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# Apvārsnis Eiropa 4. klastera «Digitālā joma, rūpniecība un kosmos» aktualitātes.

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NACIONĀLAIS  
ATTĪSTĪBAS  
PLĀNS 2020



EIROPAS SAVIENĪBA  
Eiropas Reģionālās  
attīstības fonds

IEGULDĪJUMS TAVĀ NĀKOTNĒ

1.1.1. specifiskā atbalsta mērķa "Palielināt Latvijas zinātnisko institūciju pētniecisko un inovatīvo kapacitāti un spēju piesaistīt ārējo finansējumu, ieguldot cilvēkresursos un infrastruktūrā" 1.1.1.5. pasākuma "Atbalsts starptautiskās sadarbības projektiem pētniecībā un inovācijās" 1.kārtas, projekta Nr.1.1.1.5/17/I/001 "Atbalsts starptautiskās sadarbības projektu izstrādei un īstenošanai" ietvaros





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# Apvārsnis Eiropa 4. klastera darba programma



EN

**Horizon Europe**

**Work Programme 2023-2024**

*7. Digital, Industry and Space*

*info:*

[https://ec.europa.eu/info/horizon-europe/cluster-4-digital-industry-and-space\\_en](https://ec.europa.eu/info/horizon-europe/cluster-4-digital-industry-and-space_en)

*darba programma:*

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-7-digital-industry-and-space\\_horizon-2023-2024\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-7-digital-industry-and-space_horizon-2023-2024_en.pdf)

## DIGITAL, INDUSTRY & SPACE





## DESTINATION 1

CLIMATE NEUTRAL,  
CIRCULAR AND  
DIGITISED  
PRODUCTION

## DESTINATION 2

INCREASED  
AUTONOMY IN KEY  
STRATEGIC VALUE  
CHAINS FOR  
RESILIENT INDUSTRY

## DESTINATION 3

WORLD LEADING  
DATA AND  
COMPUTING  
TECHNOLOGIES

## DESTINATION 4

DIGITAL AND  
EMERGING  
TECHNOLOGIES FOR  
COMPETITIVENESS  
AND FIT FOR THE  
GREEN DEAL

## DESTINATION 5

OPEN STRATEGIC  
AUTONOMY IN  
DEVELOPING,  
DEPLOYING AND USING  
GLOBAL SPACE-BASED  
INFRASTRUCTURE,  
SERVICES,  
APPLICATIONS AND  
DATA

## DESTINATION 6

A HUMAN-CENTRED  
AND ETHICAL  
DEVELOPMENT OF  
DIGITAL AND  
INDUSTRIAL  
TECHNOLOGIES



Strategic Plan:  
[https://ec.europa.eu/info/sites/info/files/research\\_and\\_innovation/funding/documents/ec\\_rtd\\_horizon-europe-strategic-plan-2021-24.pdf](https://ec.europa.eu/info/sites/info/files/research_and_innovation/funding/documents/ec_rtd_horizon-europe-strategic-plan-2021-24.pdf)

EXPECTED IMPACT	INTERVENTION AREAS COVERED <sup>29</sup>	EUROPEAN PARTNERSHIPS
<b>15.</b> Global leadership in clean and climate-neutral industrial value chains, circular economy and climate-neutral digital systems and infrastructures (networks, data centres).	Manufacturing Technologies Advanced Materials Circular Industries Low-Carbon and Clean Industries Key digital technologies Artificial Intelligence and Robotic	Clean Steel – Low Carbon Steelmaking Made in Europe Processes4Planet Photonics Artificial Intelligence, Data and Robotics
<b>16.</b> Industrial leadership and increased autonomy in key strategic value chains with security of supply in raw materials (...)	Advanced Materials Circular Industries Low-Carbon and Clean Industries Manufacturing Technologies Key digital technologies Emerging enabling technologies	Made in Europe Processes4Planet
<b>17.</b> Globally attractive, secure and dynamic data-agile economy (...)	Artificial Intelligence and Robotics Advanced Computing and Big Data Manufacturing Technologies	Artificial intelligence, Data and Robotics Smart Networks and Services <sup>2</sup> Key Digital Technologies <sup>2</sup> High Performance Computing <sup>2</sup> European Metrology <sup>3</sup>
<b>18.</b> Open strategic autonomy in digital technologies and in future emerging enabling technologies (...)	Key digital technologies Emerging enabling technologies Artificial Intelligence and Robotic Next Generation Internet Advanced Computing and Big Data	Artificial Intelligence, Data and Robotics Photonics Smart Networks and Services <sup>2</sup> Key Digital Technologies <sup>2</sup> High Performance Computing <sup>2</sup> European Metrology <sup>3</sup>
<b>19.</b> Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data (...)	Space, including Earth Observation	Globally Competitive Space Systems
<b>20.</b> A human-centred and ethical development of digital and industrial technologies (...)	Next Generation Internet Artificial Intelligence and Robotics Manufacturing Technologies	Made in Europe Artificial Intelligence, Data and Robotics Key Digital Technologies <sup>2</sup>



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# Projektu tipi

Type	Activities	Financing rate
RIA (Research and Innovation Actions)	Activities to establish new knowledge or to explore the feasibility of a new or improved technology, product, process, service or solution.	Up to 100%
IA (Innovation Actions)	Activities to produce plans and arrangements or designs for new, altered or improved products, processes or services.	*Up to 70%
CSA (Coordination and Support Actions)	Activities that contribute to the objectives of Horizon Europe. This excludes R&I activities, except for 'Widening participation and spreading excellence'.	Up to 100%



\* the rate is 70 percent for profit-making legal entities and 100 percent for non-profit legal entities



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# Projektu tipi

Research & Innovation Actions	Innovation Actions
Basic & applied research	Limited R&D activities
Testing / validation on small-scale prototype (in lab or simulated environment)	Prototyping, testing, large-scale product validation & market replication
Limited demo or pilot activities (to show tech feasibility in a near to operational environment)	Demo or pilot activities (to show tech feasibility in operational environment)
Developing innovations meeting needs of markets	Developing innovations meeting needs of markets & their delivery to market
Exploitation activities	
Innovation management	



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# Technology Readiness Level

**Technology Readiness Levels (TRLs) are indicators of the maturity level of particular technologies.**

**TRL 1** – basic principles observed

**TRL 2** – technology concept formulated

**TRL 3** – experimental proof of concept

**TRL 4** – technology validated in lab

**TRL 5** – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

**TRL 6** – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

**TRL 7** – system prototype demonstration in operational environment

**TRL 8** – system complete and qualified

**TRL 9** – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)



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# D3: World Leading Data and Computing Technologies

**Opening date: 8 December 2022**

**Deadline: 29 March 2023**



<https://www.youtube.com/watch?v=MQ8vsfU53hU>

Topic	Type of action, TRL	EU contribution per project (EUR million)	Number of projects to be funded
<b>HORIZON-CL4-2023-DATA-01-02:</b> Integration of data life cycle, architectures and standards for complex data cycles and/or human factors, language (AI, data and robotics partnership)	<b>RIA</b> TRL 2-3/TRL 4-5	9	5
<b>HORIZON-CL4-2023-DATA-01-07:</b> Collaboration with NSF on fundamental research on new concepts for distributed computing and swarm intelligence	<b>CSA</b>	1	1
<b>HORIZON-CL4-2023-DATA-01-04:</b> Cognitive Computing Continuum: Intelligence and automation for more efficient data processing (AI, data and robotics partnership)	<b>RIA</b> TRL 2/TRL 5	4-6	6
<b>HORIZON-CL4-2023-DATA-01-06:</b> Coordination and Support of Cognitive Computing Continuum research and policy	<b>CSA</b>	2	1



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# HORIZON-CL4-2023-DATA-01-02

## What are we looking for?

- Address the entire data life cycle
- Build on existing/emerging standards, models, architectures
- Address/support compliance with applicable legislation & FAIR principles
- Account for human factors/intervention
- Involve at least 3 Common European Data Spaces (or equivalent platforms)

## Current project portfolio

- Data Spaces Support Centre (Digital Europe CSA project)
- Data platform project portfolio (H2020 topic ICT-13-2019)
- Compliance and privacy preservation portfolio (HORIZON-CL4-2021-DATA-01-01)

## What we do NOT want?

- Vertical projects addressing a single area/industry/data space
- Stand-alone actions ignoring the numerous required links
- Actions addressing only one period of the data life cycle
- Theoretical or scientific actions without use cases involving real data spaces (or equivalent platforms)
- Re-inventing/ignoring past achievements where these can be relevant/useful

## Is there a key group of actors driving this?

- Big Data Value (BDVA) community
- ADRA partnership (AI, Data & Robotics)
- Data Spaces Business Alliance (DSBA)



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# HORIZON-CL4-2023-DATA-01-07

