

# Horizon Europe

Framework programme for research and innovation 2021–2027

# Mötesetikett

- Stort möte = alla mikrofoner avstängda
- Under presentationen, ställ dina frågor i chatten. Dessa tas upp vid avsedd tid i agendan av chatt-ansvarig (Mikael)
- Chatten används enbart för frågor, ingen diskussion, med hänsyn till den som presenterar
- Vid tekniska problem maila [johan.lindberg@vinnova.se](mailto:johan.lindberg@vinnova.se)
- Presentationen kommer att delas via Vinnovas kalendarium
- Vi utvärderar mötet via [menti.com](https://www.menti.com): kod 3539 7732 – fyll i efter mötet!



# Idag

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- Kort om bakomliggande policy
- Introduktion till Horisont Europa
- Europeiska Försvarsfonden
- Partnerskapsprogram
- Destinationer och fokusområden i digital, industry & space
- Vägledning och stöd
- Frågestund



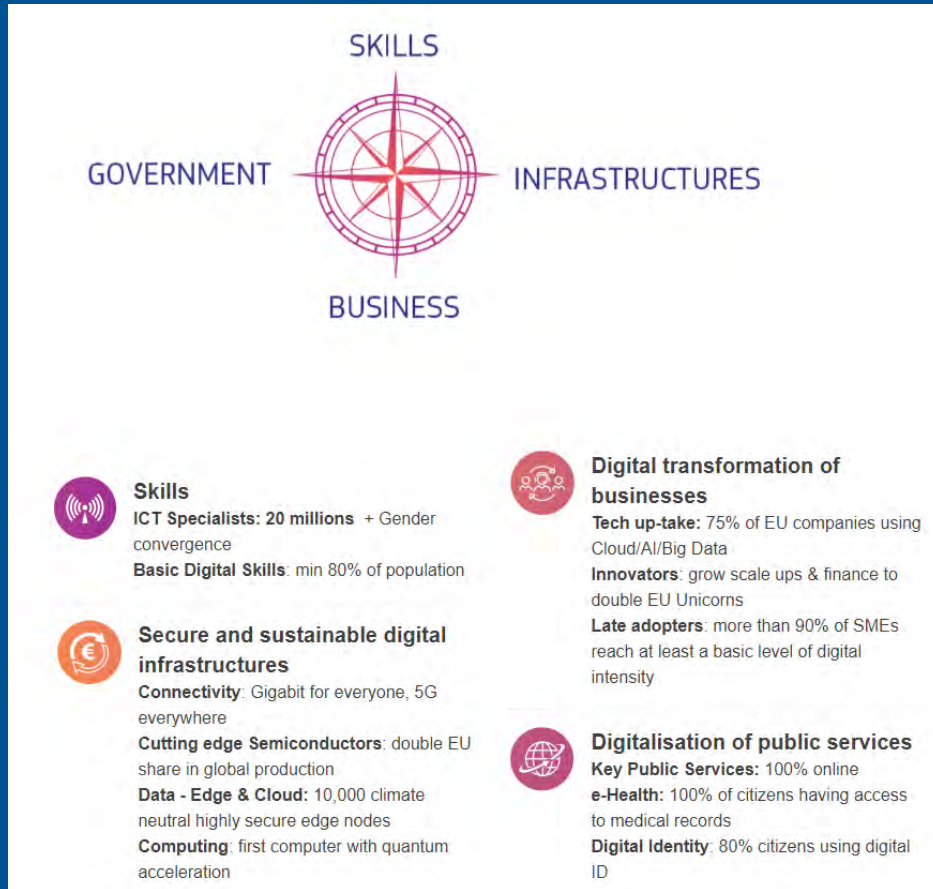
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The Horizon framework programme is a **POLITICAL INSTRUMENT** where research and innovation are needed to achieve political priorities



# A Europe fit for the digital age

## Europe's digital decade Digital targets for 2030



# A Europe fit for the digital age

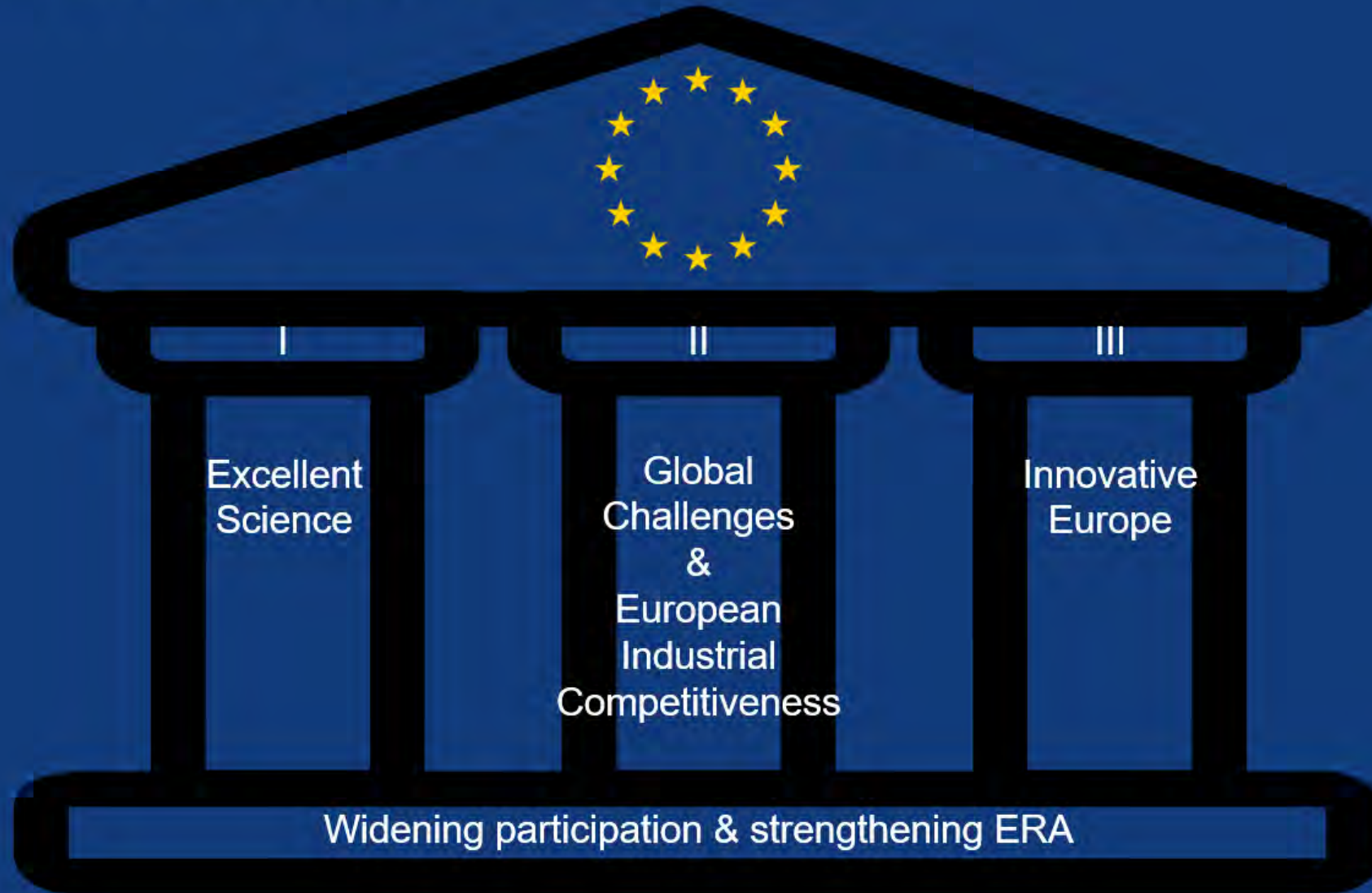
Empowering people with a new generation of technologies

## Nine Actions

1. Artificial Intelligence
2. European data strategy
3. European industrial strategy
4. High Performance Computing (HPC)
5. Digital Markets Act
6. Digital Services Act
7. Cybersecurity
8. Digital skills
9. Connectivity

[https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age_en)

# HORIZON EUROPE



# HORIZON EUROPE

# EURATOM

## SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

*Exclusive focus on  
defence research  
& development*

Research  
actions

Development  
actions

## SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT\*

*Exclusive focus on civil applications*



**Pillar I**  
EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie

Research Infrastructures



**Pillar II**  
GLOBAL CHALLENGES &  
EUROPEAN INDUSTRIAL  
COMPETITIVENESS

Clusters

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre

Partnerships & Missions



**Pillar III**  
INNOVATIVE EUROPE

European Innovation  
Council

European innovation  
ecosystems

European Institute of  
Innovation & Technology\*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

Fusion

Fission

Joint  
Research  
Center

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

# 95,5 billion euro

VINNOVA



# European Defence Fund

# Europeiska försvarsfonden (EDF)

## Finansiering

- Forskning: 100% av godkända kostnader
- Utveckling: EU-bidrag 20-80 (100)% av godkända kostnader (bonussystem finns). Utveckling kräver därför oftast medfinansiering från MS försvarsmyndigheter (för EDF: generellt Försvarsmakten i Sverige)
- Indirekta kostnader: 25% av godkända kostnader alt. nationell praxis kommunicerad med KOM

## Associerade länder

- Endast Norge är associerat land

## Deltaganderegler

- Endast entiteter etablerade i MS/associerat land kan finansieras av fonden
- Tredjelandskontrollerade entiteter inom MS/associerat land behöver visa garantier godkända av aktuell MS/associerat land
- Intyg avseende medfinansiering för utvecklingsprojekt m.m. uppvisas (beroende av projekttyp: studie, design etc.)

