

HORIZON EUROPE SPACE CALL 2025 Topics

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Space Business Forum

Ruoholahti

HORISONTTI EUROOPPA

— EU:N TUTKIMUS- JA INNOVAATIO-OHJELMA —

CALL 2025

- OPENS 22.5.2025
- CLOSES 23.9.2025

- 134 M€

INFO DAY AT BRUSSELS for “Cluster 4”

- 13 May 2025 info day
 - Horizontal issues of Work Programme 2025
 - Destination 1: Climate neutral, circular and digitised production
 - Destination 2: Increased Autonomy in Key Strategic Value Chains for Resilient Industry
 - Destination 5: Open Strategic Autonomy in Developing, Deploying and Using Global Space-Based Infrastructures, Services, Applications and Data
- 14 May 2025 info day
 - Destination 3: World-leading Data and Computing Technologies
 - Destination 4: Digital & Emerging Technologies for Competitiveness and Fit for the Green Deal
 - Destination 6: A human-centred and ethical development of digital and industrial technologies
 - Application and evaluation process

Partnership/kumppanuusohjelma

SPACE AISBL Membership

Partnership/Kumppanuusohjelma



EU SPACE



SPACE AISBL

General
Assembly

Full members

Associate
Members

Founding
associations

EUROSPACE

SME4SPACE

ESRE

EASTRO

EASN

Others

SPACE AISBL – Memberships schemes



- **Full membership**

- Accessible through the founding associations
- No additional fees

- **Associate membership**

- Open to entities involved in space system research, and fulfilling the eligibility criteria listed in the SPACE AISBL statutes TITLE II, Article 2.01, Section (c)
- Associate members must be vetted by SPACE AISBL Board

<https://www.space-aisbl.org/>

Organisation type	Associate Membership		Full Membership
	Conditions	Entry fee	Relevant founding association fees
SME	Private company <ul style="list-style-type: none">• EU SME definition	2 000€	<ul style="list-style-type: none">• SME4Space membership (free)• Eurospace membership (starting at 1500€+22€/employee))
Midsize company	Private company <ul style="list-style-type: none">• Up to 3000 employees	10 000€	<ul style="list-style-type: none">• Eurospace membership (10k+22€/employee)
Large company	Private company <ul style="list-style-type: none">• Larger than 3000 employees	30 000€	<ul style="list-style-type: none">• Eurospace membership (30k+22€/employee)
RTO/Labs/Univ.	Private or public entity <ul style="list-style-type: none">• Any size	5 000€	<ul style="list-style-type: none">• Eurospace membership (10k+22€/employee)• ESRE membership (5000€ fixed fee)• EASTRO membership (2000€ fixed fee)• EASN membership (200€ fixed fee)

TOPIC
HORIZON-CL4-2025-02-SPACE-11: CSA on access to European spaceports
HORIZON-CL4-2025-02-SPACE-12: Digital solutions for autonomy for space transportation systems, design and simulation tools - Digital enablers and building blocks
HORIZON-CL4-2025-02-SPACE-13: Digital solutions for autonomy for space transportation systems, design and simulation tools – targeting demonstration
11 Meuro on the above topics on LAUNCH VEHICLES
HORIZON-CL4-2025-02-SPACE-31: Digital enablers and building blocks for Earth Observation and Satellite telecommunication for Space solutions
HORIZON-CL4-2025-02-SPACE-32: Preparing demonstration missions for collaborative Earth Observation and Satellite telecommunication for Space solutions
17 Meuro on the above topics

These Topics belong under the SPACE PARTNERSHIP that starts in Call 2025. In the satellite technology development Topics (31, 32) will **lead into demosatellites that will fly in space in 2030.**

Calls open to all

Partnership Roadmap: EO

High level scope activities	2025	2026	2027
Harmonization enabling interoperability among multiple EO missions	Low-Mid	Low-Mid	Mid-High
Breakthrough digitalised technology steps	Low-Mid	Low-Mid	Mid-High
EO ground segment interfaces and data flows standardisation and adoption (evangelisation)	Mid-High	Low-Mid	Mid-High
LEO or VLEO Earth Observation equipment, subsystems, applications and services (including e.g. video) enabling real-time reaction (e.g. under emergency situations)	Low-Mid	Low-Mid	Mid-High
Maturation of miniaturised instruments design	Low-Mid	Low-Mid	Mid-High
Mature digital techniques and technologies to support novel operational approaches	Low-Mid	Low-Mid	Low-Mid
On-board processing to optimize EO missions' performance or timeliness	Mid-High	Low-Mid	Mid-High
Data processing design based on fast data acquisition	Low-Mid	Low-Mid	Mid-High
Smart multi-source EO intelligence information fusion	Low-Mid	Mid-High	Mid-High



TERMS USED:

The **Globally Competitive Space Systems partnership** is targeting the calls 2025, 2026 and 2027 of the Horizon Europe work programme.

