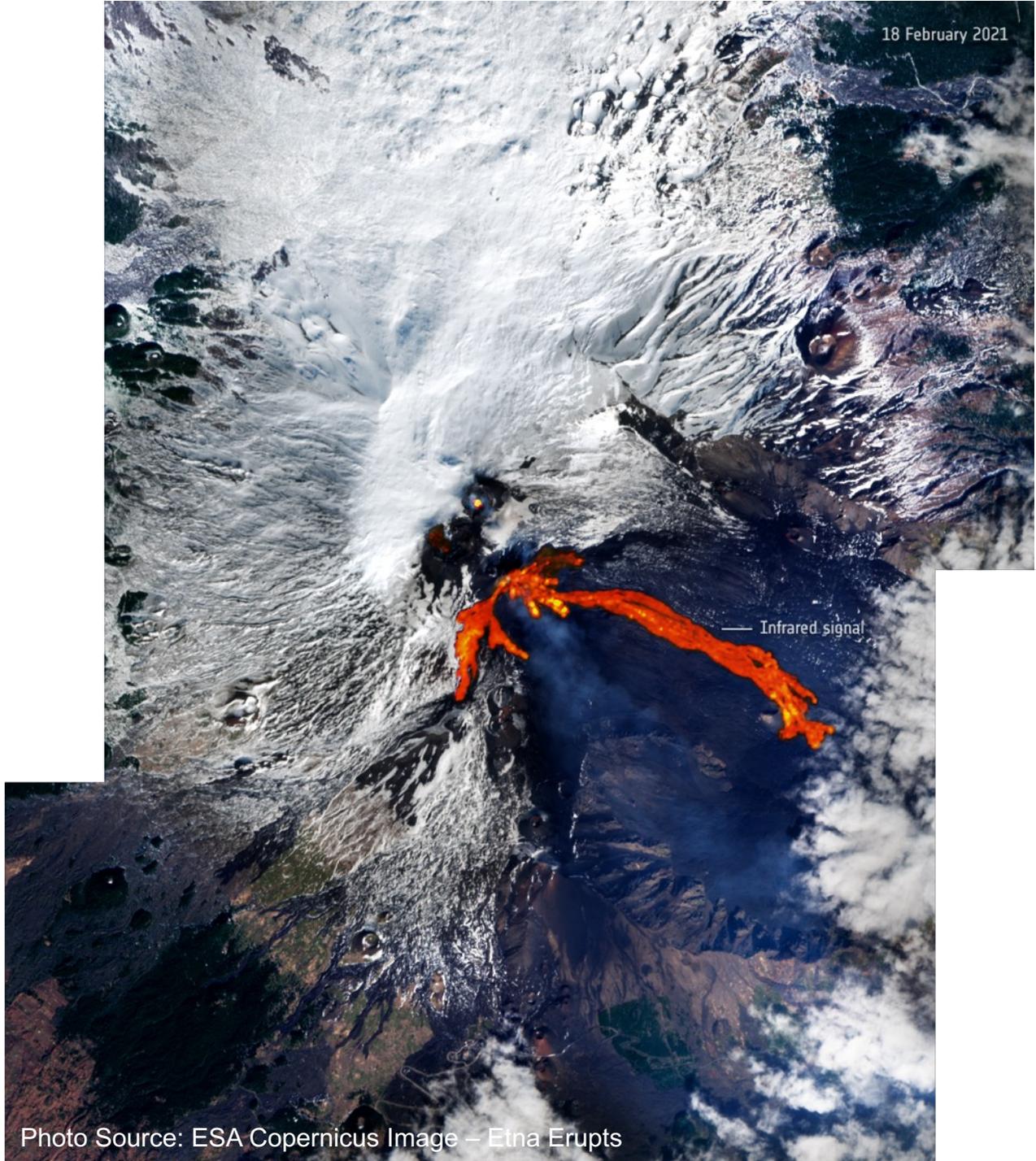


Photo Source: ESA Copernicus Image – Etna Erupts

# Space in Horizon Europe

## 5. Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data

Systems	Access	Data	Capabilities	Strategic
<ul style="list-style-type: none"><li>• SatCom</li><li>• EO</li><li>• On-orbit operations</li><li>• Electronic propulsion</li></ul>	<ul style="list-style-type: none"><li>• Launchers</li><li>• Propulsion</li><li>• Launch systems</li><li>• Ground facilities</li></ul>	<ul style="list-style-type: none"><li>• Copernicus evolution</li><li>• Copernicus applications</li><li>• EGNSS applications</li></ul>	<ul style="list-style-type: none"><li>• Quantum</li></ul>	<ul style="list-style-type: none"><li>• SSA</li><li>• GOVSATCOM</li><li>• Technology non-dependence</li><li>• Space science</li><li>• Education and skills</li><li>• Entrepreneurship</li></ul>

# UK Access to Space Topics

Participation limited to Member States, Norway, Iceland and the UK. UK participation conditional upon associated to Horizon Europe and UK equivalent space calls published and open to the EU entities on a reciprocal basis.