## Immateriella rättigheter (IPR)

- Restriktioner rörande överföring av EDF-genererad IPR till tredjeland
- MS förhandlar till sig IPR i de utvecklingsprojekt som de medfinansierar

## Avtal

- Utvecklingsprojekt kräver utöver Grant Agreement (GA), parallella mellanstatliga avtal (MoU), mellan MS som medfinansierar

## Exportkontroll

- Inspektionen för strategiska produkter (ISP) ska i förväg godkänna avtal (GA, MoU-avtal) som berörs av exportkontroll



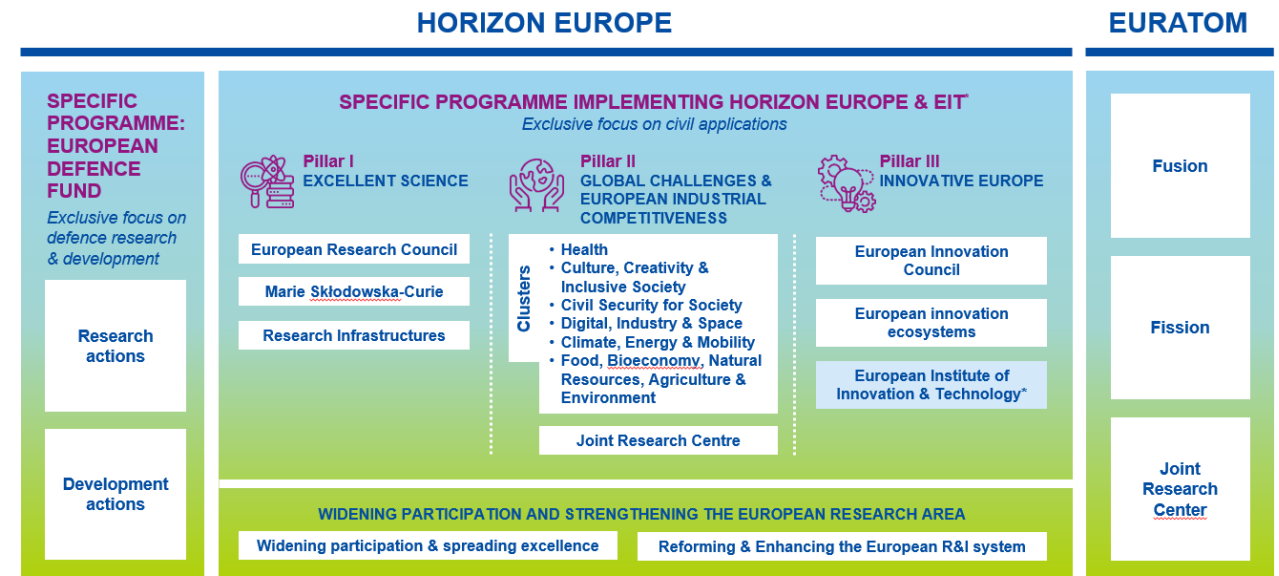
# Samverkan EDF och HE

## EDF thematic categories of actions

1. Defence medical support, Chemical Biological Radiological Nuclear (CBRN), biotech and human factors
2. Information superiority
3. Advanced passive and active sensors
4. Cyber
5. Space
6. Digital transformation
7. Materials and components
8. Energy resilience and environmental transition
9. Air combat
10. Air and missile defence
11. Ground combat
12. Force protection and mobility
13. Naval combat
14. Underwater warfare
15. Simulation and training

## EDF non thematic categories of actions

16. Disruptive technologies
17. Open calls for innovative and future-oriented defence solutions



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- Ovan bild till vänster visar kategorier inom EDF:s utkast till arbetsprogram, till höger HE-strukturen
- Arbetsprogrammen innehåller överlappande teknologier. Enklare att identifiera synergier mellan EDF och HE på forskningsidan
- Svårt med exakta exempel i nuläget, då EDF:s arbetsprogram inte är beslutat
- Vinnova och FMV samverkar i EDF- och HE-frågor (informationsspridning m.m.)

# EDF-lansering 18 juni 2021 (13.00-16.30)

[Nyhet på FMV:s hemsida: Stöd till innovation och försvarsförmåga \(fmv.se\)](https://www.fmv.se)

Digitalt event, öppen lansering, mer info kommer, välkomna att delta!

- Välkommen
- European Commission views on EDF
- Varför delta i EDF, svenskt perspektiv
- Vägen framåt
- Avslutning

För mer info om EDF, kontakta nationella EDF-koordineringskontoret på FMV: [edf@fmv.se](mailto:edf@fmv.se)

Besök <https://www.fmv.se/internationellt/europeiska-forsvarsfonden/>

<https://www.fmv.se/aktuellt--press/aktuella-handelser/stod-till-innovation-och-forsvarsformaiga/>

## Stöd till innovation och försvarsförmåga

FMV bjuder in till ett digitalt informationsmöte den 18 juni kring den europeiska försvarsfonden, EDF. EDF omfattar forsknings- och teknikutvecklingsprojekt finansierade med EU-medel och avser att förbättra innovationskapaciteten hos europeiska företag, lärosäten och institut, stärka försvarsförmåga och europeiskt samarbete.

Nu finns möjligheter för svenska företag, lärosäten samt institut att vara med och driva forsknings- och teknikutvecklingsprojekt inom försvarsområdet finansierade med EU-medel.

Bakgrunden är att den europeiska försvarsfonden, EDF, för perioden 2021 – 2027, verkar för att stödja konkurrenskraften och innovationskapaciteten för bland annat företag inom EU.

Programmet innebär bland annat möjligheter för Sverige att få externa finansiella medel för att genomföra europeiska forsknings- och utvecklingsprojekt och att dela på utvecklingskostnader. Det sker i samarbete med andra EU-länder och deras företag med flera.

Den 18 juni bjuder FMV in till ett digitalt lanseringsmöte där deltagarna får lyssna till svenska myndigheters och EU-kommissionens syn på EDF och hur svensk försvarsförmåga, kompetens och konkurrensförmåga kan stärkas genom att delta i strategiska EU-projekt inom försvarsområdet.



15,5 billion EUR

# HORIZON EUROPE

# EURATOM

## SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

Exclusive focus on defence research & development

Research actions

Development actions

## SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT\*

Exclusive focus on civil applications

**Pillar I**  
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**Pillar II**  
GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Partnerships & Missions

Clusters

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre

**Pillar III**  
INNOVATIVE EUROPE

European Innovation Council

European innovation ecosystems

European Institute of Innovation & Technology\*

## WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

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# 95,5 billion euro

# Events



24:th of June at 15:30 Digital track



<https://www.horizon-europe-infodays2021.eu/>

28 June 2021 – Project idea consultations

29-30 June 2021 – Digital, industry & space

<https://www.horizon-europe-infodays2021.eu/event/cluster-4-digital-industry-space>

Online brokerage and Face2Face-meetings

<https://digital2021.ideal-ist.eu>

<https://digital2021.b2match.io>

# Global Challenges and European Industrial Competitiveness

# Global Challenges and European Industrial Competitiveness

Boosting key technologies and solutions, underpinning  
EU policies and Sustainable Development Goals



1. Health



2. Culture,  
Creativity and  
Inclusive Society



3. Civil Security  
for Society



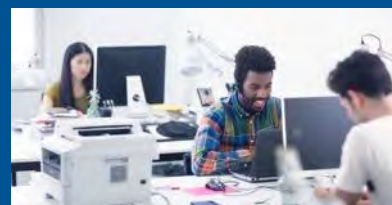
4. Digital, Industry  
and Space



5. Climate, Energy  
and Mobilty



6. Food, Bioeconomy,  
Natural Recources,  
Agriculture and  
Environment



Joint Research Centre



# Minimum consortium size

- Collaborative projects (incl. RIAs, IAs): Usually a consortium must have a minimum of 3 independent legal entities, each established in different EU Member States (MS) or Associated Countries (AC), with at least 1 of them established in a MS.
- Coordination & Support Actions: One or more legal entities, which may be established in a MS, AC, or in exceptional cases and if provided for in the specific call conditions, in another third country.

# Collaborative research

With whom? Well it depends ...

Involve stakeholders

Involve suppliers/industry

Involve RTOs and Universities

Involve society as such

# Why participate?

- Development of cutting-edge ideas
- Access to new knowledge and skills
- Strategic partnerships and collaborations
- Access to advanced technologies and methods
- Influence standards, regulations and research policies
- Increased visibility at national, EU & global level
- Solutions to global challenges

# Digitalisation is everywhere

Being an enabling technology means that it is present in all clusters !!

1. Health – Medical technologies, patient data, AI for health, personalized health care ...
2. Culture, creativity, Inclusive Society – eGovernment, access to cultural heritage, digitization of creative sector
3. Civil security for society – cyber crime, critical infrastructure protection, digitization of rescue services, ...
5. Climate, Energy, Mobility – Smart Energy Grids, Autonomous vehicles, climate observation technologies, ...
6. Food, Bioeconomy, Natural Resources, Agriculture and Environment – Digitisation of agriculture ...

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## 4. Digital, industry & Space: Cluster aims

- Ensuring the competitive edge and autonomy of EU industry
- Fostering climate-neutral, circular and clean industry
- A major contribution to inclusiveness



# Cluster 4 – Destinations

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 industrial technologies

# Cluster 4 – Call draft dead-lines

Climate neutral, circular, and digitised production 2021  
Increased autonomy in key strategic value chains for resilient industry

23 Sep 2021

30 Mar 2022

World leading data and computing technologies  
A human-centred and ethical development of industrial technologies

21 Oct 2021

5 Apr 2022

Digital and emerging technologies for competitiveness and fit for the green deal

21 Oct 2021

27 Jan 2022

5 Apr 2022

16 Nov 2022

Strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data

16 Feb 2022

# Cluster 4 – Partnerships

High Performance Computing  
Key Digital Technologies  
European Metrology  
Smart Networks and Services

- Institutionalised, euroHPC
- Institutionalised, derived from ECSEL
- Institutionalised, derived from EMPIR
- Institutionalised, derived from 5G-PPP

AI, data and robotics  
Photonics Europe  
Clean Steel - Low Carbon Steelmaking  
Made in Europe  
Process4Planet  
Global competitive space systems