Brokerage event on HORIZON-CL4-2023-DATA-01-07 end January 2023 – TBC

## What are we looking for?

- We expect the CSA to support structure for cooperation between the EU and National Science Foundation of U.S. by:
- Organizing networking events,
- Providing exchange and fellowship programmes,
- Vision workshops for the academic and industrial comp. community,
- Organizing at least one annual EU-US workshop

## A new action, building on on-going projects

Focus on match-making for on-going projects

- HE-CL4-2021-DATA-01-05 – Platforms for the Edge: Meta Operating Systems
- HE-CL4-2022-DATA-01-03 – Programming tools for Decentralized Intelligence and Swarms

## What we do NOT want?

- Generic domain knowledge: → need to support a Strategic Vision
- Carrying out R&D, scientific papers as outcome // tons of deliverables
- Newcomers in CSA actions → track record in community buildings and stakeholder mobilisation
- Large consortia: → need of a powerful but lean consortium
- Closed club → need to open up target communities to interdisciplinary topics and have insights into ongoing HE projects

## Who are the types of main stakeholders

- Research establishments and academic partners with interest in collaboration with the NSF



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# HORIZON-CL4-2023-DATA-01-07

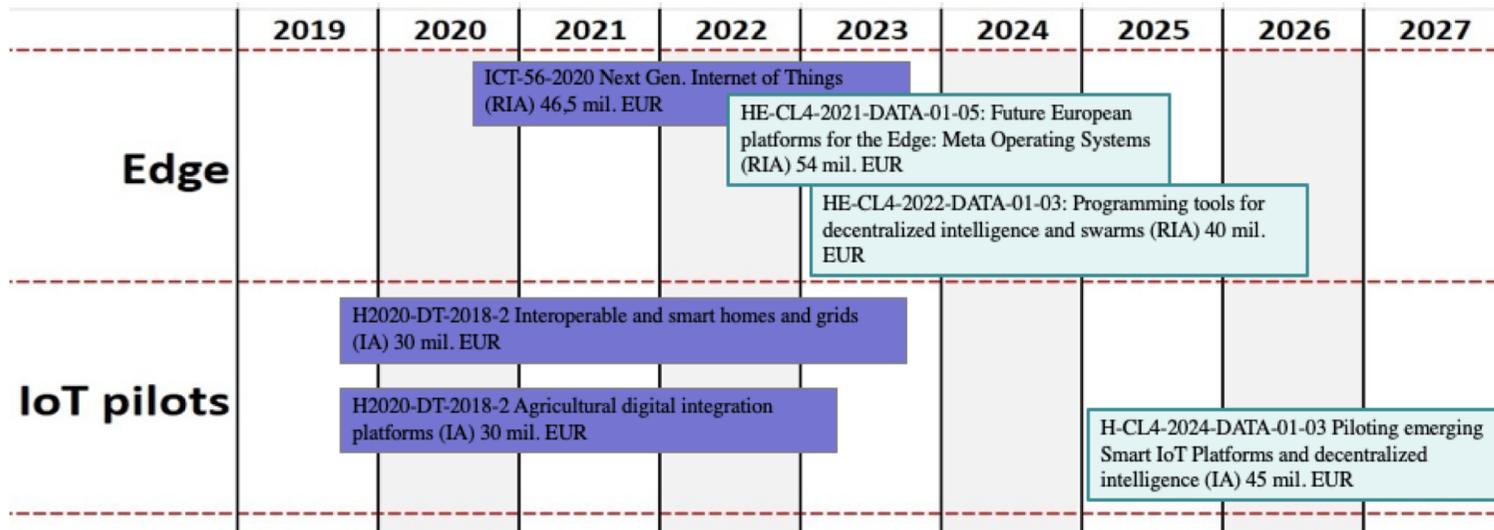
## Commission Communications:

European Data Strategy, Industrial Strategy, Fit for 55

## Position Papers and Event Reports:

Next Generation IoT and Edge Computing Strategy Forum, Portal – <https://eucloudedgeiot.eu/>  
HIPEAC Vision - <https://www.hipeac.net/vision/#/latest/>  
ARTEMIS SRIA - <https://artemis-ia.eu/>

## Topic evolution





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# HORIZON-CL4-2023-DATA-01-04

## What are we looking for?

Development of generic and advanced AI-enabled Cloud/Edge technologies, mechanisms, techniques, etc. covering the whole continuum.

Research on cloud/edge technologies! not in AI

For example: hyper-distributed computing approaches encompassing resources from IoT and far-edge constrained devices, to federated fog/edge computing nodes to central cloud computing centres and hybrid cloud models which exploit AI techniques Beyond State-of-the-art, not incremental type of research → cutting-edge novel approaches, TRL 2-5.

The proposals should demonstrate the applicability and viability of the proposed technological solutions across multiple application domains.

## What we do NOT want?

- Using existing Cloud/Edge technologies as an enabler for research in other domains (e.g., AI, IoT, BigData, 5G, etc.)
- Any User Application development using existing Cloud/Edge/AI technologies

For security and identity management, proposals are expected to apply state-of-the-art technologies, develop synergies and relate to activities and outcomes in Cluster 3 (HORIZON-CL3-2023-CS-01-01: Secure distributed platforms (IoT, Edge, Cloud, Dataspaces) and HORIZON-CL3-2023-CS-01-02: Privacy-preserving and identity technologies).

Interoperability approaches (based on open standards, interoperability models and open platforms) should be considered where appropriate.



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# HORIZON-CL4-2023-DATA-01-06

## What are we looking for?

New action, building on existing HE CSAs  
(UnlockCEI and OpenContinuum)

Seek for complementarity!

Bring together all stakeholders in the Cloud-Edge continuum and produce annually updated research roadmaps involving on-going research projects, EU initiatives (DEP related projects, Cloud Alliance, AIOTI, NESSI, IPCEI, etc.)

Long-term, Forward looking perspectives!

Scientific and policy related events that provide input to the research roadmaps and policy and standardization initiatives

**DG Connect units E2-E4 Brokerage event/Info Day – planned end January 2023 -tbc.**

## What we do NOT want?

- Business as usual... generic and not focus on the strategic vision of the cloud-edge-iot continuum
- Avoid too generic, short time to market perspectives
- Static/boring web sites and difficult to find information
- CSAs are to be used by community stakeholders and citizens

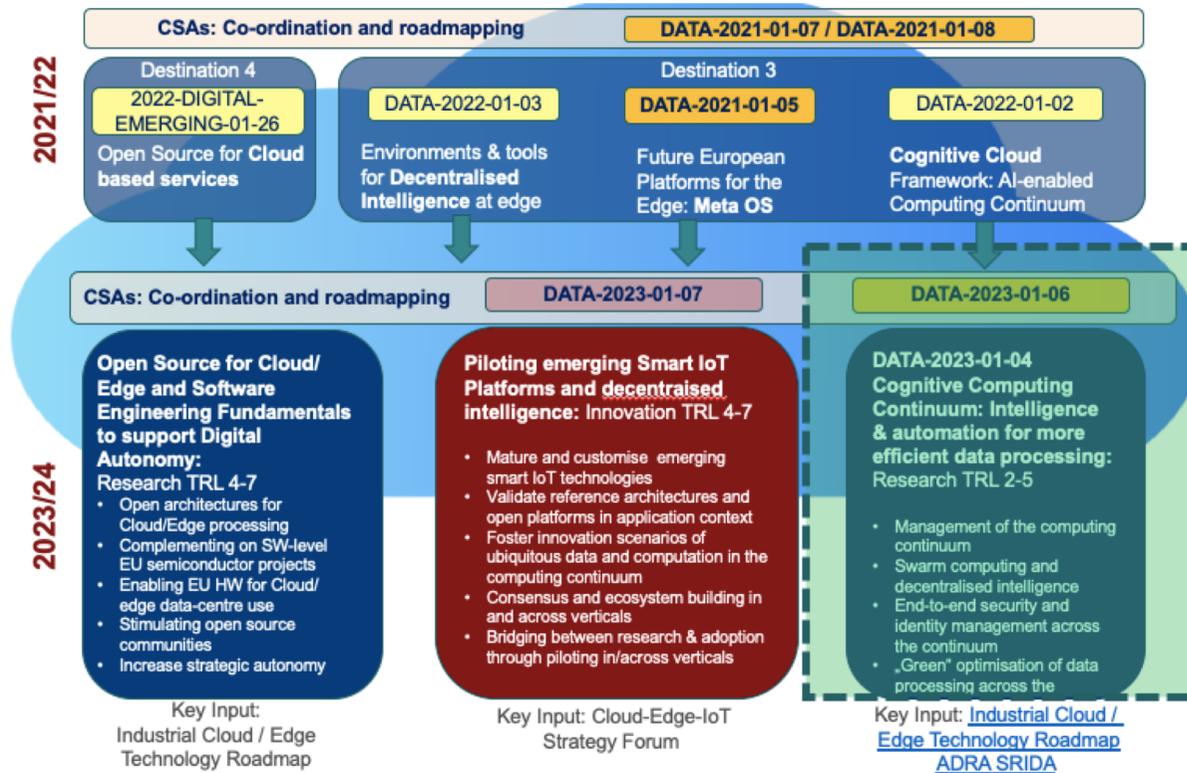
## Current project portfolio

- HE cloud-edge-IoT projects <https://eucloudedgeiot.eu/>
- H2020 Cloud projects <https://www.h-cloud.eu/projects/research-innovation/> and Funding and Tenders (F&T) portal: [ICT-40](#) , [ICT-15](#) , [ICT-16](#) , [HE projects on the F&T portal](#)