- HORIZON-CL4-2024-SPACE-01-64: Quantum Space Gravimetry Phase-B study & Technology Maturation

Participation limited to Member States, Norway and Iceland

- HORIZON-CL4-2024-SPACE-01-36: Copernicus for Security
- HORIZON-CL4-2024-SPACE-01-73: Space technologies for European non-dependence and competitiveness

Participation limited to Member States, third countries with agreements in place

- HORIZON-EUSPA-2023-SPACE-01-44: The Galileo PRS service for governmental authorised use cases
- HORIZON-EUSPA-2023-SPACE-01-45: Joint Test Activities for Galileo PRS service
- HORIZON-EUSPA-2023-SPACE-01-61: EU GOVSATCOM for a safer and more secure EU

# Horizon Europe Space Calls

Opens 21 Nov 2023    Deadline 20 Feb 2024    Budget €46.3M

Topic reference number	Topic title	Funding action/TRL	Budget (€)
CL4-2024-SPACE-01-35	<p><b>Copernicus for Land and Water</b></p> <ol style="list-style-type: none"> <li>1. Integrate current land products into land surface/use/cover change, and land planning and allocation models for different environments</li> <li>2. Improve global hydrological monitoring/forecasting through sophisticated inland and coastal/shore hydrological satellite observation products</li> </ol>	RIA TRL 5-6	4M (2)
CL4-2024-SPACE-01-36	<p><b>Copernicus for Security</b></p> <p>Management of enlarged data sets and evolution and scope of the security services, increasing user reach, responding to regional needs and increasing service added value in user operational scenarios.</p>	RIA TRL 5-6	8M (2)
CL4-2024-SPACE-01-64	<p><b>Quantum Space Gravimetry Phase-B study &amp; Technology Maturation</b></p> <p>Covers the quantum space gravimetry payload and satellite platform as well as the implementation measures to enhance the technological readiness of the critical components</p>	RIA TRL 6-7	14.2M (1)
CL4-2024-SPACE-01-73	<p><b>HORIZON-CL4-2024-SPACE-01-73: Space technologies for European non-dependence and competitiveness</b></p> <p>Mature critical space technologies that currently have dependency issues for use in the EU space programme</p>	RIA TRL 5-8	20.1M (7)

# Horizon Europe Space Calls - Applications

**Opens Oct 2023    Deadline Feb 2024    Budget €46.5M**

Topic reference number	Topic title	Funding action/TRL	Budget (€)
HORIZON-EUSPA-2023-SPACE-01-41	<p><b>EGNSS - Transition toward a green, smart and more secure post-pandemic society</b></p> <p>Supports the creation of cities built around its citizens, developed on efficient mobility solutions, environmentally-friendly and energetically-efficient.</p>	IA TRL 7-9	3.5M (2)
HORIZON-EUSPA-2023-SPACE-01-42	<p><b>EGNSS - Closing the gaps in mature, regulated and long lead markets</b></p> <p>Supporting GNSS adoption in mature, regulated long lead markets, including rail, maritime inland waterways, fisheries and aquaculture, road and automotive, aviation</p>	IA TRL 7-9	8M (4)
HORIZON-EUSPA-2023-SPACE-01-43	<p><b>Copernicus-based applications for businesses and policy-making</b></p> <p>Build on Copernicus data and services (and other sources) for business and policy applications: emergency, security, marine, land, climate, atmosphere</p>	RIA TRL 2	7M (5)
HORIZON-EUSPA-2023-SPACE-01-46	<p><b>Designing space-based downstream applications with international partners</b></p> <p>New or improved products, processes or services capable of generating a marketable solution for the local market</p>	RIA TRL 3-4	6M (7)

# Horizon Europe Space Calls - Applications

Opens Oct 2023   Deadline Feb 2024   Budget €46.5M

Topic reference number	Topic title	Funding action/TRL	Budget (€)
HORIZON-EUSPA-2023-SPACE-01-44	<b>The Galileo PRS service for governmental authorised use cases</b> Applications for identified operational environments, e.g. critical infrastructure management and security, law enforcement, emergency and disaster recovery	IA TRL 5-7	9M (5)
HORIZON-EUSPA-2023-SPACE-01-45	<b>Joint Test Activities for Galileo PRS service</b> Actions related to validation and verification, testing and awareness activities and uptake to authorised users	IA TRL 6-7	3M (2)
HORIZON-EUSPA-2023-SPACE-01-61	<b>EU GOVSATCOM for a safer and more secure EU</b> Identification, assessment and development of one or more suitable use case in the area of surveillance, crisis management and key infrastructure	IA TRL 7-9	10M (3)