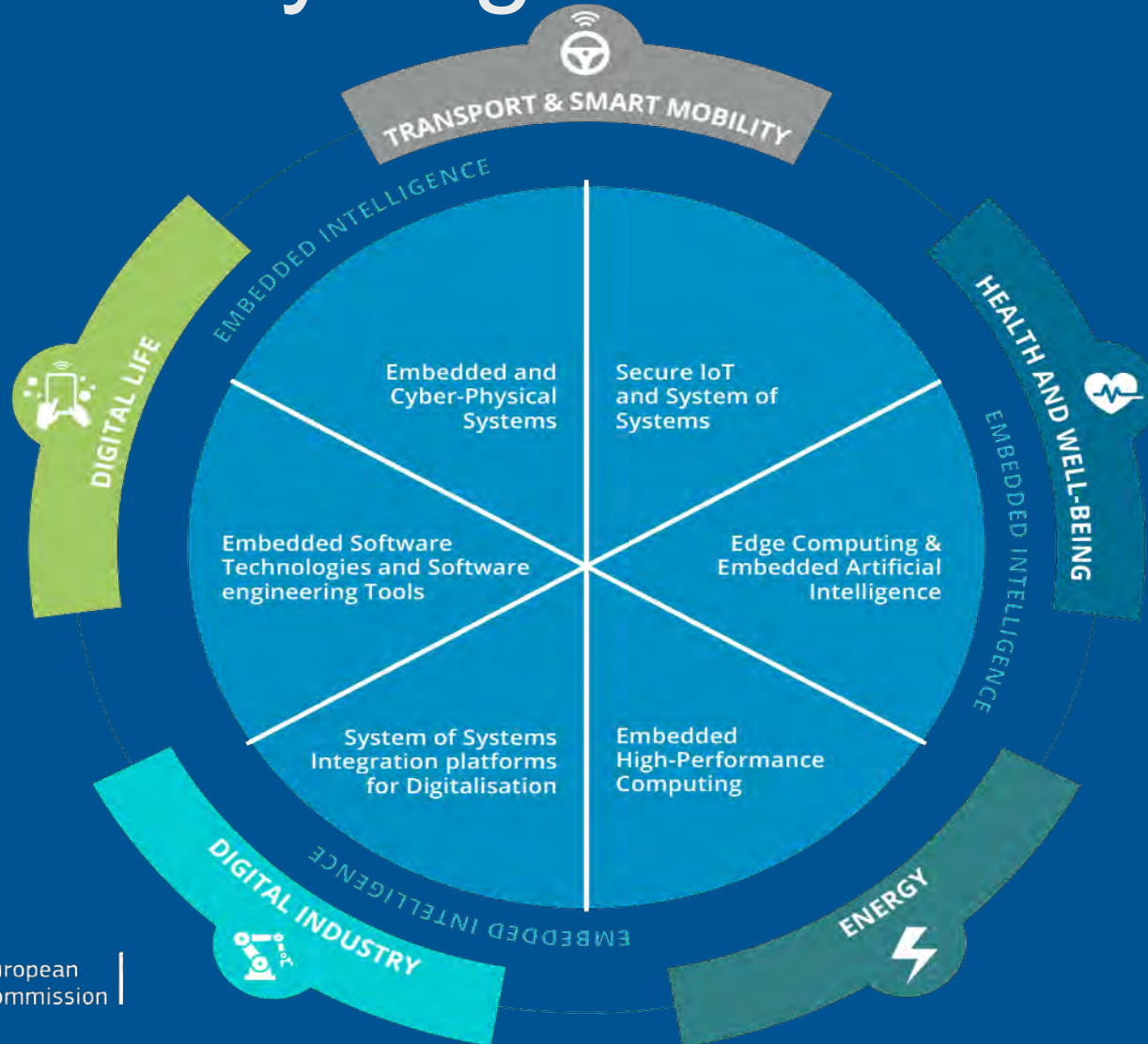
- Co-programmed, derived from euRobotics & BDVA
- Co-programmed, derived from Photonics21
- Co-programmed, derived from ESTEP
- Co-programmed, derived from EFFRA
- Co-programmed, derived from Spire
- Co-programmed

[https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme/european-partnerships-horizon-europe/candidates-digital-industry-and-space\\_en](https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme/european-partnerships-horizon-europe/candidates-digital-industry-and-space_en)



# Cluster 4 – Partnership

## Key Digital Technologies (KDT)



KDT is based on the success of Joint Undertaking ECSEL.

EU's budget to KDT

From Horizon Europe: 1800 mEuro

A partnership with Industry Associations and Participating States. Vinnova is lead SE agency

# Cluster 4 – Partnership Smart Network and Services (SNS)

## Proposed structure of the Work Programme



### 5G Evolution (40%)

**Stream A (20% - RIA):** Smart communication components, systems and networks for 5G mid-term Evolution systems

**Stream D (20% - IA):** Large Scale SNS Trials and Pilots with Verticals



### 6G (60%)

**Stream B (50% - RIA):** Research for radical technology advancement towards 6G

**Stream C (10% - IA):** SNS experimental infrastructures

**CSAs - TBD**

3

Smart Network and Services (SNS) predecessor is 5G-PPP under Horizon 2020

EU's budget to SNS

From Horizon Europe: 900 mEuro

Also budget from Connect Europe Facility CEF-2 for 5G deployment.

A partnership with Industry Associations.

# Cluster 4 – Partnership EuroHPC

By 2030, EuroHPC will support a diverse system of HPC architectures, technologies and applications that will provide European leadership and autonomy in HPC infrastructure, data and services

**2021-2024:**

Best available (European) technology and applications to support requirements of European users (eg: interconnect)

**In 5 years:**

Technology (including quantum accelerators) developed and applications acquired with a strong focus on European technology (eg: EPI)

**In 10 years:**

Technology (including quantum and neuromorphic) developed and applications acquired with a strong focus on European technology (eg: RISC-V)

# Cluster 4 – Partnership EuroHPC

Activity	Horizon Europe (EUR 900 Mn)	Digital Europe Programme (EUR 1.98 Bn)	Connecting Europe Facility (EUR 200 Mn)
P1 Infrastructure		EUR 1.35 billion	EUR 100 million
P2 Federated and secure HPCs		EUR 280 million	EUR 100 million
P3 Technology	EUR 450 million		
P4 Applications	EUR 400 million	EUR 200 million	
P5 Skills		EUR 150 million	
P6 International	EUR 50 million		
P7 Administration	tbc		

# Cluster 4 – Partnership EuroHPC



A pan-European pre-exascale supercomputer, LUMI, is located in CSC's data center in Kajaani, Finland.

The LUMI (Large Unified Modern Infrastructure) consortium countries are Finland, Belgium, Czech Republic, Denmark, Estonia, Iceland, Norway, Poland, Sweden, and Switzerland.

A partnership primarily with Participating States. Swedish Research Council (VR) is lead SE agency.



# Frågor!

# Short break



# Cluster 4

## Digital Industry & Space



# Cluster 4 – Destinations

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 industrial technologies**

## Destination 3: World leading data and computing technologies

- Data sharing in the common European data space
- Strengthening Europe's data analytics capacity
- From Cloud to Edge to IoT for European Data



# Destination 3: World leading data and computing technologies

Topic 2021 – deadline 21 Oct 2021	Action	Budget (Meuro)	TRL
Data sharing in the common European data spaces			
HORIZON-CL4-2021-DATA-01-01: Technologies and solutions for compliance, privacy preservation, green and responsible data operations (AI, Data and Robotics Partnership)	RIA	52 (8-11)	
HORIZON-CL4-2021-DATA-01-03: Technologies for data management (AI, Data and Robotics Partnership)	IA	30 (5)	
From Cloud to Edge to IoT for European Data			
HORIZON-CL4-2021-DATA-01-05: Future European platforms for the Edge: Meta Operating Systems	RIA	54 (8-12)	
HORIZON-CL4-2021-DATA-01-07: Coordination and Support of the 'Cloud-Edge-IoT' domain	CSA	3 (1,5)	
HORIZON-CL4-2021-DATA-01-08: Roadmap for next generation computing and systems technologies	CSA	2 (2)	

# Destination 3: World leading data and computing technologies

Topic 2022	Action	Budget (Meuro)	TRL
Data sharing in the common European data spaces			
HORIZON-CL4-2022-DATA-01-04: Technologies and solutions for data trading, monetizing, exchange and interoperability (AI, Data and Robotics Partnership)	IA	52 (10-13)	
Strengthening Europe's data analytics capacity			
HORIZON-CL4-2022-DATA-01-01: Methods for exploiting data and knowledge for extremely precise outcomes (analysis, prediction, decision support), reducing complexity and presenting insights in understandable way	RIA	33 (8-12)	
HORIZON-CL4-2022-DATA-01-05: Extreme data mining, aggregation and analytics technologies and solutions	RIA	30 (5)	
From Cloud to Edge to IoT for European Data			
HORIZON-CL4-2022-DATA-01-02: Cognitive Cloud: AI-enabled computing continuum from Cloud to Edge	RIA	50 (4-6)	
HORIZON-CL4-2022-DATA-01-03: Programming tools for decentralised intelligence and swarms	RIA	40 (4-8)	

## Destination 4:

# Digital and emerging technologies for competitiveness and fit for the green deal

- Ultra-low power processors
- European Innovation Leadership in Electronics
- European Innovation Leadership in Photonics
- 6G and foundational connectivity technologies
- Innovation in AI, data and robotics
- Tomorrow's deployable Robots: efficient, robust, safe, adaptive and trusted
- European leadership in Emerging Enabling Technologies
- Flagship on Quantum Technologies: a Paradigm Shift
- Graphene: Europe in the lead



# Destination 4: Digital and emerging technologies for competitiveness and fit for the green deal

Topic 2021 deadline 21 Oct 2021	Action	Budget (Meuro)	TRL
Ultra-low power processors			
HORIZON-CL4-2021-DIGITAL-EMERGING-01-01: Ultra-low-power, secure processors for edge computing (RIA)	RIA	26 (8-10)	
HORIZON-CL4-2021-DIGITAL-EMERGING-01-05: Open Source Hardware for ultra-low-power, secure processors	CSA	2	
European Innovation Leadership in Electronics			
HORIZON-CL4-2021-DIGITAL-EMERGING-01-06: Advanced optical communication components (Photonics Partnership)	IA	26 (4-6)	
HORIZON-CL4-2021-DIGITAL-EMERGING-01-07: Advanced Photonic Integrated Circuits (Photonics Partnership)	RIA	39 (3-5)	



# Destination 4: Digital and emerging technologies for competitiveness and fit for the green deal

Topic 2021 deadline 21 Oct 2021	Action	Budget (Meuro)	TRL
6G and foundational connectivity technologies			
HORIZON-CL4-2021-DIGITAL-EMERGING-01-26: Coordination of European Smart Network actions (CSA)	CSA	3	
Innovation in AI, Data and Robotics			
HORIZON-CL4-2021-DIGITAL-EMERGING-01-09: AI, Data and Robotics for the Green Deal (AI, Data and Robotics Partnership)	IA	27 (3-5)	
HORIZON-CL4-2021-DIGITAL-EMERGING-01-10: AI, Data and Robotics at work (AI, Data and Robotics Partnership)	IA	22 (3-5)	

# Destination 4: Digital and emerging technologies for competitiveness and fit for the green deal

Topic 2021 deadline 21 Oct 2021	Action	Budget (Meuro)	TRL
Tomorrow's deployable Robots: efficient, robust, safe, adaptive and trusted			
HORIZON-CL4-2021-DIGITAL-EMERGING-01-11: Pushing the limit of robotics cognition (AI, Data and Robotics Partnership)	RIA	44,5 (5)	
HORIZON-CL4-2021-DIGITAL-EMERGING-01-12: European Network of Excellence Centres in Robotics	RIA	11,5	
European leadership in Emerging Enabling Technologies			
HORIZON-CL4-2021-DIGITAL-EMERGING-01-13: Academia-Industry Forum on Emerging Enabling Technologies (CSA)	CSA	2,5	
HORIZON-CL4-2021-DIGITAL-EMERGING-01-14: Advanced spintronics: Unleashing spin in the next generation ICs (RIA)	RIA	17 (2-3)	
HORIZON-CL4-2021-DIGITAL-EMERGING-01-27: Development of technologies/devices for bio-intelligent manufacturing (RIA)	RIA	22,5 (5-7)	



# Destination 4: Digital and emerging technologies for competitiveness and fit for the green deal

Topic 2021 deadline 21 Oct 2021	Action	Budget (Meuro)	TRL
Flagship on Quantum Technologies: a Paradigm Shift			
HORIZON-CL4-2021-DIGITAL-EMERGING-01-21: Next generation quantum sensing technologies (RIA)	RIA	13,5 (6,75)	
HORIZON-CL4-2021-DIGITAL-EMERGING-01-23: International cooperation with Canada (RIA)	RIA	4 (1,3)	
HORIZON-CL4-2021-DIGITAL-EMERGING-01-30: Investing in new emerging quantum computing technologies (RIA)	RIA	10 (5)	
HORIZON-CL4-2021-DIGITAL-EMERGING-01-32: Support and coordination of the Quantum Technologies Flagship Initiative (CSA)	CSA	6,4	