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# HORIZON-CL4-2023-DATA-01-06



## Useful information

- [Roadmap published by the Alliance on Industrial Data and Cloud](#)
- White paper on future cloud research <https://www.h-cloud.eu/news/h-cloud-publishes-final-version-of-white-paper-cloud-computing-in-europe/>
- Related videos on future research <https://www.h-cloud.eu/videos/>
- [DEP](#) and [IPCEI](#) on Next Generation Cloud Infrastructure and Services
- Lump Sum <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/horizon/lump-sum/guidance> and Link to the related training <https://ec.europa.eu/research/participant/docs/h2020-funding-guide/other/event221020.htm>



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# D4: Digital and Emerging Technologies for Competitiveness and Fit for the Green Deal

**Opening date: 8 December 2022    Deadline: 29 March 2023**



<https://www.youtube.com/watch?v=z9EoQ99GNL8>

Topic	Type of action, TRL	EU contribution per project (EUR million)	Number of projects to be funded
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-01:</b> Novel paradigms and approaches, towards AI-driven autonomous robots (AI, data and robotics partnership)	<b>RIA</b> TRL 2-3/TRL 4-5	8	4
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-12:</b> Adaptive multi-scale modelling and characterisation suites from lab to production	<b>RIA</b> TRL 3/TRL 5	5-7	4
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-51:</b> Pervasive photonics - multi- technology integration for digital infrastructure, sensors and internet of things (Photonics partnership)	<b>RIA</b> TRL 2/TRL 5	3-5	4
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-53:</b> Versatile light sources and systems as tools for manufacturing and medical application (Photonics Partnership)	<b>RIA</b> TRL 2/TRL 5	3-5	4
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-57:</b> Advanced imaging and sensing technologies (IA)(Photonics Partnership)	<b>IA</b> TRL 3/TRL 6-7	5-7	4



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# D4: Digital and Emerging Technologies for Competitiveness and Fit for the Green Deal

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Topic	Type of action, TRL	EU contribution per project (EUR million)	Number of projects to be funded
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-02:</b> Industrial leadership in AI, Data and Robotics – advanced human robot interaction (AI Data and Robotics Partnership)	<b>IA</b> TRL 3-5/TRL 6-7	10	3
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-11:</b> Low TRL research in micro- electronics and integration technologies for industrial solutions	<b>RIA</b> TRL 1-2/TRL 3-4	3-4	10
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-32:</b> Sustainable safe-by-design 2D materials technology	<b>RIA</b> TRL 2-3/TRL 4-5	3-5	2
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-33:</b> 2D materials of tomorrow	<b>RIA</b> TRL 2/TRL 4	3-4	3
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-40:</b> Quantum Photonic Integrated Circuit technologies	<b>RIA</b> TRL 2-3/TRL 4-5	4-6	2
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-41:</b> Investing in alternative quantum computation and simulation platform technologies	<b>RIA</b> TRL 3-4/TRL 5-6	7-12	2



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# D4: Digital and Emerging Technologies for Competitiveness and Fit for the Green Deal

**Opening date: 8 December 2022    Deadline: 29 March 2023**



<https://www.youtube.com/watch?v=z9EoQ99GNL8>

Topic	Type of action, TRL	EU contribution per project (EUR million)	Number of projects to be funded
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-50:</b> Next generation quantum sensing and metrology technologies	<b>RIA</b> TRL 2-3/TRL 4-5	2-3	3
<b>HORIZON-CL4-2023-DIGITAL-EMERGING-01-56:</b> Photonic Strategies and Skills Development (Photonics Partnership)	<b>CSA</b>	1-3	2



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# HORIZON-CL4-2023-DIGITAL-EMERGING-01-01

## What are we looking for?

- Achieve substantial “next step autonomy” in robots, undertaking non-repetitive tasks in realistic settings, including Human-Robot interactions, as well as robots acting in isolation, demonstrated in key high impact sectors where robotics has the potential to deliver significant economic and/or societal benefits.
- Deliver a step change in autonomy essential for the diffusion of robots in various industries, sectors and services.
- Accelerate enabling conditions essential for the diffusion of robots in various industries, sectors and services.

## Key group of actors driving this

AI, Data and Robotics Partnership



The AI Data Robotics  
Association

<https://adr-association.eu/>

## What we do NOT want?

- Proposals with limited ambition on robot autonomy delivering only incremental progress over the scientific state of the art.
- Non-realistic settings disconnected from actual needs of key industries, sectors and services (end-users involvement is key)
- Focus on low impact sectors with little potential to deliver economic or societal benefits.
- DO NOT DEVIATE FROM ADMIN/FORMAL requirements: e.g. transfer of essential information to annexes to overcome page limits, font size and formatting imposed by the templates...



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# HORIZON-CL4-2023-DIGITAL-EMERGING-01-01

## Was it called before?

- HORIZON-CL4-2021-DIGITAL-EMERGING-01-11 Pushing de limit of robotic cognition (RIA)
- HORIZON-CL4-2021-DIGITAL-EMERGING-01-12 European Network of Excellence Centres in Robotics (RIA)
- HORIZON-CL4-2022-DIGITAL-EMERGING-02-06 Pushing de limits of physical intelligence and performance (RIA)

## This topic is complemented by the topic:

- HORIZON-CL4-2023-DIGITAL-EMERGING-01-02 Industrial leadership in AI, Data and Robotics – advanced human robot interaction (IA)

## Current project portfolio

- 2021-DIGITAL-EMERGING-01-11 Pushing limit of robotic cognition: REGO; HARIA; CoreSense; AGIMUS; PILLAR-Robots; CONVINCENCE; MOZART; IntelliMan; SESTOSENDO
- 2021-DIGITAL-EMERGING-01-12 European Network of Excellence Centres in Robotics: euROBIN

## Background documents

[Horizon Europe: New Projects in Robotics and AI - June-November 2022 | Shaping Europe's digital future \(europa.eu\)](#)

[Launch Event: Paving the way towards the next generation of R&I excellence in AI, Data and Robotics | Adra-e](#)



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# HORIZON-CL4-2023-DIGITAL-EMERGING-01-02

## What are we looking for?

- Proposals must target one of these two scopes (to be identified in the proposal):
  - 1. Development of innovative solutions to address major application-driven challenges (min 50% FSTP),
  - 2. Large scale pilots bringing major industries from key application sectors in Europe (FSTP optional)
- To reach the point where human robot interaction adds value and improves the quality of outcome for complex tasks.
- To address challenges in key industries and develop solutions that address human robot interaction at all levels from physical interaction to social interaction in a variety of working environments.
- Boost the innovation potential for wide uptake of AI, Data and Robotics.
- Proposals should include a clear business case and exploitation strategy.

## What we do NOT want?

- Academic exercises with limited potential for commercial exploitation of the results after the end of the project.
- Non-realistic settings disconnected from actual needs of key industries, sectors and services.
- Focus on low impact sectors with little potential to deliver economic or societal benefits.
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# Flagship on Quantum Technologies: a Paradigm Shift

- HORIZON-CL4-2023-DIGITAL-EMERGING-01-40
- HORIZON-CL4-2023-DIGITAL-EMERGING-01-41
- HORIZON-CL4-2023-DIGITAL-EMERGING-01-43
- HORIZON-CL4-2023-DIGITAL-EMERGING-01-50
- HORIZON-CL4-2023-DIGITAL-EMERGING-01-56

## What are we looking for?

- Build on Flagship ramp-up success stories
- Move the technologies up the TRL scale
- Lab to Market
- Build EU quantum ecosystem

## Was it called before?

- Continuation of activities of the Quantum Flagship ramp-up phase & WP21-22
- Entering the technology demonstration phase (support deployment activities)
- In line with new Strategic Research and Industry Agenda

## What we do NOT want?

- Pure academic consortia
- Splitting of competences, incoherent approaches
- Non-addressed weaknesses in terms of supply chain



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# Flagship on Quantum Technologies: a Paradigm Shift