The **Space Partnership Association** is dedicated to enhancing Europe's competitiveness in the space sector. As one of the governing bodies of the **GCSS Partnership** and the focal point consolidating the **GLOCS3 project activities**, **SPACE AISBL** fosters collaboration between public and private entities, drives innovation, and ensures the alignment of priorities across the space industry.

A strategy has been written for this partnership giving longer term view:

Co-Programmed European Partnership on Globally Competitive Space Systems - Strategic Research and Innovation Agenda 1.0 (21.10.2024)

ISOS – in space activities

HOST COMPONENT

Providing supply for commercial and governmental services, hosting and distributing satApps, IOD/V experiments, propellant

Transporting cargo and supply to HOST, providing transport services to commercial and governmental spacecraft

SERVICING COMPONENT

Providing commercial and governmental services

**IN SPACE OPERATIONS –
500 M€ for 4 spacecraft
to be launched 2028**

LOGISTIC COMPONENT

Building an ecosystem of functional satellite upgrades and enhanced IOD/V opportunities

satAPPS COMPONENT

PILOT MISSION: EU IN-SPACE OPERATIONS & SERVICES INFRASTRUCTURE 2030

ACRONYM: EU ISOS<I

STRATEGIC OBJECTIVE: Pre-cursor element for continuous provision of services to the EU and Member States' infrastructure in space.

TOPIC

HORIZON-CL4-2025-02-SPACE-21: ISOS Pilot Mission Detailed Design – Servicing component

HORIZON-CL4-2025-02-SPACE-22: ISOS Pilot Mission Detailed Design – HOST component

HORIZON-CL4-2025-02-SPACE-23: ISOS Pilot Mission Detailed Design – Logistics component

HORIZON-CL4-2025-02-SPACE-24: ISOS Pilot Mission Detailed Design – satAPPs component

In Space Operations and Systems (ISOS) activity is building 3 satellites and tools (satAPPs). The design work starts in the Call 2025. The funding continues in future Calls – the satellites will be launched to space in 2028. Total cost is anticipated to be 500 M€.

If necessary next MFF-budget will finalize this activity.

Some countries (IT, FR, DE, CH) have experience in this activity. CH nor any other Third country can not participate (Article 22.5)

Also Invitation to Tender:

ISOS Pilot Mission Coordination and Support Action

For these all 55 Meuro.

This year also EIC has 50 M€ Call on ISOS and EDF has also a Topic on ISOS: EDF-2025-DA-SI-SPACE-3OS: On-orbit operations and services with Indicative budget: EUR 49 000 000 for this topic under the call EDF-2025-DA-SI.

Other

TOPIC – COPERNICUS AND ONE OTHER REMOTE SENSING TOPIC

HORIZON-CL4-2025-02-SPACE-41: Copernicus Climate Change Service (C3S) evolution: new and innovative processing and methods for future Sentinels and other satellites for reanalyses

HORIZON-CL4-2025-02-SPACE-42: Copernicus Atmosphere Monitoring Service (CAMS) evolution: improved soil-vegetation-atmosphere modelling and data assimilation of atmospheric constituents

HORIZON-CL4-2025-02-SPACE-43: Copernicus Anthropogenic CO₂ Emissions Monitoring & Verification Support (CO₂MVS) capacity: new and innovative methods to estimate the impact of fires on vegetation and related carbon fluxes

HORIZON-CL4-2025-02-SPACE-44: Copernicus Marine Environment Monitoring Service (CMEMS) evolution: new and innovative ocean data assimilation techniques

HORIZON-CL4-2025-02-SPACE-45: **Supporting the AI/ML digital transition of Copernicus Services**

These Topics foster new research using EU's Copernicus systems (Sentinel-satellites etc) data. 2 Topics on climate change (41, 43), one at atmosphere (42), one on the seas (44), and one on the use of AI (45).