# Destination 4

Topic 2021 deadline 27 Jan 2022	Action	Budget (Meuro)	TRL
Flagship on Quantum Technologies: a Paradigm Shift			
HORIZON-CL4-2021-DIGITAL-EMERGING-02-15: Framework Partnership Agreement for developing the first large-scale quantum computers	FPA		
HORIZON-CL4-2021-DIGITAL-EMERGING-02-16: Basic Science for Quantum Technologies	RIA	16 (2-3)	
HORIZON-CL4-2021-DIGITAL-EMERGING-02-17: Framework Partnership Agreement for developing large scale quantum simulation platform technologies	FPA		
HORIZON-CL4-2021-DIGITAL-EMERGING-02-19: Framework Partnership Agreements in Quantum Communications	FPA		
HORIZON-CL4-2021-DIGITAL-EMERGING-02-20: Quantum sensing technologies for market uptake	RIA	23 (7-10)	
HORIZON-CL4-2021-DIGITAL-EMERGING-02-22: Framework Partnership Agreements for open testing and experimentation and for pilot production capabilities for quantum technologies	FPA		
HORIZON-CL4-2021-DIGITAL-EMERGING-02-10: Strengthening the quantum software ecosystem for quantum computing platforms	RIA	12 (5-7)	

# Destination 4

Topic 2022 deadline 5 Apr 2022	Action	Budget (Meuro)	TRL
Ultra-low power processors			
HORIZON-CL4-2022-DIGITAL-EMERGING-01-26: Open source for cloud-based services	RIA	22 (4-6)	
European Innovation Leadership in Electronics			
HORIZON-CL4-2022-DIGITAL-EMERGING-01-38: International cooperation in semiconductors	CSA	3	
European Innovation Leadership in Photonics			
HORIZON-CL4-2022-DIGITAL-EMERGING-01-03: Advanced multi-sensing systems (Photonics Partnership)	RIA	48 (3-5)	
6G and foundational connectivity technologies			
HORIZON-CL4-2022-DIGITAL-EMERGING-01-30: European Enabling technologies for Beyond 5G/6G RAN disaggregated architectures	RIA	13	
HORIZON-CL4-2022-DIGITAL-EMERGING-01-39: Ultra low energy and secure networks	RIA	13	

# Destination 4

Topic 2022 deadline 5 Apr 2022	Action	Budget (Meuro)	TRL
Innovation in AI, Data and Robotics			
HORIZON-CL4-2022-DIGITAL-EMERGING-01-05: AI, Data and Robotics for Industry optimisation (including production and services) (AI, Data and Robotics Partnership)	IA	19 (3-5)	
Tomorrow's deployable Robots: efficient, robust, safe, adaptive and trusted			
HORIZON-CL4-2022-DIGITAL-EMERGING-01-06: Pushing the limit of physical intelligence and performance (RIA)	RIA	28,5 (4)	
HORIZON-CL4-2022-DIGITAL-EMERGING-01-07: Increased robotics capabilities demonstrated in key sectors (AI, Data and Robotics Partnership) (IA)	IA	36 (6)	
European leadership in Emerging Enabling Technologies			
HORIZON-CL4-2022-DIGITAL-EMERGING-01-35: Advanced characterisation methodologies to assess and predict the health and environmental risks of nanomaterials	RIA	17,5 (2-3)	

# Destination 4

Topic 2022 deadline 16 Nov 2022	Action	Budget (Meuro)	TRL
Graphene: Europe in the lead			
HORIZON-CL4-2022-DIGITAL-EMERGING-02-17: New generation of advanced electronic and photonic 2D materials-based devices, systems and sensors (RIA)	RIA	16,5	
HORIZON-CL4-2022-DIGITAL-EMERGING-02-18: 2D materials-based devices and systems for energy storage and/or harvesting (RIA)	RIA	9	
HORIZON-CL4-2022-DIGITAL-EMERGING-02-19: 2D materials-based devices and systems for biomedical applications (RIA)	RIA	6	
HORIZON-CL4-2022-DIGITAL-EMERGING-02-20: 2D-material-based composites, coatings and foams (IA)	IA	9	
HORIZON-CL4-2022-DIGITAL-EMERGING-02-22: Supporting the coordination of the Graphene Flagship projects (CSA)	CSA	3	

## Destination 6: A human-centred and ethical development of digital and industrial technologies

- Leadership in AI based on trust
- An Internet of Trust
- eXtended Reality (XR)
- Systemic approaches to make the most of the technologies within society and industry



# Destination 6: A human-centred and ethical development of digital and industrial technologies

Topic 2021 deadline 21 Oct 2021	Action	Budget (Meuro)	TRL
Leadership in AI based on trust			
HORIZON-CL4-2021-HUMAN-01-01: Verifiable robustness, energy efficiency and transparency for Trustworthy AI: Scientific excellence boosting industrial competitiveness (AI, Data and Robotics Partnership) (RIA)	RIA	36 (4)	
HORIZON-CL4-2021-HUMAN-01-02: European coordination, awareness, standardisation & adoption of trustworthy European AI, Data and Robotics (AI, Data and Robotics Partnership) (CSA)	CSA	13 (4-9)	
HORIZON-CL4-2021-HUMAN-01-03: European Network of AI Excellence Centres: Pillars of the European AI lighthouse (RIA)	RIA	9	
HORIZON-CL4-2021-HUMAN-01-24: Tackling gender, race and other biases in AI (RIA)	RIA	10 (3-3,5)	
HORIZON-CL4-2021-HUMAN-01-27: AI to fight disinformation	RIA	13 (6,5)	

# Destination 6: A human-centred and ethical development of digital and industrial technologies

Topic 2021 deadline 21 Oct 2021	Action	Budget (Meuro)	TRL
An Internet of Trust			
HORIZON-CL4-2021-HUMAN-01-04: Trust & data sovereignty on the Internet	RIA	12	
HORIZON-CL4-2021-HUMAN-01-05: Trustworthy open search and discovery	RIA	17 (8,5)	
HORIZON-CL4-2021-HUMAN-01-07: Next Generation Internet community-building and outreach	CSA	2	
HORIZON-CL4-2021-HUMAN-01-08: NGI International Collaboration - Transatlantic fellowship programme	CSA	2	
HORIZON-CL4-2021-HUMAN-01-09: NGI Tech Review	CSA	1,5	



# Destination 6: A human-centred and ethical development of digital and industrial technologies

Topic 2021 deadline 21 Oct 2021	Action	Budget (Meuro)	TRL
eXtended Reality (XR)			
HORIZON-CL4-2021-HUMAN-01-13: eXtended Reality Modelling	RIA	14,5 (4,8)	
HORIZON-CL4-2021-HUMAN-01-14: eXtended Reality for All – Haptics	RIA	6	
HORIZON-CL4-2021-HUMAN-01-25: eXtended Collaborative Telepresence (IA)	IA	14 (5-8)	
HORIZON-CL4-2021-HUMAN-01-06: Innovation for Media, including eXtended Reality (IA)	IA	26 (8-9)	
HORIZON-CL4-2021-HUMAN-01-28: eXtended Reality Ethics, Interoperability and Impact (CSA)	CSA	2,5	

# Destination 6: A human-centred and ethical development of digital and industrial technologies

Topic 2021 deadline 21 Oct 2021	Action	Budget (Meuro)	TRL
Systemic approaches to make the most of the technologies within society and industry			
HORIZON-CL4-2021-HUMAN-01-17: Awareness raising on Intellectual property (IP) management for European R&I (CSA)	CSA	1	
HORIZON-CL4-2021-HUMAN-01-18: Fostering standardisation to boost European industry's competitiveness (CSA)	CSA	1	
HORIZON-CL4-2021-HUMAN-01-19: Testing innovative solutions on local communities' demand (CSA)	CSA	5	
HORIZON-CL4-2021-HUMAN-01-20: Piloting a new industry-academia knowledge exchange focussing on companies' needs (CSA)	CSA	2	
HORIZON-CL4-2021-HUMAN-01-21: Art-driven use experiments and design (RIA)	RIA	8,5 (2,8)	
HORIZON-CL4-2021-HUMAN-01-26: Workforce skills for industry 5.0 (RIA)	RIA	5	

# Destination 6: A human-centred and ethical development of digital and industrial technologies

Topic 2022 deadline 5 Apr 2022	Action	Budget (Meuro)	TRL
Leadership in AI based on trust			
HORIZON-CL4-2022-HUMAN-01-01: AI for human empowerment (AI, Data and Robotics Partnership) (RIA)	RIA	16 (4)	
HORIZON-CL4-2022-HUMAN-01-02: European Network of AI Excellence Centres: Expanding the European AI lighthouse (RIA)	RIA	34,5 (11,5)	
An Internet of Trust			
HORIZON-CL4-2022-HUMAN-01-03: Internet architecture and decentralised technologies	RIA	22 (11)	
HORIZON-CL4-2022-HUMAN-01-05: Next Generation Safer Internet: Technologies to identify digital Child Sexual Abuse Material (CSAM)	RIA	2	
HORIZON-CL4-2022-HUMAN-01-07: NGI International Collaboration - USA and Canada	RIA	6	

# Destination 6: A human-centred and ethical development of digital and industrial technologies

Topic 2022	Action	Budget (Meuro)	TRL
eXtended Reality (XR)			
HORIZON-CL4-2022-HUMAN-01-19: eXtended Reality Learning - Engage and Interact (IA)	IA	21,5 (5-8)	
HORIZON-CL4-2022-HUMAN-01-14: eXtended Reality Technologies (RIA)	RIA	19 (5-8)	

# Frågor!

# DIGITAL, **INDUSTRY** AND SPACE

BERTRAND.NOHARET@VINNOVA.SE

**VINNOVA**

Sveriges innovationsmyndighet

# Destination 1 - CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION

Process industries

Manufacturing sector

Strong global competition

EU industrial leadership

Construction sector

Potential of digital technologies

## KEYWORDS

climate neutrality

Twin transition

(green and digital)

2050

near zero waste

European Green Deal

zero pollution

zero landfill

*'Do no significant harm' principle  
(EU Taxonomy Regulation)*

# Expected impacts: Manufacturing & Construction

- **Accelerate the twin green and digital transition.**
- **Sustainable, flexible, responsive and resilient factories and value chains**, enabled by digitisation, AI, data sharing, advanced robotics and modularity.
- **Reduction of CO2 emissions and waste**, and **enhance the durability, reparability and re-cycling of products/components**.
- Make the **jobs of the humans more attractive and safer**, and point the way to opportunities for upskilling;



# Expected impacts: Energy-intensive industries

- Set out a **credible pathway to contributing to climate neutral, circular and digitalised energy intensive industries**;
- Increase **productivity, innovation capacity, resilience, sustainability and global competitiveness** of European energy intensive industries.
- Contribute to **a substantial reduction of waste and CO2 emissions**, turning them into alternative feedstocks to replace fossil-based raw materials and decrease reliance on imports.