## Current project portfolio

- Quantum Flagship projects under H2020 and HE (RIAs & FPAs/SGAs)
- Quantum computing (platforms, software, EuroHPC)
- Quantum simulations
- Quantum communications (infrastructure: EuroQCI)
- Quantum sensing and metrology
- Basic science
- Pilot lines and testing facilities

## Background documents

- [qt.eu](http://qt.eu) – [Resources](#)
- [Quantum \(europa.eu\)](http://Quantum.europa.eu)



## A key group of actors driving this :

The Quantum Flagship Community

- Quantum Community Network (QCN)
- European Quantum Industry Consortium (QuIC)

The Quantum Flagship Governance

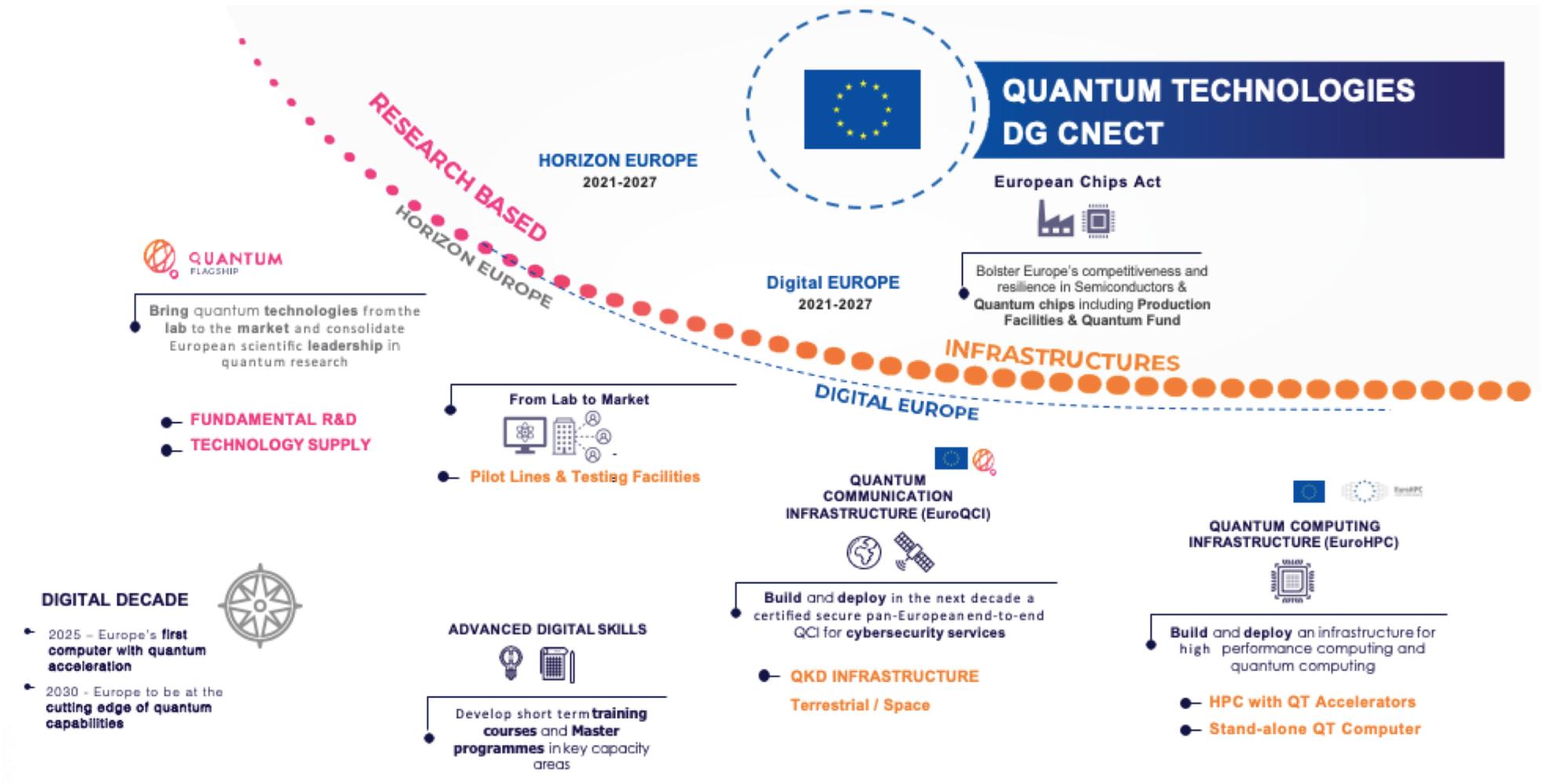
- Strategic Advisory Board (SAB)
- Quantum Coordination Board (QCB) (former SEB)

CSA: QUCATS



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# Flagship on Quantum Technologies: a Paradigm Shift





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# HORIZON-CL4-2023-DIGITAL-EMERGING-01-32

## What are we looking for?

- Development of Safe and Sustainable by Design two-dimensional materials (2DM) technology.
- Societal acceptance of 2DM and 2DM-based technologies.
- A set of robust and verified assays to support regulatory requirements for their registration and authorization for use
- Critical examination of 2DM health and environment issues
- Studies and tests of biocompatibility and safety of 2DMs and composites along their life cycle;
- Development of solutions to modulate potential risks by developing appropriate chemical/physical approaches towards safer manufactured materials and nanomaterials
- Safety assessment of 2DMs and composites at different TRL levels by developing best practices along the product development process

## Was it called before?

- It is the continuation of the Graphene Flagship
- Follows the change of implementation from FPA/SGA vs RIA/IA + CSA
- There are other topics/initiatives in the WP out of "Graphene Europe in the Lead" where 2DM can compete

## Current project portfolio

- Graphene Flagship  
<https://graphene-flagship.eu>
- 2D experimental Pilot line  
<https://graphene-flagship.eu/innovation/pilot-line>



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# HORIZON-CL4-2023-DIGITAL-EMERGING-01-32

## A key group of actors driving this:

- Graphene Flagship consortium: <https://graphene-flagship.eu/collaboration/our-partners/>

## Background documents

- Consultation report on graphene and related materials, Jan 2020: <https://digital-strategy.ec.europa.eu/en/library/consultation-report-graphene-and-related-materials-now-available>

## Future trends:

- Technology and Innovation roadmap: <https://graphene-flagship.eu/innovation/industrialisation/roadmap/>



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# D6: A human-centred and ethical development and industrial technologies



<https://www.youtube.com/watch?v=gZwAGom6rFI>

<https://www.youtube.com/watch?v=JalqEajYz7c>

**Opening date: 8 December 2022 Deadline: 29 March 2023**

Topic	Type of action, TRL	EU contribution per project (EUR million)	Number of projects to be funded
<b>HORIZON-CL4-2023-HUMAN-01-31:</b> Toolbox for efficient IP licensing for market uptake and societal value creation	<b>CSA</b>	2	1
<b>HORIZON-CL4-2023-HUMAN-01-32:</b> Piloting communities of expert facilitators to improve industry-academia-public sector co-creation	<b>CSA</b>	2	1
<b>HORIZON-CL4-2023-HUMAN-01-33:</b> Fostering knowledge valorisation through societal and cultural interactions	<b>CSA</b>	1	5
<b>HORIZON-CL4-2023-HUMAN-01-51:</b> Pilots for an innovative human-centric industry	<b>RIA</b> TRL 5/TRL 6	10	1
<b>HORIZON-CL4-2023-HUMAN-01-52:</b> Drivers and success factors for progress towards Industry 5.0	<b>RIA</b>	4	1
<b>HORIZON-CL4-2023-HUMAN-01-53:</b> Localised and Urban Manufacturing, supporting creativity and the New European Bauhaus	<b>RIA</b> TRL 5/TRL 6	1.5-2.5	4
<b>HORIZON-CL4-2023-HUMAN-01-54:</b> Green and digital skills and training needs for a just transition	<b>CSA</b>	0.5	5





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# D6: A human-centred and ethical development and industrial technologies



<https://www.youtube.com/watch?v=gZwAGom6rFI>

<https://www.youtube.com/watch?v=JalqEajYz7c>

**Opening date: 8 December 2022    Deadline: 29 March 2023**

Topic	Type of action, TRL	EU contribution per project (EUR million)	Number of projects to be funded
<b>HORIZON-CL4-2023-HUMAN-01-62:</b> Boosting industrial symbiosis by standardization	<b>CSA</b>	2	1
<b>HORIZON-CL4-2023-HUMAN-01-63:</b> Provide for a strong and sustainable pool of experts for European Standardization: attract the students of university/HEI	<b>CSA</b>	2.5-3	1
<b>HORIZON-CL4-2023-HUMAN-01-64:</b> Pre-normative research and standardization in industrial ecosystems	<b>CSA</b>	0.1-1	8
<b>HORIZON-CL4-2023-HUMAN-01-91:</b> International Hub for Digital Partnerships in the Indo-Pacific	<b>CSA</b>	2.5	1
<b>HORIZON-CL4-2023-HUMAN-01-92:</b> R&I cooperation with Sub-Saharan Africa	<b>CSA</b>	2	1
<b>HORIZON-CL4-2023-HUMAN-01-93:</b> R&I cooperation with Latin America (Mexico, Brazil, Argentina, and other countries in the BELLA network or members of RedClara)	<b>CSA</b>	2	1