# Horizon Europe Non-Space Calls

The application of EGNSS and Copernicus data is used across all of the clusters and focus on topics that can strongly benefit from the space capabilities offered by satellites. EUSPA provides a [list of examples](#) and includes

- HORIZON-HLTH-2024-ENVHLTH-02-06-two-stage: The role of environmental pollution in non-communicable diseases: air, noise and light and hazardous waste pollution
- HORIZON-CL3-2024-BM-01-05: Detection and tracking of illegal and trafficked goods
- HORIZON-CL3-2024-INFRA-01-03: Advanced real-time data analysis used for infrastructure resilience
- HORIZON-CL3-2024-DRS-01-04: Hi-tech capacities for crisis response and recovery after a natural-technological (NaTech) disaster
- HORIZON-CL4-2024-RESILIENCE-01-01: Exploration of critical raw materials in deep land deposits (RIA)
- HORIZON-CL5-2024-D1-01-01: Enhanced quantification and understanding of natural and anthropogenic methane emissions and sinks
- HORIZON-CL5-2024-D1-01-02: Inland ice, including snow cover, glaciers, ice sheets and permafrost, and their interaction with climate change
- HORIZON-CL6-2024-GOVERNANCE-01-5: Customisation/pre-operationalisation of prototypes end-user services in the area Climate Change Adaptation and Mitigation



UK Research  
and Innovation



Thank you



[ncp-space@iuk.ukri.org](mailto:ncp-space@iuk.ukri.org)



**UK Research  
and Innovation**

# Horizon Europe

**Craig Sharp**

*Horizon Europe UK National Contact Point for Digital*

[NCP-Digital@iuk.ukri.org](mailto:NCP-Digital@iuk.ukri.org)



**HORIZON EUROPE**

THE NEXT EU RESEARCH & INNOVATION  
PROGRAMME (2021 – 2027)

[www.ukri.org/HorizonEU](http://www.ukri.org/HorizonEU)



# Digital opportunities

- Horizon Europe - multiple [work programmes](#)
  - A large number of Digital topics are within the Digital, Industry and Space workprogramme – but...
  - Digital opportunities are also available across other (Pillar 2) Cluster work programmes ([Mobility](#), [Health](#), [Energy](#), [Climate](#), [Security](#), etc. often embedded in project activities, not just [Digital, Industry and Space](#))
  - Each work programme has its own National Contact Point - <https://www.gov.uk/business-finance-support/horizon-europe-funding>
  - Note also EIC challenge calls



# Where you find funding calls and info



SEARCH FUNDING &amp; TENDERS

HOW TO PARTICIPATE

PROJECTS &amp; RESULTS

WORK AS AN EXPERT

SUPPORT



Get started

Digital

 Match whole words only GRANTS TENDERS

## Submission status

 Forthcoming (179)

 Open for submission

 Closed

## Programming period

2021 - 2027 (179)



Horizon Europe (HORIZON)



## Programme part

Select a Programme part...

## Mission

Select a Mission...

## Destination

Select a Destination...

## Quick search on specific priorities

Select a Priority...

Filter by call

## Funding and tenders (179)

Need help?



Sort by:

Submission status



## Open Source for Cloud/Edge to support European Digital Autonomy (RIA)

HORIZON-CL4-2024-DIGITAL-EMERGING-01-21

Call for proposal

Grant

Programme Horizon Europe (HORIZON)

Status Forthcoming

Type of action HORIZON Research and Innovation Actions

Deadline model single-stage

Opening date 15 November 2023

Deadline date 19 March 2024 17:00:00 Brussels time

## Digital democracy

HORIZON-CL2-2024-DEMOCRACY-01-07

Call for proposal

Grant

Programme Horizon Europe (HORIZON)

Status Forthcoming

Type of action HORIZON Research and Innovation Actions

Deadline model single-stage

Opening date 04 October 2023

Deadline date 07 February 2024 17:00:00 Brussels time

## Digital for nature

HORIZON-CL6-2024-BIODIV-01-2

Call for proposal

Grant

Programme Horizon Europe (HORIZON)

Status Forthcoming

Type of action HORIZON Innovation Actions

Deadline model single-stage

Opening date 17 October 2023

Deadline date 22 February 2024 17:00:00 Brussels time

## New digital twins for Destination Earth

HORIZON-INFRA-2024-TECH-01-03

Call for proposal

Grant

Programme Horizon Europe (HORIZON)

Status Forthcoming

Type of action HORIZON Research and Innovation Actions

Deadline model single-stage

Opening date 06 December 2023

Deadline date 12 March 2024 17:00:00 Brussels time

## Digital tools for CSP and solar thermal plants

HORIZON-CL5-2024-D3-02-01

Call for proposal

Grant

Programme Horizon Europe (HORIZON)

Status Forthcoming

# Where you find funding calls and info - keywords



European Commission | Funding & tender opportunities  
Single Electronic Data Interchange Area (SEDIA)

English 

[Register](#) [Login](#)