# Destination 1 - CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION

Call - CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION 2021/2022

*HORIZON-CL4-2021-TWIN-TRANSITION-01-XX*

Call	Budgets (EUR million)		Deadline(s)
	2021	2022	
HORIZON-CL4-2021-TWIN-TRANSITION-01	402.60		23 Sep 2021
HORIZON-CL4-2022-TWIN-TRANSITION-01		321.50	30 Mar 2022
Overall indicative budget	402.60	321.50	

# Destination 1 - CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION

## *ORIENTATIONS*

- **Green, flexible and advanced manufacturing**
- **Advanced digital technologies for manufacturing**
- **A new way to build, accelerating disruptive change in construction**
- **Hubs for circularity, a stepping stone towards climate neutrality and circularity in industry**
- **Enabling circularity of resources in the process industries, including waste and CO<sub>2</sub>/CO**
- **Integration of Renewables and Electrification in process industry**

# CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION – Topics 2021

- AI enhanced robotics systems for smart manufacturing (AI, Data and Robotics - Made in Europe Partnerships) (IA)
- Zero-defect manufacturing towards zero-waste (Made in Europe Partnership) (IA)
- Laser-based technologies for green manufacturing (Photonics - Made in Europe Partnerships) (RIA)
- Manufacturing technologies for bio-based materials (Made in Europe Partnership) (RIA)
  
- Artificial Intelligence for sustainable, agile manufacturing (AI, Data and Robotics - Made in Europe Partnerships) (IA)
- Data-driven Distributed Industrial Environments (Made in Europe Partnership) (IA)
  
- Digital permits and compliance checks for buildings and infrastructure (IA)
- Automated tools for the valorisation of construction waste (RIA)
- Breakthrough technologies supporting technological sovereignty in construction (RIA)

# CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION – Topics 2021

- Deploying industrial-urban symbiosis solutions for the utilization of energy, water, industrial waste and by-products at regional scale (Processes4Planet Partnership) (RIA)
- Hubs for Circularity European Community of Practice (ECoP) platform (Processes4Planet Partnership) (CSA)
- Plastic waste as a circular carbon feedstock for industry (Processes4Planet Partnership) (IA)
- Carbon Direct Avoidance in steel: Electricity and hydrogen-based metallurgy (Clean Steel Partnership) (IA)
- Improvement of the yield of the iron and steel making (Clean Steel Partnership) (IA)
- Reducing environmental footprint, improving circularity in extractive and processing value chains (IA)
- Design and optimisation of energy flexible industrial processes (Processes4Planet Partnership) (IA)
- Adjustment of Steel process production to prepare for the transition towards climate neutrality (Clean Steel Partnership) (IA)

# CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION – Topics 2022

- Rapid reconfigurable production process chains (Made in Europe Partnership) (IA)
- Products with complex functional surfaces (Made in Europe Partnership) (RIA)
- Excellence in distributed control and modular manufacturing (Made in Europe Partnership) (RIA)
- Intelligent work piece handling in a full production line (Made in Europe Partnership) (RIA)
  
- ICT Innovation for Manufacturing Sustainability in SMEs (I4MS2) (Made in Europe Partnership) (IA)
- Digital tools to support the engineering of a Circular Economy (Made in Europe Partnership) (RIA)
  
- Demonstrate the use of Digital Logbook for buildings (IA)

# CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION – Topics 2022

- Circular flows for solid waste in urban environment (Processes4Planet Partnership) (IA)
- Valorisation of CO/CO<sub>2</sub> streams into added-value products of market interest (Processes4Planet Partnership) (IA)
- Raw material preparation for clean steel production (Clean Steel Partnership) (IA)
- New electrochemical conversion routes for the production of chemicals and materials in process industries (Processes4Planet Partnership) (RIA)
- Modular and hybrid heating technologies in steel production (Clean Steel Partnership) (IA)
- Integration of hydrogen for replacing fossil fuels in industrial applications (Processes4Planet Partnership) (IA)

# Destination 2 - INCREASED AUTONOMY IN KEY STRATEGIC VALUE CHAINS FOR RESILIENT INDUSTRY

## Advanced materials

Open innovation test beds

Sustainable by design

## Raw materials

Strategic value chains

Open strategic autonomy

## KEYWORDS

A resilient industry

## Circular value chains

Traceability

Increased circularity

## Preparedness of businesses/smes/startups

Uptake of new technologies



# Expected impacts

- **Resilient, sustainable and secure (critical) raw materials value chains** for EU industrial ecosystems, in support of the twin green and digital transformations.
- **New sustainable-by-design materials with enhanced functionalities and applications** in a wide range of industrial processes and consumer products.
- **Leadership** in producing **materials** that provide solutions for **clean, toxic/pollutant free environment, decarbonising industry, and safeguarding civil infrastructures**.
- **Leadership in circular economy** that strengthens cross-sectorial cooperation along the value chain and **enable SMEs to transform their activities and business models**.
- **Increased adoption of key digital and enabling technologies** in industrial value chains and strategic sectors, paying particular attention to SMEs and start-ups.

# Destination 2 - INCREASED AUTONOMY IN KEY STRATEGIC VALUE CHAINS FOR RESILIENT INDUSTRY

Call - A DIGITISED, RESOURCE-EFFICIENT AND RESILIENT INDUSTRY 2021/2022

*HORIZON-CL4-2021-RESILIENCE-01-XX*

Call	Budgets (EUR million)		Deadline(s)
	2021	2022	
HORIZON-CL4-2021-RESILIENCE-01	365.20		23 Sep 2021
HORIZON-CL4-2022-RESILIENCE-01		402.20	30 Mar 2022
HORIZON-CL4-2022-RESILIENCE-02-PCP		9.00	30 Mar 2022
Overall indicative budget	365.20	411.20	

# Destination 2 - INCREASED AUTONOMY IN KEY STRATEGIC VALUE CHAINS FOR RESILIENT INDUSTRY

## *ORIENTATIONS*

- Novel paradigms to establish resilient and circular value chains
- Raw materials for EU open strategic autonomy and successful transition to a climate-neutral and circular economy
- Green and Sustainable Materials
- Materials for the benefit of society and the environment and materials for climate-neutral Industry
- Materials and data cross-cutting actions
- Improving the resilience and preparedness of EU businesses, especially SMEs and Startups

# INCREASED AUTONOMY IN KEY STRATEGIC VALUE CHAINS FOR RESILIENT INDUSTRY – Topics 2021

- HORIZON-CL4-2021-RESILIENCE-01-01: Ensuring circularity of composite materials (Processes4Planet Partnership) (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-03: Identifying future availability of secondary raw materials (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-04: Developing climate-neutral and circular raw materials (IA)
- HORIZON-CL4-2021-RESILIENCE-01-05: Building EU-Africa partnerships on sustainable raw materials value chains (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-06: Innovation for responsible EU sourcing of primary raw materials, the foundation of the Green Deal (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-07: Building innovative value chains from raw materials to sustainable products (IA)
- HORIZON-CL4-2021-RESILIENCE-01-08: Establishing EU led international community on safe- and sustainable-by-design materials to support embedding sustainability criteria over the life cycle of products and processes (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-09: Promote Europe's availability, affordability, sustainability and security of supply of essential chemicals and materials (IA)
- HORIZON-CL4-2021-RESILIENCE-01-10: Paving the way to an increased share of recycled plastics in added value products (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-11: Safe- and sustainable-by-design polymeric materials (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-12: Safe- and sustainable-by-design metallic coatings and engineered surfaces (RIA)

# INCREASED AUTONOMY IN KEY STRATEGIC VALUE CHAINS FOR RESILIENT INDUSTRY – Topics 2021

- HORIZON-CL4-2021-RESILIENCE-01-14: Development of more energy efficient electrically heated catalytic reactors (IA)
- HORIZON-CL4-2021-RESILIENCE-01-16: Creation of an innovation community for solar fuels and chemicals (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-17: Advanced materials for hydrogen storage (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-20: Antimicrobial, Antiviral, and Antifungal Nanocoatings (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-25: Biomaterials database for Health Applications (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-26: Sustainable Industry Commons (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-27: Innovation Radar, Tech Due Diligence and Venture Building for strategic digital technologies (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-28: Re-opening industrial sites preparatory action – Promoting a sustainable strategy for Europe's industrial future (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-29: 'Innovate to transform' support for SME's sustainability transition (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-31: European Technological and Social Innovation Factory (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-32: Social and affordable housing district demonstrator (IA)

# INCREASED AUTONOMY IN KEY STRATEGIC VALUE CHAINS FOR RESILIENT INDUSTRY – Topics 2022

- HORIZON-CL4-2022-RESILIENCE-01-01: Circular and low emission value chains through digitalisation (Processes4Planet Partnership) (RIA)
- HORIZON-CL4-2022-RESILIENCE-01-02: Monitoring and supervising system for exploration and future exploitation activities in the deep sea (RIA)
- HORIZON-CL4-2022-RESILIENCE-01-03: Streamlining cross-sectoral policy framework throughout the extractive life-cycle in environmentally protected areas (CSA)
- HORIZON-CL4-2022-RESILIENCE-01-04: Developing digital platforms for the small scale extractive industry (IA)
- HORIZON-CL4-2022-RESILIENCE-01-05: Technological solutions for tracking raw material flows in complex supply chains (RIA)
- HORIZON-CL4-2022-RESILIENCE-01-06: Sustainable and innovative mine of the future (IA)
- HORIZON-CL4-2022-RESILIENCE-01-07: Innovative solutions for efficient use and enhanced recovery of mineral and metal by-products from processing of raw materials (IA)
- HORIZON-CL4-2022-RESILIENCE-01-08: Earth observation technologies for the mining life cycle in support of EU autonomy and transition to a climate-neutral economy (RIA)
- HORIZON-CL4-2022-RESILIENCE-01-10: Innovative materials for advanced (nano)electronic components and systems (RIA)
- HORIZON-CL4-2022-RESILIENCE-01-11: Advanced lightweight materials for energy efficient structures (RIA)
- HORIZON-CL4-2022-RESILIENCE-01-12: Functional multi-material components and structures (RIA)
- HORIZON-CL4-2022-RESILIENCE-01-23: Safe- and sustainable-by-design organic and hybrid coatings (RIA)

# INCREASED AUTONOMY IN KEY STRATEGIC VALUE CHAINS FOR RESILIENT INDUSTRY – Topics 2022

- HORIZON-CL4-2022-RESILIENCE-01-13: Smart and multifunctional biomaterials for health innovations (RIA)
- HORIZON-CL4-2022-RESILIENCE-01-14: Membranes for gas separations - membrane distillation (IA)
- HORIZON-CL4-2022-RESILIENCE-01-16: Building and renovating by exploiting advanced materials for energy and resources efficient management (IA)
- HORIZON-CL4-2022-RESILIENCE-01-24: Novel materials for supercapacitor energy storage (RIA)
- HORIZON-CL4-2022-RESILIENCE-01-19: Advanced materials modelling and characterisation (RIA)
- HORIZON-CL4-2022-RESILIENCE-01-20: Climate Neutral and Circular Innovative Materials Technologies Open Innovation Test Beds (IA)
- HORIZON-CL4-2022-RESILIENCE-01-25: Optimised Industrial Systems and Lines through digitalisation (IA)
- HORIZON-CL4-2022-RESILIENCE-01-21: Leveraging standardisation in Digital Technologies (CSA)
- HORIZON-CL4-2022-RESILIENCE-01-26: 'Innovate to transform' support for SME's sustainability transition (CSA)

# Främja svenskt deltagande i Horisont Europa: planeringsprojekt inom Hållbar industri 2021



## Vad kan ni söka för?

Planeringsprojekt ska resultera i inlämning av en färdig Horisont Europa ansökan. Finansieringen ska nyttjas för att utveckla projektidén, etablera ett starkt konsortium med relevanta projektpartners, samt planera de resurser som krävs för att projektet ska bli en framgång.