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Topic	Type of action, TRL	EU contribution per project (EUR million)	Number of projects to be funded
<b>HORIZON-CL4-2023-HUMAN-01-01:</b> Efficient trustworthy AI - making the best of data (AI, Data and Robotics Partnership)	<b>RIA</b> TRL 2-3/TRL 4-5	7-9	5
<b>HORIZON-CL4-2023-HUMAN-01-02:</b> Large Scale pilots on trustworthy AI data and robotics addressing key societal challenges (AI Data and Robotics Partnership)	<b>IA</b> TRL 3-5/TRL 6-7	8	3
<b>HORIZON-CL4-2023-HUMAN-01-03:</b> Natural Language Understanding and Interaction in Advanced Language Technologies (AI Data and Robotics Partnership)	<b>RIA</b> TRL 2/TRL 5	6-8	3
<b>HORIZON-CL4-2023-HUMAN-01-04:</b> Open innovation: Addressing Grand challenges in AI (AI Data and Robotics Partnership)	<b>CSA</b>	4	1
<b>HORIZON-CL4-2023-HUMAN-01-05:</b> Through AI from Disinformation to Trust	<b>IA</b> TRL 4-5/TRL 6-7	5	2
<b>HORIZON-CL4-2023-HUMAN-01-11:</b> Next Generation Internet Fund	<b>RIA</b>	27	1
<b>HORIZON-CL4-2023-HUMAN-01-12:</b> Pilots for the Next Generation Internet	<b>IA</b>	3-5	5



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**Opening date: 8 December 2022 Deadline: 29 March 2023**

Topic	Type of action, TRL	EU contribution per project (EUR million)	Number of projects to be funded
<b>HORIZON-CL4-2023-HUMAN-01-13:</b> Next Generation Internet International Collaboration - USA	<b>RIA</b>	4	1
<b>HORIZON-CL4-2023-HUMAN-01-14:</b> Next Generation Internet Commons Policy	<b>CSA</b>	2	1
<b>HORIZON-CL4-2023-HUMAN-01-21:</b> Next Generation eXtended Reality	<b>RIA</b> TRL 2/TRL 5	5-8	4
<b>HORIZON-CL4-2023-HUMAN-01-22:</b> eXtended Reality for Industry 5.0	<b>IA</b> TRL 4/TRL 7-8	5-8	4
<b>HORIZON-CL4-2023-HUMAN-01-23:</b> Supporting the emergence of an open human- centric Metaverse	<b>CSA</b>	2	1
<b>HORIZON-CL4-2023-HUMAN-01-65:</b> Support facility for digital standardisation and international cooperation in digital partnerships	<b>CSA</b>	1.5	1
<b>HORIZON-CL4-2023-HUMAN-01-66:</b> Promoting EU standards globally	<b>CSA</b>	2.5	1



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**Opening date: 8 December 2022    Deadline: 29 March 2023**

Topic	Type of action, TRL	EU contribution per project (EUR million)	Number of projects to be funded
<b>HORIZON-CL4-2023-HUMAN-01-81:</b> Digital Humanism - Putting people at the centre of the digital transformation	CSA	1.5	1
<b>HORIZON-CL4-2023-HUMAN-01-82:</b> Art-driven digital innovation: Towards human compatible and ecologically conscious technology	CSA	3	1



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# HORIZON-CL4-2023-HUMAN-01-31

## What are we looking for?

- Optimized AI solutions: optimizing model design and data usage to maximize accuracy and robustness.
- Ensure in general, the pipeline of high-quality, representative, unbiased and compliant training data for AI development in all relevant sectors
- Support data preparation and AI training processes that lead to efficient and more trustworthy AI
- automated and AI-based mining, harvesting, selection, cleaning, annotation, and/or enrichment/augmentation of data for AI; generating and using synthetic data to reduce the need for large volumes of real and potentially sensitive data; validating the efficiency of these processes in AI systems;
- lighter, less data-intensive and less energy-consuming AI models, optimized learning processes that require less input (data efficient AI) without degrading the quality of the output; machine learning methods and architectures that deal with lower volumes such as transfer learning; one-shot learning; continuous and/or lifelong learning.

## Key group of actors driving this

AI, Data and Robotics Partnership

<https://adr-association.eu/>



The AI Data Robotics  
Association



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# HORIZON-CL4-2023-HUMAN-01-31

## What we do NOT want?

- Proposals with limited ambition delivering only incremental progress over the scientific state of the art.
- Lack of description and availability of data to be used

## This topic is complemented by

- HORIZON-CL4-2023-HUMAN-01-04: Open innovation: Addressing Grand challenges in AI: Proposals are to dedicate tasks and resources to provide input to and involve their research teams in the respective challenge.
- HORIZON-CL4-2024-DATA-01-01: AI-driven data operations and compliance technologies

## Was it called before?

- 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)
- Research Area: Greener AI, increasing data and energy efficiency: SustainML - New Green AI project coordinated by eProxima
- HORIZON-CL4-2021-DATA-01-03 - Technologies for data management (AI, Data and Robotics Partnership) (IA)
- Enabling Data Enrichment Pipelines for AI-driven Business Products and Services | enRichMyData Project



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# HORIZON-CL4-2023-HUMAN-01-02

## What are we looking for?

- Strengthening EU's ecosystem of AI, Data and Robotics excellence and innovation in world class foundational and application-inspired and application-oriented research;
- Technology progress in AI addressing major challenges hampering the deployment of AI, Data and Robotics technologies;
- Wide uptake of AI, Data and Robotics technologies by industry and end-users towards the Digital Decade targets for 2030.

## Key group of actors driving this

AI, Data and Robotics Partnership

<https://adr-association.eu/>



The AI Data Robotics  
Association

## What we do NOT want?

- Academic focus with limited potential for commercial exploitation of the results after the end of the project.
- Lack of or limited end user involvement (human-centric approach)
- Lack of critical mass of industry and therefore non-realistic settings disconnected from actual needs of key industries, sectors and services.
- Focus on low impact sectors with little potential to deliver economic or societal benefits.

## Upcoming events

- ADRA Info Day on WP23 - AI, Data and Robotics Partnership Topics: February 2023 (tbc)



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# HORIZON-CL4-2023-HUMAN-01-03

## What are we looking for?

Development of natural language understanding and interaction in advanced language technologies, based on context-aware language models able to

- further integrate long-term general knowledge and
- derive meaning

in order to

- develop automated reasoning
- and enhanced interaction skills.

## What we do NOT want?

- Simple copying / refreshing of existing ideas/ technologies/ solutions.
- Proposals where language modeling technologies and their evident applications are not the main subject.
- Proposals with a vague / imprecise description of the action.

## Future trends:

Artificial Intelligence Index Report 2022 (Stanford University)

<https://aiindex.stanford.edu/report/>

2022 Tech Trends Report, Artificial Intelligence (Future Today Institute)

<https://futuretodayinstitute.com/trends/>

State of AI Report 2022 (Nathan Benaich, Ian Hogarth)

<https://www.stateof.ai/>



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# HORIZON-CL4-2023-HUMAN-01-03

## A key actors :

- Leading research entities with expertise in:
- Artificial Intelligence, especially Natural Language Processing, Data Science, Computational Linguistics, etc.
- Industrial users of language modeling technologies:
- Communication, Telepresence, Smart Assistants, Chatbots, Content Generation, Internet of Things, Robotics, etc.