SEARCH FUNDING & TENDERS | HOW TO PARTICIPATE | PROJECTS & RESULTS | WORK AS AN EXPERT | SUPPORT | [Get started](#)

Match whole words only

GRANTS  TENDERS

Submission status

Forthcoming (3)  Open for submission  Closed

Programming period

2021 - 2027 (3)

Horizon Europe (HORIZON)

Programme part:

Mission:

Destination:

Quick search on specific priorities:

Funding and tenders (3) [Need help?](#) [RSS](#) [Calendar](#) Sort by:

**Advanced digitalisation and modelling utilizing operational and other data to support zero emission waterborne transport (ZEWTP Partnership)** [Call for proposal](#) [Grant](#)

HORIZON-CL5-2024-D5-01-15

<b>Programme</b>	Horizon Europe (HORIZON)	<b>Status</b>	<b>Forthcoming</b>
<b>Type of action</b>	HORIZON Innovation Actions	<b>Deadline model</b>	single-stage
<b>Opening date</b>	07 December 2023	<b>Deadline date</b>	18 April 2024 17:00:00 Brussels time

**Advanced battery system integration for next generation vehicles (2ZERO Partnership)** [Call for proposal](#) [Grant](#)

HORIZON-CL5-2024-D5-01-03

<b>Programme</b>	Horizon Europe (HORIZON)	<b>Status</b>	<b>Forthcoming</b>
<b>Type of action</b>	HORIZON Research and Innovation Actions	<b>Deadline model</b>	single-stage
<b>Opening date</b>	07 December 2023	<b>Deadline date</b>	18 April 2024 17:00:00 Brussels time

**Ocean models for seasonal to decadal regional climate impacts and feedbacks** [Call for proposal](#) [Grant](#)

HORIZON-CL6-2024-CLIMATE-01-6

<b>Programme</b>	Horizon Europe (HORIZON)	<b>Status</b>	<b>Forthcoming</b>
<b>Type of action</b>	HORIZON Research and Innovation Actions	<b>Deadline model</b>	single-stage
<b>Opening date</b>	17 October 2023	<b>Deadline date</b>	22 February 2024 17:00:00 Brussels time

1 / 50

# Cluster 4: Digital, Industry and Space

## Six “Destinations” (topic groups) in the Workprogramme

1. Climate neutral, circular and digitised production
2. Increased autonomy in key strategic value chains for resilient industry
3. World leading data and computing technologies
4. Digital and emerging technologies for competitiveness and fit for the Green Deal
5. Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data
6. A human-centred and ethical development of digital and industrial technologies

# Digital, Industry & Space (Cluster 4)

Destinations 1 & 2

## Industry

- Circular Industries, Waste
- Clean Steel, Construction
- Resource & Energy efficiency
- Digital Mfg. & Automation
- Sustainability by design
- Light weight structures, Plastics
- Smart, Multi-functional materials (incl. Composites, Nano & bio)
- Adv. Materials for Energy storage (incl. Hydrogen & Electrification)

NCP Industry: Cherie Gardiner

Destinations 3,4,6

## Digital

- AI, Data & Computing
- Photonics & Electronics
- Smart Networks & Connectivity
- Robotics
- Quantum
- Graphene/2D materials
- Digital Economy, standards, NGI, XR, Human factors, Industry 5.0
- \*plus separate calls on 5/6G, Key Digital Technologies – electronic systems, semiconductors

NCP Digital: Craig Sharp

Destinations 5

## Space

- Satellite technology
- Access to space
- Space data
- Space science
- Space robotics

NCP Space: Catherine Holt

# Partnerships in Digital, Cluster 4

The aim of European Partnerships with EU and associated countries, the private sector, foundations and other stakeholders is to deliver on global challenges and modernise industry.

The following are key partnerships in the area of Digital:

1. Artificial Intelligence, Data and Robotics – <https://adr-association.eu>
2. Photonics - <https://www.photonics21.org>
3. Smart Networks and Services - <https://6g-ia.eu>
4. Key Digital Technologies – <https://www.kdt-ju.europa.eu>

[Digital, industry and space \(europa.eu partnership details\)](#)

Digital NCP support can also be found through the Digital NCP project Ideal-ist - <https://www.ideal-ist.eu>

# 2024 (Cluster 4) Digital Calls

- Data – 3 topics, €85m
- Digital Emerging (AI, Data, Robotics, ESP, 2D, Quantum) – 11 topics, €224.5m
- Human (AI/trust, Standards) – 3 topics, €56m
- Common deadline – 18/03/2024
- [2023/24 Digital, Industry and Space workprogramme](#) (all topics, except 6G/SNS and KDT)
- 6G Smart Networks and Systems – 10 (draft) topics, €120m

European Commission 2024 Digital, Industry and Space Info Days 11-12<sup>th</sup> October / brokerage