## Vem kan söka?

Utlysningen riktar sig till aktörskonstellationer bestående av parter (juridiska personer) med väl underbyggda projektidéer och möjlighet att omsätta dessa i konkurrenskraftiga ansökningar till Horisont Europas arbetsprogram. Konstellationen ska vid ansökningstillfället bestå av minst tre svenska projektparter varav minst ett företag.



## Hur mycket kan ni söka?

Varje planeringsprojekt kan söka upp till 500 000 kronor (för en koordinerande roll) eller 300 000 kronor (för en deltagande roll). Vinnovas finansiering får utgöra högst 80 procent av projektets totala stödberättigande kostnader



# Vad vill vi åstadkomma?

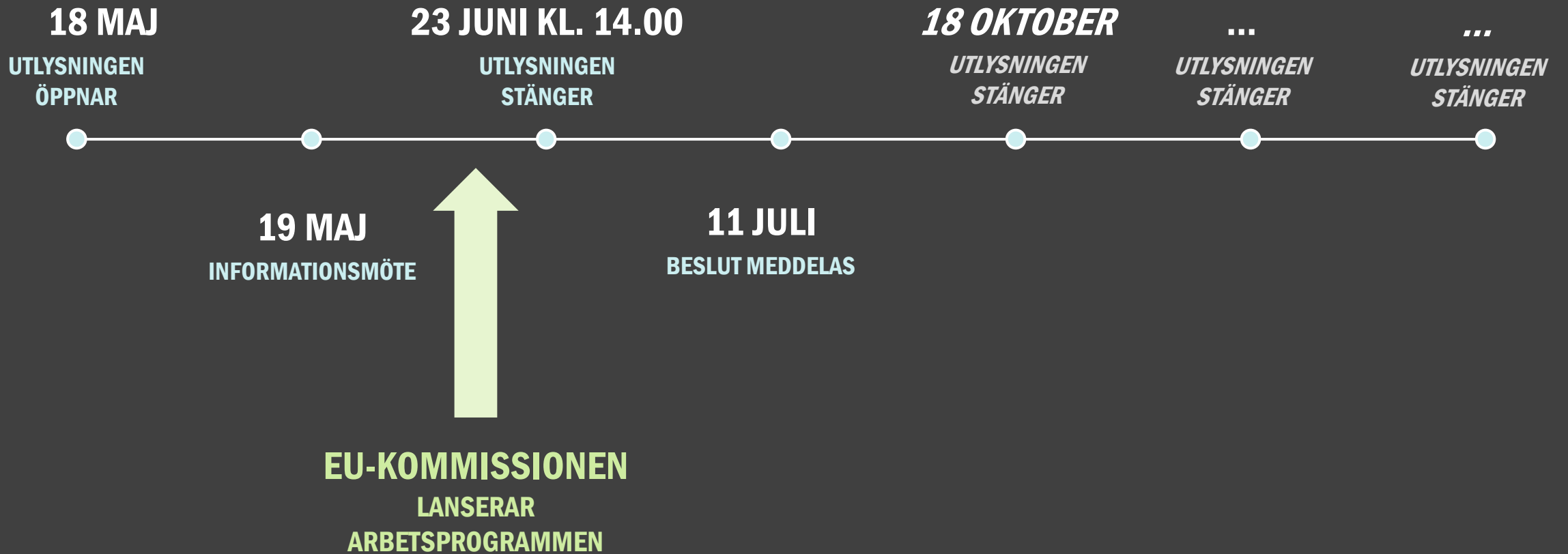
## Främja svenskt deltagande i Horisont Europa

- Planeringsprojektet ska syfta till att förbereda **konkurrenskraftiga ansökningar** med svenskt deltagande i Horisont Europas utlysningar.

## Stimulera en konkurrenskraftig hållbar industri

- Deltagande i Horisont Europa förväntas ge svenska organisationer **bättre förutsättningar** att genom samverkan med andra europeiska aktörer driva en **hållbar omställning av industrin** globalt.

# Tidplan



# Vad?

Planeringsprojektet ska syfta till att förbereda och skapa förutsättningar för konkurrenskraftiga ansökningar med svenskt deltagande i Horisont Europas utlysningar.

## Exempel av godkända projektaktiviteter:

- Utveckla idén inom utvalt område i Horisont Europa.
- Identifiera nya samarbetspartners och bygga nätverk med komplementära aktörer inom utvalt område.
- Skriva en ansökan till Horisont Europa.

## Vad som inte finansieras är exempelvis:

- Ansökningar som grundar sig på idéer som inte ligger i linje med utpekade områden i Horisont Europa.
- Projekt som inte syftar till att lämna in en ansökan till Horisont Europa.
- Teknisk utveckling.



# Vilka?

Erbjudandet riktar sig till konstellationer bestående av **minst tre svenska parter** (juridiska personer), **varav minst ett svenskt företag**, som har för avsikt att i samverkan med varandra, och tillsammans med europeiska partners, genomföra ett Horisont Europa-finansierat projekt.

**Utländska aktörer**, utan registrerad filial eller driftställe i Sverige, **kan ingå** som projektparter, men **kan inte erhålla stöd från Vinnova**. Deras deltagande får inte heller räknas in i medfinansieringen om 20 procent på projektnivå som krävs i den här utlysningen.



# Hur mycket?

- **Maximalt 80%** av projektets totala stödberättigande kostnader kan täckas genom bidrag.
- **Maximalt 500 000** kronor (koordinerande roll) eller **300 000** kronor (deltagande roll) i bidrag kan beviljas till ett enskilt projekt.
- Projektparter kan erhålla bidrag upp till den nivå som statsstödsreglerna medger:

Bidrag till (aktuell paragraf i stödordningen resp. artikel i GBER)	Litet företag (% stödnivå)	Medelstort företag (% stödnivå)	Stort företag (% stödnivå)
<a href="#">Genomförbarhetsstudie (9 § / art. 25):</a>	70	60	50



# Bilaga 1 - Utpekade områdena ("topics")

## Cluster 4

### Call TWIN GREEN AND DIGITAL TRANSITION 2021

*Green, flexible and advanced manufacturing*

- HORIZON-CL4-2021-TWIN-TRANSITION-01-01: AI enhanced robotics systems for smart manufacturing (IA)
- HORIZON-CL4-2021-TWIN-TRANSITION-01-02: Zero-defect manufacturing towards zero-waste (IA)
- HORIZON-CL4-2021-TWIN-TRANSITION-01-03: Laser-based technologies for green manufacturing (RIA)
- HORIZON-CL4-2021-TWIN-TRANSITION-01-05: Manufacturing technologies for bio-based materials (RIA)

*Advanced digital technologies for manufacturing*

- HORIZON-CL4-2021-TWIN-TRANSITION-01-07: Artificial Intelligence for sustainable, agile manufacturing (IA)
- HORIZON-CL4-2021-TWIN-TRANSITION-01-08: Data-driven Distributed Industrial Environments (IA)

*Hubs for circularity, a stepping stone towards climate neutrality and circularity in industry*

- HORIZON-CL4-2021-TWIN-TRANSITION-01-14: Deploying industrial-urban symbiosis solutions for the utilization of energy, water, industrial waste and by-products at regional scale (RIA)
- HORIZON-CL4-2021-TWIN-TRANSITION-01-16: Hubs for Circularity - European Community of Practice (ECoP) platform (CSA)

*Enabling circularity of resources in the process industries, including waste, water and CO<sub>2</sub>/CO*

- HORIZON-CL4-2021-TWIN-TRANSITION-01-17: Plastic waste as a circular carbon feedstock for industry (IA)
- HORIZON-CL4-2021-TWIN-TRANSITION-01-18: Carbon Direct Avoidance in steel: Electricity and hydrogen-based metallurgy (IA)
- HORIZON-CL4-2021-TWIN-TRANSITION-01-19: Improvement of the yield of the iron and steel making (IA)
- HORIZON-CL4-2021-TWIN-TRANSITION-01-20: Reducing environmental footprint, improving circularity in extractive and processing value chains (IA)

*Integration of Renewables and Electrification in process industry*

- HORIZON-CL4-2021-TWIN-TRANSITION-01-21: Design and optimisation of energy flexible industrial processes (IA)
- HORIZON-CL4-2021-TWIN-TRANSITION-01-22: Adjustment of Steel process production to prepare for the transition towards climate neutrality (IA)

### Call A DIGITISED, RESOURCE-EFFICIENT AND RESILIENT INDUSTRY 2021

- HORIZON-CL4-2021-RESILIENCE-01-01: Ensuring circularity of composite materials (RIA)

*Raw materials for EU strategic autonomy and successful transition to a climate-neutral and circular economy*

- HORIZON-CL4-2021-RESILIENCE-01-03: Identifying future availability of secondary raw materials (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-04: Developing climate-neutral and circular raw materials (IA)
- HORIZON-CL4-2021-RESILIENCE-01-05: Building EU-Africa partnerships on sustainable raw materials value chains (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-06: Innovation for responsible EU sourcing of primary raw materials, the foundation of the Green Deal (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-07: Building innovative value chains from raw materials to sustainable products (IA)

*Green and Sustainable Materials*

- HORIZON-CL4-2021-RESILIENCE-01-08: Establishing EU led international community on sustainable-by-design materials to support embedding sustainability criteria over the life cycle of products and processes (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-09: Promote Europe's availability, affordability, sustainability and security of supply of essential chemicals and materials (IA)
- HORIZON-CL4-2021-RESILIENCE-01-10: Paving the way to an increased share of recycled plastics in added value products (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-11: Safe- and sustainable-by-design polymeric materials (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-12: Safe- and sustainable-by-design metallic coatings and engineered surfaces (RIA)

