

# The EU Space Programme



Horizon Europe,  
a programme of the  
European Union



# The EU Space Programme

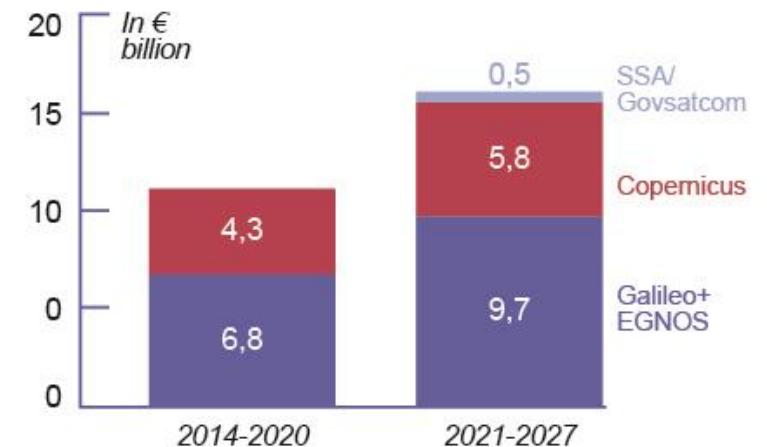
# The EC implements the EU Space Programme, covering Galileo, EGNOS, Copernicus, Space Situational Awareness (SSA) and EU Govsatcom

## THE EUROPEAN SPACE PROGRAMME

<p><b>Copernicus</b> Earth Observation (EO) and monitoring based on satellite and non-space data. <b>Nr.1</b> world provider of space data and information.</p>	<p><b>Galileo</b> Global satellite navigation and positioning system (GNSS). <b>10%</b> of the EU GDP is enabled by satellite navigation.</p>	<p><b>EGNOS</b> Makes navigation signals more accurate and reliable. Operational in <b>300+</b> airports in 23 countries.</p>	<p><b>SSA</b> Space situational awareness, monitors and protects space assets. Providing surveillance and tracking services to <b>129</b> European satellites.</p>	<p><b>EU GOVSATCOM</b> Secures satellite communications for EU security actors.</p>
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### Cross cutting activities:

- Access to space
- Foster uptake
- Governance
- Security and autonomy
- International Cooperation

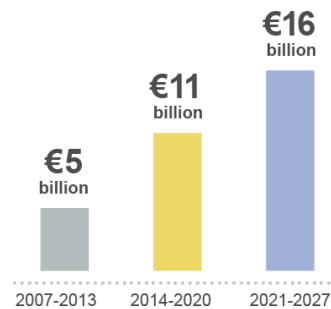


# The EU Space Programme boosts the EU economy

**30+ EU-owned satellites in orbit for EO and GNSS**



**EU Investment in space**



proposed budget for 2021-2027, commitment of **€14.6 billion**

**European space industry supports 250.000+ jobs**

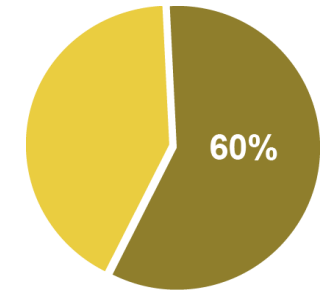


Global GNSS and EO enabled revenues **€200 billion** in 2021 - Set to reach almost **€500 billion** over the next decade

**3+ billion** Galileo-enabled Smartphones



**Copernicus** data is used by **60%** of the European EO companies



2021 global turnover for EO-derived data and services is **€2.8 billion**

# It also fosters a strong and innovative space-based industry

The EU Space Programme provides established space technology, data and services indispensable in the lives of Europeans today. **In the future, it will address an increasing range of EU ambitions and priorities:**



**Competitive edge:**  
Completion of current satellite constellation, development and launch of next-generation satellites



**Research & innovation:**  
the ambitious research and innovation programme Horizon Europe



**Fighting Climate Change:**  
Monitoring biodiversity, environmental compliance and CO2 emissions (Paris Agreement)



**EU as a global actor:**  
Support disaster relief, humanitarian assistance and security operations

# Some concrete areas of application

## Agriculture



**EU Space** enables precision agriculture and integrated farming solutions.

It helps farmers increase yields by 10%+ and save 20%+ on fertiliser, fuel and pesticides.

It enables safe landings and autonomous machines.

## Response to Natural Disasters



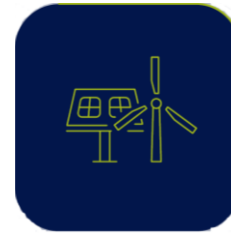
**EU Space** supports rescue operations during floods, fires, earthquakes and hurricanes as well as man-made disasters.

## Smart Cities



**EU Space** is crucial for urban mapping, planning and infrastructure monitoring, notably enabling better urban transport and smart waste management.

## Renewable Energies



**EU Space** supports the siting of renewable energy facilities assessing potential energy generation and environmental impacts.