## Topic evolution

- HORIZON-CL4-2021-HUMAN-01-13 eXtended Reality Modelling (RIA)

## Background documents

- <https://digital-strategy.ec.europa.eu/en/policies/language-technologies>
- <https://www.european-language-technology.eu/>
- <https://live.european-language-grid.eu/>
- <https://european-language-equality.eu/>
- <https://www.lr-coordination.eu/>

## Current project portfolio

- SERMAS (Socially-acceptable Extended Reality Models and Systems)  
<https://cordis.europa.eu/project/id/101070351>
- UTTER (Unified Transcription and Translation for Extended Reality)  
<https://cordis.europa.eu/project/id/101070631>
- VOX (Voice driven interaction in XR spaces)  
<https://cordis.europa.eu/project/id/101070521>



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# HORIZON-CL4-2023-HUMAN-01-04

## What are we looking for?

- Develop prestigious AI open innovation challenges that will mobilise wide participation of top scientists from academia, industry including start-ups and as well as young teams and rising stars.
- Substantially increase interest from industry in AI, in particular from key socio-economic sectors for Europe. Therefore, contributing to uptake of research results by industry
- Demonstrate and reinforce Europe's research excellence in AI by driving substantial scientific progress in the following major scientific & technological AI areas:
  - Optimisation (in collaboration with CL4-2023-HUMAN-01-01)
  - natural language understanding and interaction (in collaboration with CL4-2023-HUMAN-01-03)
  - Explainability, robustness (with CL4-2024-HUMAN-01-06)
  - and collaborative intelligence (with CL4-2024-HUMAN-01-07)

## What we do NOT want?

- Lack of ambition and plans to attract and engage outstanding talent and best research teams in the challenges
- Proposals with limited ambition and plans delivering only incremental progress over the scientific state of the art.
- Limited visibility of the innovation challenges

## Background documents

### [Launch Event](#)

[Horizon Europe: New Projects in Robotics and AI - June-November 2022 | Shaping Europe's digital future \(europa.eu\)](#)



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# HORIZON-CL4-2023-HUMAN-01-05

## What are we looking for?

- Innovative AI solutions for trusted information production for media professionals.
- Innovative AI solutions for supporting trustworthy online activity of citizens.
- Following the results of the Horizon Europe 2020/21 WP, the second Horizon Europe 2023/24 WP will support innovation activities to move closer to AI-based market and ultimately widely available solutions that can play an important role in ensuring pluralistic access to meaningful information, quality content and trustworthy online interaction.

## Follow-up in HE WP 2025-2026

- Social media innovation against disinformation
- Metaverse(s)
- AI-tools and solutions
- Big Data components
- Digital Well-Being
- Media literacy aspects

## What we do NOT want?

- Proposals without scientists from various relevant disciplines
- Proposals without focus on media professionals or citizens)
- Having a narrow focus on Disinformation
- Not addressing next generation social media as part of digital universe(s) or fediverse(s)

## Was it called before?

- New, previous relating calls did not target the AI aspect:
- HE-CL4-2021-HUMAN-01-27 AI to fight disinformation
- H2020-ICT-28-2018 Hyperconnected Sociality
- H2020-ICT-54-2020 Block for the Next Generation Internet, subtopics 2 and 3



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# HORIZON-CL4-2023-HUMAN-01-05

## Current project portfolio

- AI4TRUST
- TITAN
- VERA.AI
- TREBLO/TRUBLO
- ONTOCHAIN
- EUNOMIA
- AI4Media

## A key group of actors driving this:

- EDMO – European Digital Media Observatory
- PPP on AI, Data and Robotics and funded actions related to this partnership

## Main stakeholders that are addressed

Media practitioners, journalists, scientists from various disciplines, AI specialists, technology providers, citizen representatives

## Background documents

Audiovisual and Media Action Plan

<https://digital-strategy.ec.europa.eu/en/policies/media-and-audiovisual-action-plan>

European Democracy Action Plan

[https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy/european-democracy-action-plan\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy/european-democracy-action-plan_en)

The 2022 Code of Practice on Disinformation

<https://ec.europa.eu/newsroom/dae/redirection/document/87585>



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# HORIZON-CL4-2023-HUMAN-01-65

## What are we looking for?

- engaging with national administrations and key ICT standardisation stakeholders from third countries (Japan, South Korea, Taiwan, Singapore, Canada, Australia and the USA) to work towards a common vision and agenda for key digital technologies and its standardisation.
- Setting up a coordination mechanism with these stakeholders to align positions on international standardisation (SDOs and other fora/consortia).
- Setting up a mechanism to monitor the effective implementation of international standards in trade & cooperation agreements (e.g. Digital Partnerships and TTC) with these third countries.

## What we do NOT want?

- Direct contribution to international standardisation activities
- Coordination mechanism targeting only formal SDOs (ISO/IEC, ITU). It should also target other international fora and consortia (e.g. 3GPP, oneM2M, IETF...)

## Was it called before?

- It is partially a continuation of [InDiCo](#), supported by the Foreign Policy Instrument (FPI) unit of the EEAS
- NEW => different target countries; monitor implementation of standards in trade & cooperation agreements.

## Current project portfolio

<https://www.indico-ictstandards.eu/>





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# HORIZON-CL4-2023-HUMAN-01-66

## What are we looking for?

- Promoting EU ICT/digital standards for key technologies prioritised in the Horizon Europe programme (AI, chips, quantum...)
- Promoting the EU model for setting global & interoperable ICT/digital standards
- Fostering capacity building in third countries for ICT/digital standardisation around EU values

## Current project portfolio

<https://www.indico-ictstandards.eu/>



## What we do NOT want?

- Direct contribution to international standardisation activities
- Influence of third countries / companies on the EU model for setting standards
- Targeting only formal SDOs (ISO/IEC, ITU). The CSA should also target other international fora and consortia (e.g. 3GPP, oneM2M, IETF...)

## Was it called before?

- It is partially a continuation of [InDiCo](#), supported by the Foreign Policy Instrument (FPI) unit of the EEAS
- NEW => different target countries; extended technological reach.



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# HORIZON-CL4-2023-HUMAN-01-63

## What are we looking for?

- The creation of a robust and sustainable pool of European professionals ready to contribute to standardisation and support positioning EU as global standard-setter.
- Those teachers of EU universities/HEI, who already integrate standardisation-related content in their lectures, should team up and, in co-operation with industry, design an innovative teaching concept of standardisation.
- The teaching concept has the mission to bridge the technical and societal facets of standardisation, as well as to integrate the aspects of a human-centric standardisation and the EU core values.
- This concept should foster the development of green and digital skills and underline the respective support through standardisation.

## What we do NOT want?

- Desk research or papers on the topic

## Background documents

- An EU Strategy on Standardisation – COM(2022) 31 of 2/2/2022
- Digital Education Action Plan 2021-2027 – COM(2020) 624 of 30/9/2020



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# HORIZON-CL4-2023-HUMAN-01-64

## What are we looking for?

- Coordination/execution of pre-normative research activities in the industrial ecosystems with a view to exploit synergies among the stakeholders.
- Boosting the interactions between research projects and pre-normative work in the various ecosystems, and to increase the European contribution and presence in the subsequent formal European and international standardisation processes.
- Establishing interoperability standards for data sharing within and across the ecosystems, through the implementation of the FAIR data principles and leveraging on already adopted practices especially those in the relevant European common data spaces and in the European Research infrastructures.
- Additionally, a strategy for education and skills development within the ecosystems should be developed, associating social partners when relevant.

## What we do NOT want?

- The aim is to bring together the research world (projects, universities, innovation centres, etc.) with supply chains and stakeholders within industrial ecosystems to define standardisation needs and priorities, the role to be played by pre-normative research, and the contributions to be provided at the European and international standardisation level
- Generic studies or papers are not expected as main actions



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# HORIZON-CL4-2023-HUMAN-01-64

## Background documents

- An EU Strategy on Standardisation – COM(2022) 31 of 2/2/2022
- The first Annual Single Market Report [SWD(2021) 351 of 5/5/2021]
- DG GROW Industrial Forum ([https://single-market-economy.ec.europa.eu/industry/strategy/industrial-policy-dialogue-and-expert-advice\\_en](https://single-market-economy.ec.europa.eu/industry/strategy/industrial-policy-dialogue-and-expert-advice_en))
- ERA industrial technology roadmap for low-carbon technologies in energy-intensive industries (<https://op.europa.eu/s/xfbu>)
- FAIR data principles ([https://ec.europa.eu/info/sites/default/files/turning\\_fair\\_into\\_reality\\_1.pdf](https://ec.europa.eu/info/sites/default/files/turning_fair_into_reality_1.pdf))

## Key group of actors

- European and international standardisation organisations are the prominent actors

## Future trends

- High-Level Forum on Standardisation



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# HORIZON-CL4-2023-HUMAN-01-11

## What are we looking for?

- The general objective is to nurture a structured human-centric internet eco-system by turning digital values into motivating challenges for top value-driven open-source innovators in Europe enabling to create, mature and grow new internet commons

## Was it called before?

- This topic is a consolidation of previous topics where funding was split by technology area: e.g. Internet architecture & decentralised technologies (2022); Trust & data sovereignty on the Internet & Trustworthy open search and discovery (2021)
- The objective is to avoid fragmentation and structure the eco-system with critical mass

## Additional documents

[www.NGI.eu](http://www.NGI.eu)

## What we do NOT want?

- That the beneficiaries do the research work
- Proprietary and/or non-open-source solutions
- Pushing a specific technology through the fund
- That technical or non-technical support tasks (e.g. security audits) are implemented through the budget earmarked for the financial support to third parties

## Current project portfolio

- NGIO Entrust (2021)
- NGI Search (2021)
- NGIO Core (2022)
- TrustChain (2022)



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# HORIZON-CL4-2023-HUMAN-01-12