*Materials for the benefit of society and the environment and materials for climate-neutral industry*

- HORIZON-CL4-2021-RESILIENCE-01-14: Development of more energy efficient electrically heated catalytic reactors (IA)
- HORIZON-CL4-2021-RESILIENCE-01-16: Creation of an innovation community for solar fuels and chemicals (CSA)

- HORIZON-CL4-2021-RESILIENCE-01-17: Advanced materials for hydrogen storage (RIA)
- HORIZON-CL4-2021-RESILIENCE-01-20: Antimicrobial, Antiviral, and Antifungal Nanocoatings (RIA)

*Materials and data cross-cutting actions*

- HORIZON-CL4-2021-RESILIENCE-01-25: Biomaterials database for Health Applications (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-26: Sustainable Industry Commons (RIA)

*Improving the resilience and preparedness of EU businesses, especially SMEs and Startups*

- HORIZON-CL4-2021-RESILIENCE-01-27: Innovation Radar, Tech Due Diligence and Venture Building for strategic digital technologies (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-28: Re-opening industrial sites preparatory action - Promoting a sustainable strategy for Europe's industrial future (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-29: 'Innovate to transform' support for SME's sustainability transition (CSA)
- HORIZON-CL4-2021-RESILIENCE-01-31: European Technological and Social Innovation Factory (RIA)

### Call DIGITAL AND EMERGING TECHNOLOGIES FOR COMPETITIVENESS AND FIT FOR THE GREEN DEAL 2021

*European Innovation Leadership in Photonics*

- HORIZON-CL4-2021-DIGITAL-EMERGING-01-07: Advanced Photonic Integrated Circuits (RIA)

*Innovation in AI, Data and Robotics*

- HORIZON-CL4-2021-DIGITAL-EMERGING-01-09: AI, Data and Robotics for the Green Deal (IA)
- HORIZON-CL4-2021-DIGITAL-EMERGING-01-10: AI, Data and Robotics at work (IA)

*Tomorrow's deployable Robots: efficient, robust, safe, adaptive and trusted*

- HORIZON-CL4-2021-DIGITAL-EMERGING-01-11: Pushing the limit of robotics cognition (RIA)
- HORIZON-CL4-2021-DIGITAL-EMERGING-01-12: European Network of Excellence Centres in Robotics (RIA)

*European leadership in Emerging Enabling Technologies*

- HORIZON-CL4-2021-DIGITAL-EMERGING-01-13: Academia-Industry Forum on Emerging Enabling Technologies (CSA)
- HORIZON-CL4-2021-DIGITAL-EMERGING-01-14: Advanced spintronics: Unleashing spin in the next generation ICs (RIA)
- HORIZON-CL4-2021-DIGITAL-EMERGING-01-27: Development of technologies/devices for bio-intelligent manufacturing (RIA)

### Call STRATEGIC AUTONOMY IN DEVELOPING, DEPLOYING AND USING GLOBAL SPACE-BASED INFRASTRUCTURES, SERVICES, APPLICATIONS AND DATA 2022 - APPLICATIONS

*Development of applications from the EU space programme components*

- HORIZON-CL4-2021-SPACE-02-51: EGNSS and Copernicus applications fostering the European Green deal

### Call A HUMAN-CENTRED AND ETHICAL DEVELOPMENT OF DIGITAL AND INDUSTRIAL TECHNOLOGIES 2021

*Leadership in AI based on trust*

- HORIZON-CL4-2021-HUMAN-01-02: European coordination, awareness, standardisation & adoption of trustworthy European AI, Data and Robotics (CSA)

*Systemic approaches to make the most of the technologies within society and industry*

- HORIZON-CL4-2021-HUMAN-01-17: Awareness raising on Intellectual property (IP) management for European R&I (CSA)
- HORIZON-CL4-2021-HUMAN-01-18: Fostering standardisation to boost European industry's competitiveness (CSA)
- HORIZON-CL4-2021-HUMAN-01-19: Testing innovative solutions on local communities'-demand (IA)
- HORIZON-CL4-2021-HUMAN-01-20: Piloting a new industry-academia knowledge exchange focussing on companies' needs (CSA)
- HORIZON-CL4-2021-HUMAN-01-21: Art-driven use experiments and design (RIA)
- HORIZON-CL4-2021-HUMAN-01-23: Support for National Contact Points in Digital, Industry and Space
- HORIZON-CL4-2021-HUMAN-01-26: Workforce skills for industry 5.0 (RIA)

# TACK!

## VINNOVA

Sveriges innovationsmyndighet



Vinnova.se



/Vinnova



@Vinnovase



/Vinnovase

# Frågor!



# Cluster 4 – Destination 5

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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# Structured headings

1 Foster competitiveness of space systems

2 Reinforce EU capacity to access to space

3 Evolution of Space and ground infrastructures for Galileo/EGNOS

- Under 'Other Actions', (ESA & EUSPA)

4 Evolution of services: Copernicus

5 Development of applications for Galileo, EGNOS and Copernicus

- Under 'Other Actions', (EUSPA)

6 Innovative space capabilities: SSA, GOVSATCOM, Quantum

- Partially under 'Other Actions'

7 Space entrepreneurship ecosystems (incl. New Space and start-ups) and skills

8 Targeted and strategic actions supporting the EU space sector

| 2021  
 Opening | 28 Oct 2021  
 Deadline | 16 Feb 2022

| 2022  
 | 28 Oct 2021  
 | 16 Feb 2022

# 1. Foster competitiveness of space systems

Topics	Type of Action	Budget (M€)	Expected EU contribution per project (M€) [Number of projects expected to be funded]
HORIZON-CL4-2021-SPACE-01-11: End-to-end satellite communication systems and associated services	RIA	12	4 - 6 [2]
HORIZON-CL4-2021-SPACE-01-12: Future space ecosystems: on-orbit operations, new system concepts	RIA	6	1 - 2 [3]
HORIZON-CL4-2022-SPACE-01-11: Future space ecosystems: on-orbit operations, preparation of orbital demonstration mission	RIA	26	20 - 26 [1]
HORIZON-CL4-2022-SPACE-01-12: Technologies and generic building blocks for Electrical Propulsion	IA	5,1	1 - 2 [3]
HORIZON-CL4-2022-SPACE-01-13: End-to-end Earth observation systems and associated services	IA	8,1	2 - 3 [3]

| 2021  
 Opening | 28 Oct 2021  
 Deadline | 16 Feb 2022

| 2022  
 | 28 Oct 2021  
 | 16 Feb 2022

## 2 Reinforce EU capacity to access to space

Topics	Type of Action	Budget (M€)	Expected EU contribution per project (M€) [Number of projects expected to be funded]
HORIZON-CL4-2021-SPACE-01-21: Reusability for European strategic space launchers - technologies and operation maturation including flight test demonstration	RIA	39	30 - 39 [1]
HORIZON-CL4-2021-SPACE-01-22: Low cost high thrust propulsion for European strategic space launchers - technologies maturation including ground tests	RIA	19,8	15 - 19 [1]
HORIZON-CL4-2021-SPACE-01-23: New space transportation solutions and services	RIA	3	1 - 1,5 [2]
HORIZON-CL4-2022-SPACE-01-21: Multi sites flexible industrial platform and standardised technology for improving interoperability of European access to space ground facilities	RIA	2	1 - 2 [1]

| 2021  
 Opening | 28 Oct 2022  
 Deadline | 16 Feb 2022

| 2022  
 | 28 Oct 2022  
 | 16 Feb 2022

## 4 Evolution of services: Copernicus

Topics	Type of Action	Budget (M€)	Expected EU contribution per project (M€) [Number of projects expected to be funded]
HORIZON-CL4-2021-SPACE-01-41: Copernicus Climate Change Service evolution	RIA	11	10 - 11 [1]
HORIZON-CL4-2021-SPACE-01-42: Copernicus Atmosphere Monitoring Service evolution	RIA	7,5	6 - 7,5 [1]
HORIZON-CL4-2021-SPACE-01-43: Copernicus Security and Emergency Services evolution	RIA	5	4 - 5 [1]
HORIZON-CL4-2021-SPACE-01-44: Copernicus evolution for cross-services thematic domains	RIA	5,6	~3 [2]
HORIZON-CL4-2022-SPACE-01-41: Copernicus Marine Environment Monitoring Service evolution	RIA	10	8 - 10 [1]
HORIZON-CL4-2022-SPACE-01-42: Copernicus Anthropogenic CO <sub>2</sub> Emissions Monitoring & Verification Support (MVS) capacity	RIA	6	5 - 6 [1]
HORIZON-CL4-2022-SPACE-01-43: Copernicus Land Monitoring Service evolution	RIA	5	4 - 5 [1]

| 2021  
Opening | 2021  
Deadline | 2021

| 2022  
| 05 May 2022  
| 06 Sept 2022

## 5 Development of applications for Galileo, EGNOS and Copernicus

Topics - Found under 'Other Actions' "implemented under indirect management by the European Union Space programme Agency - EUSPA"	Type of Action	Budget (M€)	Expected EU contribution per project (M€) [Number of projects expected to be funded]	
HORIZON-EUSPA-2021-SPACE-02-51: EGNSS and Copernicus applications fostering the European Green deal	IA	14	2 - 3	[5]
HORIZON-EUSPA-2021-SPACE-02-52: EGNSS applications for Safety and Crisis management	IA	9,3	2 - 3	[3]
HORIZON-EUSPA-2021-SPACE-02-53: EGNSS applications for the Digital Age	IA	9,3	2 - 3	[3]
<hr/>				
HORIZON-EUSPA-2022-SPACE-02-51: EGNSS applications for Smart mobility	IA	9,5	2 - 3	[3]
HORIZON-EUSPA-2022-SPACE-02-52: Public sector as Galileo and/or Copernicus user	PCP	5,2	2,6 - 5,2	[2]
HORIZON-EUSPA-2022-SPACE-02-54: Copernicus downstream applications and the European Data Economy	IA	9,6	2 - 3	[3]
HORIZON-EUSPA-2022-SPACE-02-55: Large-scale Copernicus data uptake with AI and HPC	RIA	9,6	2 - 3	[3]
HORIZON-EUSPA-2022-SPACE-02-56: Designing space-based downstream applications with international partners	RIA	5,1	0,5 - 1	[5]

	2021	2022
Opening	28 Oct 2021	28 Oct 2021
Deadline	16 Feb 2022	16 Feb 2022

## 6 Innovative space capabilities: SSA, GOVSATCOM, Quantum

Topics	Type of Action	Budget (M€)	Expected EU contribution per project (M€) [Number of projects expected to be funded]
HORIZON-CL4-2021-SPACE-01-62: Quantum technologies for space gravimetry	RIA	17	15 - 17 [1]
HORIZON-CL4-2022-SPACE-01-62: Space Weather	RIA	2	0,5 - 1 [2]