Not a Copernicus-topic but in environmental research::

HORIZON-CL4-2025-02-SPACE-46: Innovative Earth observation services in support of maritime litter detection and ship source pollution policies

For all these topics 38 Meuro

TOPICS ON CRITICAL TECHNOLOGIES

~~HORIZON-CL4-2025-02-SPACE-71: Space Critical EEE Components for EU non-dependence – RISC-V Microprocessor on 7nm~~

~~HORIZON-CL4-2025-02-SPACE-72: Space Critical Equipment and Related Technologies for EU non-dependence – Chip Scale Atomic Clocks and Solar Cells~~

~~HORIZON-CL4-2025-02-SPACE-73: Space Critical EEE Components for EU non-dependence – Connectors (CANCELLED)~~

~~HORIZON-CL4-2025-02-SPACE-74: Space Critical EEE Components for EU non-dependence – Advanced Packages and Memories~~

These Topics help Europe to get electrical and other components that are hard to get in Europe. The list of technologies has been drafted by EC, ESA, EDA and member states. This is the first time the effort is focused on most difficult technologies, computer chips. This has been avoided earlier because chips require much higher investments than Space programme in any FP has had.

For these 20 Meuro

TOPICS AND PROCUREMENTS BY Horizon, EUSPA or via ESA

HORIZON-CL4-2025-02-SPACE-81: EU-Japan cooperation on the exploitation of Quantum Space Gravimetry data – EU is developing a quantum gravimetry satellite, here scientific collaboration is sought with Japan

HORIZON-EUSPA-2026-SPACE-02-51: Space Data Economy

HORIZON-EUSPA-2026-SPACE-02-52: Innovative space-based applications enhancing capabilities for a resilient Europe

Consolidate European commercial SST capabilities on sensors – RESTRICTED (SST-surveillance of satellites and space debris)

Consolidate European commercial SST capabilities on Services – RESTRICTED

EGNSS Evolution Mission and Service-related R&D activities (public procurement by the Commission, €2 million)

EGNSS Evolution: Technology and infrastructure-related R&D activities (delegated to ESA)

IRIS2 Space infrastructure: Development and Validation (delegated to ESA) – support to EU/ESA IRIS2 telecommunication satellite constellation (total cost of the system development is 6 billion euro or more)

In Orbit Demonstration/Validation (IOD/IOV) service - free launches into space for small satellites

2025 CASSINI activities (delegated to EUSPA, €0.5 million) – hackathons etc.

Boosting Space through training and education activities (public procurement by the Commission, €5 million)

Boosting Space via support to entrepreneurship – 2025 CASSINI activities public procurement by the Commission, €8.5 million)

For these 150 Meuro

Via ESA, e.g.

Work Plan 2025 (WP25)

- 5th Workplan for Horizon Europe, 6 new activities
- Submitted to Commission in December 2024, approved in January 2025

WP ID	Activity subject	Estimated budget (k€)	Planned tender issue date	Planned signature	Contract dur. (months)	Submission to Procurement Board	Notes and remarks
HE-ESA-033	Study of GNSS signals monitoring from LEO (sensor station in space)	3000 (2 x 1500)	Q1 2025	Q1 2026 – Q2 2026	24	N	Procurement in dual source
HE-ESA-034	Advanced platform-oriented ground infrastructure	18000 (2 x 9000)	Q2 2025	Q2 2026 – Q3 2026	24	Y	Procurement in dual source
HE-ESA-035	EGNOS-NEXT: System of Systems engineering trade-offs	4000 (2 x 2000)	Q3 2025	Q3 2026 – Q4 2026	18	N	Procurement in dual source
HE-ESA-036	EGNOS GEO Ranging: End-to-end qualification and operation methodology	1500	Q1 2025	Q1 2026 – Q2 2026	18	N	
HE-ESA-037	Advanced Life cycle management concept for future EU MEO space systems	1000	Q4 2025	Q4 2026 – Q1 2027	18	N	
HE-ESA-038	EU GNSS RFI Monitoring from space: system concept and technologies	2500	Q1 2025	Q1 2026 – Q2 2026	24	N	

Total = 30,0 M€ allocated to above activities

Thanks

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