## 2024 Digital Topics – Data sharing/analytics, Cloud-Edge-IoT (19/3/24 deadline)

Topic	Title	TRL range	Project funding (€m)	Estimated projects
HORIZON-CL4-2024-DATA-01-01	<p><b><u>AI-driven data operations and compliance technologies (AI, data and robotics partnership) (IA)</u></b></p> <p>Develop, pilot and integrate systems/compliance tools that process higher data volumes more efficiently. Measurement, labelling, certification and reduction of environmental footprint (minimizing data transfers/traffic, reduce energy consumption of AI training/machine learning, privacy preservation, etc). Monitor, control and track/record transactions on data. Practical, affordable and automated compliance tools (privacy preservation, smart contracting, consent management, bias detection, quality measurement, tracking of uses of data etc.).</p>	4/5->6/7	8-10	4
HORIZON-CL4-2024-DATA-01-03	<p><b><u>Piloting emerging Smart IoT Platforms and decentralized intelligence (IA) (FSTP)</u></b></p> <p>Uptake and upscaling of emerging EU-driven smart industrial IoT and Edge computing systems, to mature technologies like meta-operating systems for the IoT and the Edge. Pilot mature solutions, technology integration - sensors, actuators, distributed control, connectivity, edge computing and embedded reasoning to demonstrate security, resilience and autonomy of system, low data processing latency for analytics and AI-inference and decentralised intelligence at the edge. Cross-sector platforms in more than one application domain - renewable energy, buildings and electro-mobility, farming and/or industrial automation, including condition-monitoring/predictive maintenance and logistics.</p>	3/4->6/7	20-25	2
HORIZON-CL4-2024-DATA-01-05	<p><b><u>Platform Building, standardisation and Up-scaling of the 'Cloud-Edge-IoT' Solutions (CSA, Horizontal Activities )</u></b></p> <p>Support programme implementation across projects/topics, consensus on interoperability and standards, ecosystem building in and across verticals, environmental and green impact. Efficient interplay of computing, network connectivity, AI and learning, etc. Links to relevant European and national initiatives and partnerships like KDT JU, active cross-fertilisation across academia and industry and sectors.</p>	-	2	1

## 2024 Digital Topics – AI based on trust, Standards (19/3/24 deadline)

Topic	Title	TRL range	Project funding (€m)	Estimated projects
HORIZON-CL4-2024-HUMAN-01-06	<p><a href="#"><u>Explainable and Robust AI (RIA) (AI Data and Robotics Partnership)</u></a></p> <p>Advance AI-algorithms that can perform safely under a common variety of circumstances, reliably in real-world conditions and predict when these operational circumstances are no longer valid. The research should aim at advancing robustness and explainability for a generality of solutions, while leading to an acceptable loss in accuracy and efficiency, and with known verifiability and reproducibility. The focus is on extending the general applicability of explainability and robustness of AI-systems by foundational AI and machine learning research.</p>	2/3->4/5	9-10	3
HORIZON-CL4-2024-HUMAN-01-07	<p><a href="#"><u>Collaborative intelligence – combining the best of machine and human (AI Data and Robotics Partnership) (RIA)</u></a></p> <p>Demonstrate value of human-machine collaboration and interaction - improved effectiveness, intuitiveness, efficiency, completeness, limits of knowledge indication and other objective or quantifiable subjective measures. Demonstrate how collaborative decision-making improves over human decision-making and that the collaborative decisions cover all stages of reasoning (that they are based on an improved coverage of data and knowledge sources, on an improved analytic ability to reason from input to output, and on a well-communicated decision).</p>	2/3->4/5	5	4
HORIZON-CL4-2024-HUMAN-01-61	<p><a href="#"><u>Facilitate the engagement in global ICT standardisation development (CSA) FSTP</u></a></p> <p>Reinforce the presence of EU and associated states experts in the global ICT standardisation scene, set up an ICT standardisation observatory and facility supporting participation of key European specialists (SMEs, societal stakeholders and Academia) in key international and global Standard Developing Organisations. The project should foresee actions related to topics in the Rolling Plan for ICT standardisation as well as related to internet standardisation.</p>	-	6	1