## What are we looking for?

- The aim of this topic is to foster the take up of NGI technologies and solutions in Europe by integrating them in a variety of industrial and societal use cases, enabling the emergence of internet ecosystems supporting the needs of specific sectors

## Was it called before?

- This topic is a consolidation of previous topics where funding was split by technology area: e.g. Internet architecture & decentralised technologies (2022); Trust & data sovereignty on the Internet & Trustworthy open search and discovery (2021)
- The objective is to avoid fragmentation and structure the eco-system with critical mass

## Additional documents

[www.NGI.eu](http://www.NGI.eu)

## What we do NOT want?

- Research focused activities as this is an IA
- Proprietary and/or non-open-source solutions
- Single sector proposal

## Key actors

- User organisations from vertical sectors
- Other Digital Technology providers
- NGI Innovators
- SSH experts



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# HORIZON-CL4-2023-HUMAN-01-13

## What are we looking for?

- Enhanced EU-US cooperation in the development of Next Generation Internet technologies, services and standards
- A transatlantic ecosystem of Internet researchers, open source developers, high-tech startups
- Generate new business opportunities for European Internet innovators based on decentralised technologies and open source

## Current project portfolio

- Since the last WPs of Horizon 2020, International Collaboration with the USA has been an active area in NGI, focusing on mobility of researchers and on R&I collaborations.
- Running collaboration projects are: NGI Enrichers on mobility of researchers; NGI Atlantic and NGI Sargasso (to start soon) on R&I collaborations. All the information on current NGI projects is available at: [www.NGI.eu](http://www.NGI.eu)
- The new project from this call will concentrate on the same subject areas, but will differ in its exclusive focus on R&I collaborations with NSF and in the size / duration of the third party projects, which will aim for more in-depth research collaborations.



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# HORIZON-CL4-2023-HUMAN-01-14

## What are we looking for?

- While internet commons are critical in our digital life their importance it is not fully reflected at the strategic level with little representation of the communities involved, lack of structure, gap between grass-root commoners and top-down sovereignty policies, fragmented funding landscape
- The action should put in place the measures to bridge this gap

## Additional documents

- Report "Towards a sovereign digital infrastructure of commons"  
[https://www.diplomatie.gouv.fr/IMG/pdf/report\\_of\\_the\\_european\\_working\\_team\\_on\\_digital\\_commons\\_digital\\_assembly\\_june\\_2022\\_wnether\\_lands\\_cle843dbf.pdf](https://www.diplomatie.gouv.fr/IMG/pdf/report_of_the_european_working_team_on_digital_commons_digital_assembly_june_2022_wnether_lands_cle843dbf.pdf)

## What we do NOT want?

- General purpose study

## Current project portfolio

- The action will strongly relate to the NGI portfolio.
- See: [NGI Projects | Next Generation Internet](#)



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# HORIZON-CL4-2023-HUMAN-01-21

## What are we looking for?

- Human-centred
- Providing intuitive and realistic user experiences
- Technologies: 5G/6G, IoT, data, AI, edge-cloud, microelectronics
- Domains of use: education, manufacturing, health, cultural heritage, media, security...
- More realistic, more affordable and gender-neutral
- Developed by European companies
- Respecting European values of ethics, privacy, security and safety,
- Aiming at technological sovereignty and resilience

## What we do NOT want?

- State-of-the-art XR components and applications
- Non suitable, unethical or unsafe solutions
- Research non-grounded into real world use cases and scenarios
- Non-transdisciplinary research
- Research that does not involve end-users
- Research that does not involve SSH

## Topic evolution

- XR Modelling (RIA 2021)
- XR for All – Haptics (RIA 2021)
- eXtended Collaborative Telepresence (IA 2021)
- Innovation for Media, including XR (IA 2021)
- XR Ethics, Interoperability and Impact (CSA 2021)
- XR Learning - Engage and Interact (IA 2022)
- XR Technologies (RIA 2022)



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# HORIZON-CL4-2023-HUMAN-01-22

## What are we looking for?

- Develop “XR made in Europe”, contributing to technological sovereignty
- Contribute to develop virtual worlds European platforms
- Support the use of XR technologies for a sustainable, human-centric and resilient European industry

## Topic evolution

- XR Modelling (RIA 2021)
- XR for All – Haptics (RIA 2021)
- eXtended Collaborative Telepresence (IA 2021)
- Innovation for Media, including XR (IA 2021)
- XR Ethics, Interoperability and Impact (CSA 2021)
- XR Learning - Engage and Interact (IA 2022)
- XR Technologies (RIA 2022)

## Events

- Kick-off meeting of AR/VR Coalition: Q2 2023

## What we do NOT want?

- Non suitable, unethical or unsafe solutions
- Solutions not grounded in real world scenarios
- Non-transdisciplinary approach
- Research that does not involve end-users
- Approach not involving SSH

## Additional documents

- The Virtual and Augmented Reality Industrial [Coalition](#)
- Platform for structured dialogue between the European VR/AR ecosystem and policymakers  
[Strategic paper](#)



# HORIZON-CL4-2023-HUMAN-01-23

## What are we looking for?

- contributes to structure and support the Metaverse community and stakeholders
- organises a vast engagement process – stakeholders, citizens
- reinforces the links between the various Metaverse-related elements (i.e. in particular XR and AI, Blockchain, Connectivity)
- supports the development of a Metaverse-related EU strategy and roadmap
- helps with the definition of industry standards for the Metaverse
- identifies continuity and discontinuity elem. bet. today's internet and Metaverse
- identifies ethical, legal, societal and economic aspects, IPR and governance models supporting the human-centric vision & explore the potential of open-source models
- closely collaborates and builds synergies with other existing related European initiatives and supports international cooperation

## What we do NOT want?

- R&I on metaverse technologies
- Poor understanding of the European principles and values that should underpin the metaverses
- Proposals with disproportionate focus on the technology side, rather than a tridimensional approach (people-technologies-infrastructure)
- Unclear vision of the connections between the various metaverse building blocks
- Lack of ties and synergies with relevant European initiatives
- Duplication of the work performed under HE funded project XR4Human

## Was it called before

- [XR4AI](#) - ended, now active as [XR4Europe](#)
- [XR4Human](#) - ongoing



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# HORIZON-CL4-2023-HUMAN-01-82

## What are we looking for?

- Launch open calls for artists to propose art-driven use experiments with (digital or bio) technologies.
- Follow/mentor these residences so they contribute to overall goals of project.
- Ensure that artists and hosts of residencies (technology institutes, industry, end-users) can be brought together

## Events

- <https://www.starts.eu/>
- The website STARTS.eu also contains links to
- all running projects,
  - all STARTS residencies funded
  - all STARTS prize winners

## What we do NOT want?

- Not art for art sakes
- Not technology for technology's sake
- The idea is not to have standard R&D that add artistic contribution at the end of process but to have a reflected R&I cycle with contributions of the arts at all stages.
- The call is NOT to provide funding to the arts but to have the arts contribute to the new European approach to innovation
- The call addresses all pertinent sectors of industry (it is NOT targeted specifically on CCI)



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Funding & tender opportunities

Single Electronic Data Interchange Area (SEDIA)

Funding&tender opportunities

SEARCH FUNDING & TENDERS HOW TO PARTICIPATE PROJECTS & RESULTS WORK AS AN EXPERT SUPPORT

Type your Keywords...

Match whole words only

GRANTS  TENDERS

**Submission status**

Forthcoming (3)  Open for submission (4)  Closed

**Programming period**

2021 - 2027 (7)

Horizon Europe (HORIZON)

**Programme part**

Digital, Industry and Space

**Mission**

Select a Mission...

**Destination**

World leading data and computing technologies (7)

**Quick search on specific priorities**

Select a Priority...

Funding and tenders (7)

Integration of data life cycle, architectures and standards for complex data cycles human factors, language (AI, data and robotics partnership) (RIA)

HORIZON-CL4-2023-DATA-01-02

<b>Programme</b>	Horizon Europe (HORIZON)	<b>Status</b>	Open for submission
<b>Type of action</b>	HORIZON Research and Innovation Actions	<b>Deadline model</b>	single-stage
<b>Opening date</b>	08 December 2022	<b>Deadline date</b>	29 March 2023 17:00:00 Brussels time

Cognitive Computing Continuum: Intelligence and automation for more efficient data processing (AI, data and robotics partnership) (RIA)

HORIZON-CL4-2023-DATA-01-04

<b>Programme</b>	Horizon Europe (HORIZON)	<b>Status</b>	Open for submission
<b>Type of action</b>	HORIZON Research and Innovation Actions	<b>Deadline model</b>	single-stage
<b>Opening date</b>	08 December 2022	<b>Deadline date</b>	29 March 2023 17:00:00 Brussels time

Collaboration with NSF on fundamental research on new concepts for distributed computing and swarm intelligence (CSA)

HORIZON-CL4-2023-DATA-01-07

<b>Programme</b>	Horizon Europe (HORIZON)	<b>Status</b>	Open for submission
<b>Type of action</b>	HORIZON Coordination and Support Actions	<b>Deadline model</b>	single-stage
<b>Opening date</b>	08 December 2022	<b>Deadline date</b>	29 March 2023 17:00:00 Brussels time

Coordination and Support of Cognitive Computing Continuum research and policy (CSA)

HORIZON-CL4-2023-DATA-01-05

<b>Programme</b>	Horizon Europe (HORIZON)	<b>Status</b>	Open for submission
<b>Type of action</b>	HORIZON Coordination and Support Actions	<b>Deadline model</b>	single-stage
<b>Opening date</b>	08 December 2022	<b>Deadline date</b>	29 March 2023 17:00:00 Brussels time

Partner search announcements

Searches of partners to collaborate on this topic

17

View / Edit

LEARs, Account Administrators or self-registrants can publish partner requests for open and forthcoming topics after logging into this Portal, as well as any user having an active public Person profile.