	2021	2022
Opening	-	05 May 2021
Deadline	-	06 Sep 2022

## Found under ‘Other Actions’

“implemented under indirect management by the European Union Space programme Agency - EUSPA”

HORIZON-EUSPA-2022-SPACE-02-61: GOVSATCOM Service developments and demonstrations	RIA	9,1	1 - 1,5 [6]
---	-----	-----	-------------

| 2021  
Opening | -  
Deadline | -

| 2022  
| 28 Oct 2021  
| 16 Feb 2022

## 7 Space entrepreneurship ecosystems (incl. New Space and start-ups) and skills

Topics	Type of Action	Budget (M€)	Expected EU contribution per project (M€) [Number of projects expected to be funded]
HORIZON-CL4-2022-SPACE-01-72: Education and skills for the EU space sector	CSA	3	2 - 3 [4]



| 2021  
 Opening | 28 Oct 2021  
 Deadline | 16 Feb 2022

| 2022  
 | 28 Oct 2021  
 | 16 Feb 2022

## 8 Targeted and strategic actions supporting the EU space sector

Topics	Type of Action	Budget (M€)	Expected EU contribution per project (M€) [Number of projects expected to be funded]
HORIZON-CL4-2021-SPACE-01-81: Space technologies for European non-dependence and competitiveness	RIA	10,32	2 - 3 [4]
HORIZON-CL4-2022-SPACE-01-81: Space technologies for European non-dependence and competitiveness	RIA	10,5	2 - 3 [4]
HORIZON-CL4-2022-SPACE-01-82: Space science and exploration technologies	RIA	8	1 - 1,5 [6]

### 3 Evolution of Space and ground infrastructures for Galileo/EGNOS

<b>Indirectly managed actions delegated to ESA</b>			
1.1. EGNSS Evolution: Technology and infrastructure-related R&D activities			
1.2. HORIZON-CL4-SSA-SWENEO - Space Weather and Near Earth Objects			
1.3. GOVSATCOM Technology Development and implementation of system innovative features			
1.4. CASSINI In Orbit Demonstration/Validation (IOD/IOV) service			

### 3 Evolution of Space and ground infrastructures for Galileo/EGNOS

Indirectly managed actions delegated to EUSPA	Type of action	Indicative budget (M€)
2.1. EIC Horizon and CASSINI Prize for digital space applications	Inducement Prize	3,4
2.2. EIC Horizon and CASSINI Prize for space technology products and services	Inducement Prize	5
2.3. Support European “New Space” entrepreneurship through CASSINI Space Entrepreneurship Initiative 2021-2027 - Hackathons & Mentoring	Public procurement	2,4
2.4. Innovation activities for improved EGNSS operation and service provision	-	5
2.5. Development of applications for Galileo, EGNOS and Copernicus	-	32,6 + 48,1
2.6 Tender evaluation, project monitoring and audits (EGNSS/Copernicus downstream)	Indirectly managed action	38,1 + 59,9

### 3 Evolution of Space and ground infrastructures for Galileo/EGNOS

Grants to identified beneficiaries	Type of action	Indicative budget (M€)
HORIZON-CL4-SSA-SST-MS - New & improved EUSST Missions and Services	RIA	8
HORIZON-CL4-SSA-SST-STM-AE - SST & STM system architecture and evolutions	RIA	6
HORIZON-CL4-SSA-SST-SB - Space-based SST (mission, system and sensors network)	RIA	6
HORIZON-CL4-SSA-SST-SP - SST Sensors and Processing	IA (funding rate 45%)	25
HORIZON-CL4-SSA-SST-SD - SST Networking, Security & Data sharing	IA	7

## Cluster 4 - Digital, Industry & Space

This info day aims to inform (potential) applicants about topics included in the Cluster 4 'Digital, Industry and Space' work programme of 2021.



29/06/2021 - 30/06/2021

Under the pillar 2 of Horizon Europe, Cluster 4 focuses on Digital, Industry and Space and aims to deliver on the following six destinations matching the Strategic Plan:

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

### Programme of the online event

#### Day 1 | Day 2

- 9:00 ● Welcome and general presentation of the 'Digital, Industry and Space' 2021 Work Programme  
9:00 - 10:45 | Plenary session  
[Watch this session >](#)
- 11:00 ● Horizontal Issues  
11:00 - 12:45  
[Watch this session >](#)
- 13:15 ● Destination 1 - Climate neutral, circular and digitised production  
13:15 - 17:30 | Breakout room  
[Watch this session >](#)
- 13:15 ● Destination 6 - A human-centred and ethical development of digital and industrial technologies  
13:15 - 17:30 | Breakout room  
[Watch this session >](#)
- 13:15 ● **Destination 5 - Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data**  
13:15 - 17:30 | Breakout room  
[Watch this session >](#)

[Cluster 4 - Digital, Industry & Space | Horizon Europe Info Days 2021 \(horizon-europe-infodays2021.eu\)](https://horizon-europe-infodays2021.eu)

# Frågor!

# Guidance and support

# Work programme

- Destinations
  - Call areas
    - Topics
      - Expected Outcomes
      - Scope
- Other Actions

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## HORIZON-CL3-2021-FCT-01-03: Disinformation and fake news are combated and trust in the digital world is raised

Specific conditions	
<i>Expected EU contribution per project</i>	The EU estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 16.00 million. <sup>16</sup>
<i>Type of Action</i>	Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The following additional eligibility conditions apply:</p> <p>This topic requires the active involvement of at least 3 Police Authorities<sup>17</sup> from at least 3 different EU Member States or Associated countries. For these participants, applicants must fill in the table “Eligibility information about practitioners” in the application form with all the requested information, following the template provided in the submission IT tool.</p> <p>Some activities, resulting from this topic, may involve using classified background and/or producing of security sensitive results (EUCI and SEN). Please refer to the related provisions in section B Security — EU</p>

**Expected Outcome:** Projects’ results are expected to contribute to some or all of the following outcomes:

**Scope:** Combating disinformation and fake news with implications for security is an important aspect where modern information analysis is needed. Bots are increasingly used to manipulate the public opinion and spread fake news on the internet. Causing a mass panic by spreading fake news is one example. Dimensions of this problem increase even more in crisis situations, such as the COVID-19 lockdown, where spreading disinformation and fake news, by infusing uncertainty and fear, aims at harming people’s life, intensifying the crisis situations, weakening the European societies and aggravating the divisions. This topic asks for an interdisciplinary approach based both on societal capabilities to withstand such a threat (e.g., education on trustable sources of information, research on the impact of uncertainties





European Commission

# 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

Horizon Europe (HORIZON)

clear filter

## SEARCH FUNDING & TENDERS

Search funding & tenders

Funding updates

Archived funding (FP7-CIP)

### Funding & Tenders

- Programme
- Call
- Open or closed

### Funding Updates

- Programme
- Key words

## HOW TO PARTICIPATE

Key steps

Reference documents

Participant register

Partner search

### Key Steps

Finding a call to submitting a proposal

### Ref Documents

- Legislation
- Work Programmes
- Call docs
- Grant Agreements
- Contracts
- Guidance's
- Templates and Forms

### Partner Search

Searchable by:

- Org type
- Org name
- Country
- PIC No.
- Topic
- etc

### Participant Register

- Register your org.
- Get a Participant Identification Code

## Projects & Results

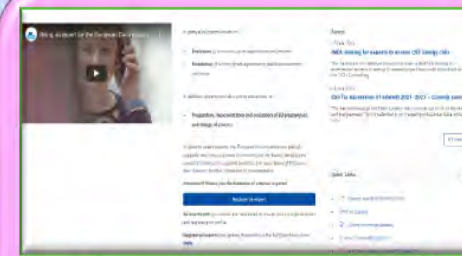
Programming period

2021-2027

Horizon Europe (HORIZON)

### Projects & Results

- Searchable database
- Not open yet



### Work as an Expert

- Register as an expert
- Associated links

## SUPPORT

Support overview

Guidance & Manuals

FAQ

Helpdesk & Support Services

### Guidance & Manuals

- Ref docs
- Online manual
- How to steps
- Glossary

### Helpdesk & Support Services

#### Services

- IT Helpdesk
- Europe Direct
- Validation Services

# GO EXPLORE!!

# WEALTH OF

# INFORMATION

# Key impact pathways

1. Creating high-quality new knowledge
2. Strengthening human capital in R&I
3. Fostering diffusion of knowledge and Open Science

**Scientific  
Impact**



4. Addressing EU policy priorities & global challenges through R&I
5. Delivering benefits & impact via R&I missions
6. Strengthening the uptake of R&I in society

**Societal  
Impact**



7. Generating innovation-based growth
8. Creating more and better jobs
9. Leveraging investments in R&I

**Economic/  
Technological  
Impact**



# Proposal Template

- Assessment of management structures removed
- Extensive explanations in template
  
- Fields moved from part B (narrative part) to part A (formalities)
  - Ethics self-assessment
  - Security questionnaire
- New fields in part A
  - Self-declaration on gender equality plan
  - Role of participating organisation
  - Researchers table

# NCP?



National EU-node

**NCP**

National contact points



- Answers questions on Horizon Europe
- Helps to find matching calls and topics
- Legal and financial advice
- Spreads information
- Strategic advice

Information from SE system to EC  
via NCP networks, experts and PC

# Events



<https://www.horizon-europe-infodays2021.eu/>

28 June 2021 – Project idea consultations

29-30 June 2021 – Digital, industry & space

<https://www.horizon-europe-infodays2021.eu/event/cluster-4-digital-industry-space>

Online brokerage and Face2Face-meetings

<https://digital2021.ideal-ist.eu>

<https://digital2021.b2match.io>

# Användbara länkar

## Information om programmet

[Vinnovas webbplats om Horisont Europa](#) – information om programmet och kontakt

[Kraftsamling för Horisont Europa](#) – förslag till nationell strategi för ett starkare svenskt deltagande

[Funding and Tenders](#) – EU-kommissionens (EC) portal för utlysningar, topics och ansökan

[Horisont Europa](#) – övergripande information om programmet från EC

[Missions](#) – ECs information om Missions

[Partnerships](#) - ECs information om europeiska partnerskap med kontaktuppgifter

[Reference Documents](#) – regelverk, mallar, guider etc.

[Dashboard](#) – Horisont 2020-databas för statistik och beviljade projekt

## Att skriva en ansökan

[How to prepare a successful proposal in Horizon Europe](#) – inspelat webinarie anordnat av EC

## Verktyg för nätverkande och stöd

[EUSME](#) – svenskt supportkontor för små och medelstora företag

[EEN Match](#)

## Fördjupad information om policy

[European Green Deal](#)

[A Clean Planet for All](#)

[Europe Fit for the Digital Age](#)

Please fill in our evaluation form:

**menti.com, code 3539 7732**

# Frågor!



Tack!