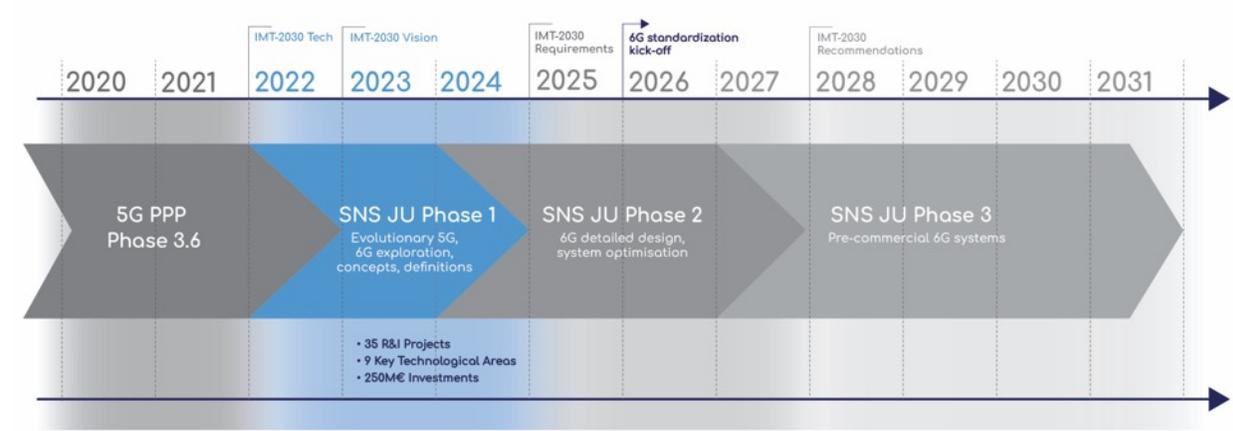
## 2024 Digital topics: AI, Data and Robotics, Open Source (19/3/24 deadline)

Topic	Title	TRL range	Project funding (€m)	Estimated projects
HORIZON-CL4-2024-DIGITAL-EMERGING-01-03	<p><a href="#"><u>Novel paradigms and approaches, towards AI-powered robots– step change in functionality (AI, data and robotics partnership) (RIA)</u></a> Major advances in functional performance - navigation to enhance mobility (underwater, ground, air, hazardous environments), including people and dynamic environments. Enhanced manipulation capabilities – large/heavy, or small, deformable, hazardous. Large-&gt;manufacturing, wind turbines, dwellings, large infrastructure, etc. Small-&gt;medical, healthcare, pharmaceutical, lab process industries, micro-assembly. significant enhancement of functional interaction capabilities to deliver efficient, safe and natural interaction with people, objects, with other robots, within complex and dynamic working environments.</p>	2/3->4/5	8	4
HORIZON-CL4-2024-DIGITAL-EMERGING-01-04	<p><a href="#"><u>Industrial leadership in AI, Data and Robotics boosting competitiveness and the green transition (AI Data and Robotics Partnership) (IA) (FSTP)</u></a>: Demonstrate the added value of integrating either AI and Data, or AI, Data and Robotics technologies through large-scale validation scenarios reaching critical mass, attracting new user industries/demonstrating business opportunities to boost the uptake. Recycling of electric car batteries, cleaning/monitoring oceans, decommissioning energy infrastructure, materials recycling, better adaption of production to demand, etc. SMEs and/or start-ups with significant potential to foster innovation through their engagement with large scale pilots - target sectors and application domains with wide-scale deployment potential and maximum contribution to the green deal.</p>	3/5->6/7	10	5
HORIZON-CL4-2024-DIGITAL-EMERGING-01-22	<p><a href="#"><u>Fundamentals of Software Engineering (RIA)</u></a> Responsible software engineering methods, tools, novel AI and data technologies – efficient agile modelling, verification, validation, vulnerability, mitigation. Smart intelligent system specification, agile system and code development, advanced code analysis, fault prediction and location and self-repair by using emerging techniques. Methods/tools for development of dynamic/resilient software for systems on multiple processing architectures including cross-compilation, run-time self- adaptation and multi-architecture executables.</p>	2->5	4-6	4
HORIZON-CL4-2024-DIGITAL-EMERGING-01-21	<p><a href="#"><u>Open Source for Cloud/Edge to support European Digital Autonomy (RIA)</u></a> European Open Cloud and Edge Computing Architecture: open source alternatives to enable physical use of emerging processors in cloud and edge server systems. Modules include basic input/output systems, pre- boot execution environments, power-on authentication, etc., supporting heterogeneous processor architectures, and demonstrating actual cloud and edge systems in real life or emulated computing environments exploiting benefits of an extended open source stack (socket to application) on emerging processor architectures (e.g. RISC-V).</p>	4->6	4-6	4
HORIZON-CL4-2024-DIGITAL-EMERGING-01-23	<p><a href="#"><u>Public recognition scheme for Open Source (CSA)</u></a> European annual awards that acts as a spotlight Open Source Software and Hardware projects, develop a scheme/list of fields related to Open Source. Deep contributions to kernel code, utilization of open source in companies' new developments. Scrutinize different fields of open source, select appropriate candidates, implement award ceremonies</p>	-	2	1