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# IDEAL-IST



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- Impact Canvas
- Partner Search
- Pre-proposal Check
- Toolbox
- Topic Tree
- ICT Projects Dashboard

## CLUSTER 4 DIGITAL ICT NCP

Your Worldwide ICT Support Network

Ideal-ist, a network of National Contact Points, helps companies and research organisations worldwide with the European Commission's research programme Horizon EUROPE.

READ MORE

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





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# Pasākumi

[SNS JU info day](#)

## 6GSNS

### SNS JU Info Day

*Join us and submit your 6G project ideas!*

23<sup>rd</sup> January 2023 | 10h-13h

#SNSJU #EUfunding #6G

COMING SOON

[EU missions info day](#)

## EU Missions info days

The event aims to inform potential applicants about the new topics included in the EU Missions work programme 2023

📅 17 January 2023 - 18 January 2023

🕒 10:00 (GMT+02:00)



## Info Day and Brokerage Event

Friday Feb 3<sup>rd</sup> 9:30 - 13:00

- ▶▶▶ AI, Data and Robotics Topics in WP2023 + Q&A
- ▶▶▶ Adra presentation + Q&A
- ▶▶▶ IDEAL-IST
- ▶▶▶ Pitching session



co-organised by

[Adra info day](#)

# EUCNC 6G Summit

Gothenburg, Sweden • 6-9 June 2023

<https://www.eucnc.eu>

European Conference on Networks and Communications & 6G summit 2023

Location: 400 10, Sweden

Date: 06/06/2023 - 06/09/2023

03-04 May 2023 Brussels

CONFERENCE **Connected and Automated Driving**

#EUCAD2023 #EUTransportResearch

[EUCAD 2023](#)

EUCAD2023



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Event organised by: [Digital brokerage event](#)

IDEAL-IST

#HorizonEU

INFO DAYS 2022  
BROKERAGE  
CLUSTER 4 | DIGITAL  
15-16 DEC 2022

HORIZON EUROPE

THE EU RESEARCH & INNOVATION PROGRAMME 2021 - 2027

EUROPEAN UNION

15 December 2022 - 16 December 2022

Horizon Europe Digital - Face2Face Brokerage

Home   How it works   Information Day   Past events   Project Idea Consultation   Cascading Grant Arena   Contacts

Ideal-ist, the network of National Contact Points for ICT research, in cooperation with the Enterprise Europe Network invites you to participate in a **brokerage event** with **pre-arranged online Face2Face meetings** complementing the first Horizon Europe event the Information Day on Cluster 4 - Digital, Industry & Space.

**This brokerage event is a unique networking opportunity for actors in the DIGITAL field! Follow us via #F2F2022**

**Register now**  
Open until 29 March 2023

ORGANISED BY

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Par mums Jaunami Programmas Starptautiskās programmas Eksperti Dokumenti Kontakti   

<https://lzp.gov.lv/starptautiskas-sadarbibas-programmas/apvarsnis-eiropa/>

## Apvārsnis Eiropa



### Praktiska sesija par idejas prezentēšanas vadlīnijām klasterī "Veselība"

December 23, 2022

Latvijas Zinātnes Padomes  
Nacionālais kontaktpunkts  
(NKP) aicina...



### Janvārī aicinām uz 4.klastera "Digitālā joma, rūpniecība un kosmos" informācijas dienu

December 22, 2022

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Nacionālais kontaktpunkts  
(NKP) aicina...



### Vebinārs par konkursiem Eiropas Pētniecības telpas stiprināšanai

December 20, 2022

Aicinām uz vebināru par  
2023.–2024. gada konkursiem  
programmas...

[Par programmu](#)

[Ekspertu kontakti](#)

[Apvārsnis Eiropa 2021-2027](#)

[Apvārsnis 2020](#)

[Pasākumu informatīvie materiāli](#)





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# Statistika

## Apvārsnis Eiropa 4. klasteris



[Statistika](#) uz 06.09.2022.

### Apvārsnis Eiropa

NET EU CONTRIBUTION	31 444 644 €
PROJECTS	109
PARTICIPATIONS	129
COORDINATORS	6
PARTICIPANTS	123

	PARTICIPANT	PARTNER_ROLE	NET EU	CALL_ID
1	WIT BERRY	PARTICIPANT	248 491,00 €	HORIZON-CL4-2021-SPACE-01
2	LU MATEMATIKAS UN INFORMATIKAS INSTITUTS	PARTICIPANT	154 235,00 €	HORIZON-KDT-JU-2021-1-IA
3	ELEKTRONIKAS UN DATORZINATNU INSTITUTS	PARTICIPANT	161 538,00 €	HORIZON-KDT-JU-2021-1-IA
4	ELEKTRONIKAS UN DATORZINATNU INSTITUTS	PARTICIPANT	161 543,00 €	HORIZON-KDT-JU-2021-2-RIA
5	ELEKTRONIKAS UN DATORZINATNU INSTITUTS	PARTICIPANT	161 538,00 €	HORIZON-KDT-JU-2021-2-RIA
6	SABIEDRIBA AR IEROBEZOTU ATBILDIBU SUNGIS	PARTICIPANT	101 733,00 €	HORIZON-KDT-JU-2021-1-IA
7	SIA RIGAS MEZI	PARTICIPANT	140 857,50 €	HORIZON-EUSPA-2021-SPACE
8	ELEKTRONIKAS UN DATORZINATNU INSTITUTS	PARTICIPANT	442 500,00 €	HORIZON-CL4-2022-TWIN-TRANSITION-01
9	TILDE SIA	PARTICIPANT	408 538,00 €	HORIZON-CL4-2022-SPACE-01
10	ZALA BRIVIBA BIEDRIBA	PARTICIPANT	305 000,00 €	HORIZON-CL4-2022-TWIN-TRANSITION-01
11	WIT BERRY	PARTICIPANT	50 050,00 €	HORIZON-CL4-2022-SPACE-01
12	WIT BERRY	PARTICIPANT	53 550,00 €	HORIZON-CL4-2022-SPACE-01
13	VAS "Elektroniskie sakari"	PARTICIPANT	231 250,00 €	HORIZON-JU-SNS-2022
14	RIGA MUNICIPAL AGENCY "RIGA ENERGY AGENCY"	PARTICIPANT	101 250,00 €	HORIZON-CL4-2021-RESILIENCE-02
15	RIGAS PLANOSANAS REGIOMS	PARTICIPANT	143 750,00 €	HORIZON-EUSPA-2021-SPACE
16	SIA LIGHTSPACE TECHNOLOGIES	PARTICIPANT	223 750,00 €	HORIZON-CL4-2022-HUMAN-01
17	SIA "Grupa93"	PARTICIPANT	295 250,00 €	HORIZON-CL4-2022-DATA-01
18	LATVIJAS UNIVERSITATES CIETVIELU FIZIKAS INSTITUTS	PARTICIPANT	405 312,00 €	HORIZON-CL4-2021-DIGITAL-EMERGING-01
19	<b>ELEKTRONIKAS UN DATORZINATNU INSTITUTS</b>	<b>COORDINATOR</b>	<b>425 625,00 €</b>	<b>HORIZON-CL4-2021-DIGITAL-EMERGING-01</b>
20	LATVIJAS ZINATNES PADOME	PARTICIPANT	14 875,00 €	HORIZON-CL4-2021-HUMAN-01
21	VALMIERAS TEHNIKUMS	PARTICIPANT	199 522,00 €	HORIZON-CL4-2021-TWIN-TRANSITION-01
22	"Rigas satiksme"	PARTICIPANT	0,00 €	HORIZON-CL4-2022-DATA-01



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# Paldies!

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Telefons: +371 28345627



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kontaktpunkts - HE NCP LV



<https://lzp.gov.lv/starptautiskas-sadarbibas-programmas/apvarsnis-eiropa/>

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