# 2024 Digital topics: Photonics, Graphene/2D Materials, Quantum (19/3/24 deadline)

Topic	Title	TRL range	Project funding (€m)	Estimated projects
HORIZON-CL4-2024-DIGITAL-EMERGING-01-54	<p><a href="#">Smart photonics for joint communication &amp; sensing and access everywhere (Photonics Partnership) (RIA)</a></p> <p>Sensors/probes to monitor the quality of the communication network and of photonic signals; Light-based solutions to let the communication network sense, while transporting data ; network energy efficiency, security, resilience. Warn and protect against natural disasters, earthquakes ; monitor the infrastructure where the fibre is deployed (traffic, stress in bridges, etc; systems integration. Fibre to the home, fibre to the antenna or fibre to the sky (satellite), for example with coherent passive optical networks, free space optics, Lifi or optical beamforming and steering</p>	2->5	3-5	4
HORIZON-CL4-2024-DIGITAL-EMERGING-01-55	<p><a href="#">Photonics Innovation Factory for Europe (Photonics Partnership) (IA)</a></p> <p>Sustainable streamlined ecosystem for photonics innovation in Europe; virtual factory with a flexible and open structure, European ecosystem cross-border deep innovation support in core photonics technologies, streamlined virtual access, supported through a network of competence centres acting as a single consortium, to a supply chain which offers a broad range of photonics technologies that cover the entire photonics innovation spectrum from concept to commercialization (TRL2-7). Target primarily first users and early adopters. innovative and industrially relevant cross border support, include business-related coaching.</p>	2/5->4/7	15	1
HORIZON-CL4-2024-DIGITAL-EMERGING-01-31	<p><a href="#">Pilot line(s) for 2D materials-based devices (RIA)</a></p> <p>Continue the efforts started in the 2D experimental Pilot Line of the Graphene Flagship and build on the IP to establish a 2DM pilot line(s). Focus on the (co-)integration of 2DM with established technologies such as CMOS integration and heterogeneous integration. Include supply of standard semiconductor technologies such as CMOS, ASICs, planarized waveguides already adapted/optimized for 2DM co-integration</p>	3/4->5/6	33	1
HORIZON-CL4-2024-DIGITAL-EMERGING-01-34	<p><a href="#">Synergy with national and regional initiatives in Europe (CSA)</a></p> <p>Support the coordination between relevant national and regional public authorities funding research and innovation in 2DM-based technologies. Active networking of relevant initiatives and R&amp;I communities. Follow-up of the projects funded under FLAG-ERA, inventory of funding and scientific landscapes in 2D materials in Europe, both basic and applied research. Analyse gaps, overlaps, contributing to topics on national/regional research agendas. Supporting the national and regional actors to organise joint calls for proposals.</p>	3-5 by end	3	1
HORIZON-CL4-2024-DIGITAL-EMERGING-01-42	<p><a href="#">Stimulating transnational research and development of next generation quantum technologies, including basic theories and components (RIA) (Cascading grant with FSTP)</a></p> <p>Support to transnational projects in quantum technologies, fostering synergy between European, national and regional initiatives and promoting broader partnerships between the European stakeholders in quantum technologies</p>	1/4->6	15	1

# 5/6G topics - Smart Networks and Systems



- Advanced 5G/6G development
- €900m programme budget
- More info/funded projects: <https://smart-networks.europa.eu>
- Draft 2024 topic text in current workprogramme for info – update due Q3 2023
- 6G Industry Association - <https://6g-ia.eu>

UK organisations are eligible for 6GIA membership



# Smart Networks and Services draft 2024 Topics (to be updated)

Topic Area	Number	Topic Title	Action	TRL range	Project budget (€m)	Topic budget (€m)
Call SNS- Stream B - Research for Radical 6G Technology and systems	HORIZON-JU-SNS-2024-STREAM-B-01-01	<b>System Architecture - Standardisation and Follow-up/PoCs</b>	RIA	3-5 by end	8	16
	HORIZON-JU-SNS-2024-STREAM-B-01-02	<b>Wireless Communication Technologies and Signal Processing – Standardisation and Follow-up/PoCs</b>	RIA	3-5 by end	8	16
	HORIZON-JU-SNS-2024-STREAM-B-01-03	<b>Communication Infrastructure Technologies and Devices – Standardisation and Follow-up/PoCs</b>	RIA	3-5 by end	8	16
	HORIZON-JU-SNS-2024-STREAM-B-01-04	<b>Reliable Services and Smart Security– Standardisation and Follow-up/PoCs</b>	RIA	3-5 by end	8	16
	HORIZON-JU-SNS-2024-STREAM-B-01-05	<b>International Collaboration – EU-JP</b>	RIA	2-5 by end	3	3
	HORIZON-JU-SNS-2024-STREAM-B-01-06	<b>International Collaboration – EU-SK</b>	RIA	2-5 by end	3	3
	HORIZON-JU-SNS-2024-STREAM-B-01-07	<b>Sustainability</b>	RIA	2-5 by end	10	10
Call SNS - Stream C – Smart Network & Services experimental infrastructure	HORIZON-JU-SNS-2024-STREAM-C-01-01	<b>SNS Microelectronics Lighthouse</b>	RIA	up to 6 by end	10	10
Stream D - SNS Large Scale Trials and Pilots with Verticals	HORIZON-JU-SNS-2024-STREAM-D-01-01	<b>SNS Large Scale Trials and Pilots (LST&amp;Ps) with Verticals</b>	IA	5-7 by end	10-15	26
SNS Coordination and Support Actions (CSAs)	HORIZON-JU-SNS-2024-STREAM-CSA-01	<b>SNS Operations and Output optimization</b>	CSA	-	4	4

SNS (2024 draft) work programme - [https://smart-networks.europa.eu/wp-content/uploads/2022/12/sns\\_ri\\_wp\\_2023-24.pdf](https://smart-networks.europa.eu/wp-content/uploads/2022/12/sns_ri_wp_2023-24.pdf)

# Key Digital Technologies JU



## Key Digital Technologies (Electronic systems, semiconductors) – ECSEL in H2020

- 2024 call under early development
- Mix of (relatively) open calls and more focused ones
- KDT SRIA and further info available at <https://www.kdt-ju.europa.eu/>
- EU Chips Act – additional funding/topics for this area expected late 2023

# 2024 Digital topic links (incl 6G, KDT)

- [ADRA](#) – key European industrial association – feeds into the 7-year roadmap that underpins topic development in the AI, Data and Robotics area with the European Commission. Recently funded projects [here](#)
- [Photonics21](#) – partnership for photonics ( including roadmap)
- [2023/24 Digital, Industry and Space workprogramme](#) pdf (all topics, except 6G/SNS and KDT)
- [2024 Data/analytics topics](#)
- [2024 AI, Data, Robotics, ESP/Quantum topics](#)
- [2024 Human Centred topics](#)
- [6G Smart Networks and Services](#) (2024 draft topics [here](#), recently funded projects [here](#))
- [Key Digital Technologies](#) (electronic systems, semiconductors)

# Pillar 3 - European Innovation Council (EIC)



- Europe's flagship innovation programme to identify, develop and scale-up breakthrough technologies and game changing innovations.
- Annual Work Programme with €1.2 Billion in 2023 - <https://eic.ec.europa.eu/eic-funding-opportunities/>
- EIC Pathfinder Challenge
  - Architecture, Engineering and Construction digitalisation for a novel triad of design, fabrication, and materials
  - Responsible electronics
- EIC Transition Challenge: Chip-scale Optical frequency combs
- EIC Accelerator Challenge (4/10/23 deadline), SME focus
  - [Emerging semiconductor or quantum technology components](#)
  - Construction digitalisation for decarbonisation
  - Energy storage,
  - space technologies and services
- NCP contact - [NCP-EIC-Transition-Accelerator@iuk.ukri.org](mailto:NCP-EIC-Transition-Accelerator@iuk.ukri.org) or [NCP-EIC-Pathfinder@iuk.ukri.org](mailto:NCP-EIC-Pathfinder@iuk.ukri.org)

# Summary - additional useful information

- [Funding and Tenders portal](#) (source of all info)
  - [UK National Contact Point](#) list (free advice and support)
  - EC - How to prepare a [successful proposal](#) and [scientific excellence](#)
  - [EC - Dissemination & Exploitation](#) in Horizon Europe
- Check out the [Reference Documents](#) – if there is any conflicting information this is the officially recognised correct source.
- The best helpdesk ever is the free to use [IPR Helpdesk](#). They have templates, guides and proforma such as Teaming Agreements, [MOUs, NDA templates](#), how to write an [exploitation and dissemination plan](#), etc

# Horizon Europe Support

UK NCP network - support for each area of Horizon Europe

International NCP network – support in Member States, Associated Countries and Third Countries

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/ncp>

Knowledge Transfer Network (KTN) has sector specialists as well as EU specialists

Support in the Devolved Administrations

Innovate UK EDGE has regional offices and access to a large database of companies seeking collaboration

UK support - [www.ukri.org/HorizonEU](http://www.ukri.org/HorizonEU)

## Horizon Europe: help for UK applicants

### Contents

- **Overview**
- Apply for Horizon Europe funding
- Find partners and collaborators for Horizon Europe
- Get guidance and help with Horizon Europe

### Related content

- ⇒ Working on EU-funded projects
- ⇒ UKRI Brussels

## Overview

Horizon Europe is an EU research and innovation programme. It has a budget of €95.5 billion and runs until 2027.

If you're a UK-based researcher or innovator, you can apply to most Horizon Europe funding opportunities on the same terms as EU-based applicants.



UK Research  
and Innovation

# Horizon Europe

Cherie Gardiner – Industry [NCP-Industry@iuk.ukri.org](mailto:NCP-Industry@iuk.ukri.org)

Catherine Holt – Space [NCP-Space@iuk.ukri.org](mailto:NCP-Space@iuk.ukri.org)

Craig Sharp - Digital [NCP-Digital@iuk.ukri.org](mailto:NCP-Digital@iuk.ukri.org)



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