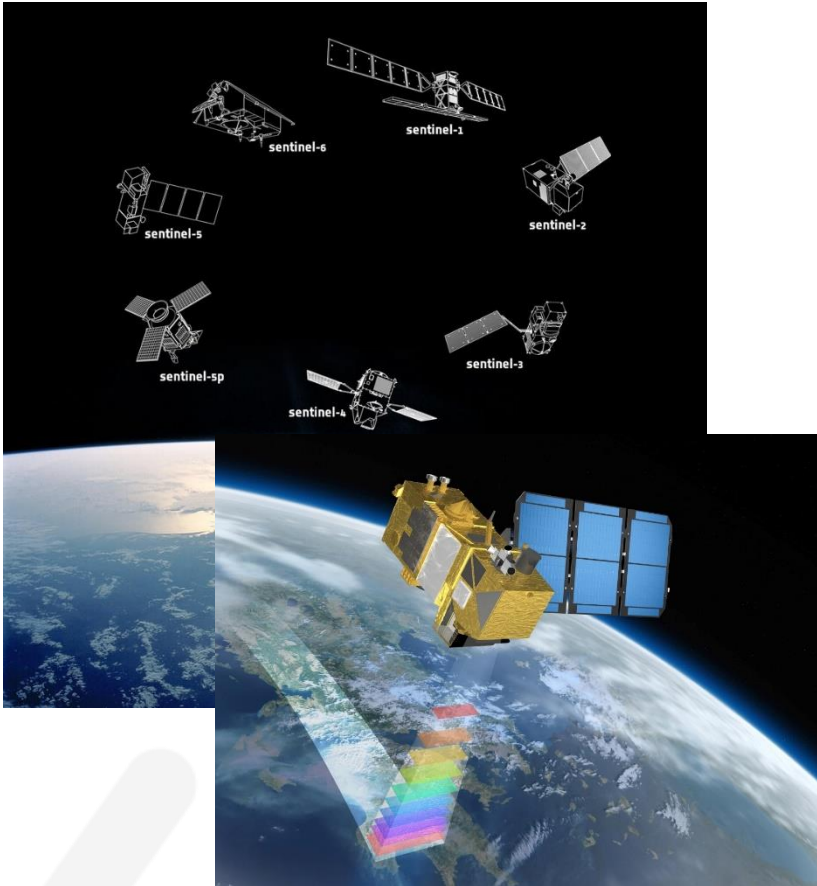
## Health



**EU Space** helps to forecast air quality and UV radiation having an impact on our health.

# Copernicus

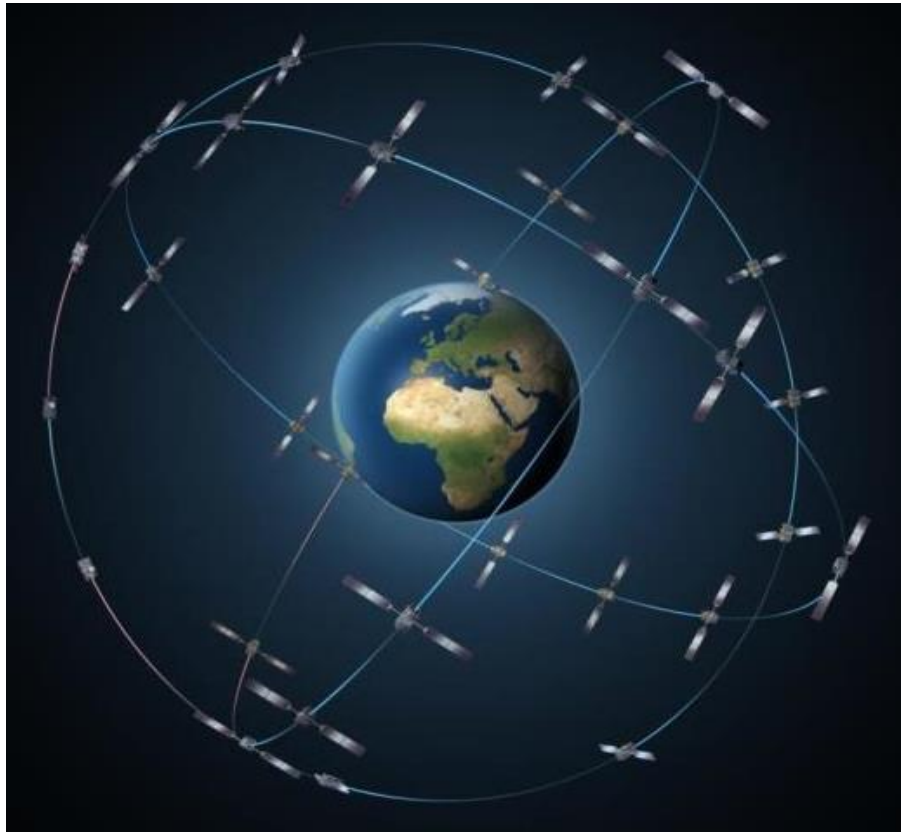
## Copernicus' Satellites: the Sentinels



- Land Monitoring Service
- Marine Environment Monitoring Service
- Atmosphere Monitoring Service
- Climate Change Service
- Security Service
- Emergency Management Service

**free, full and open  
data policy**

# Galileo: EU's positioning, navigation and timing capability



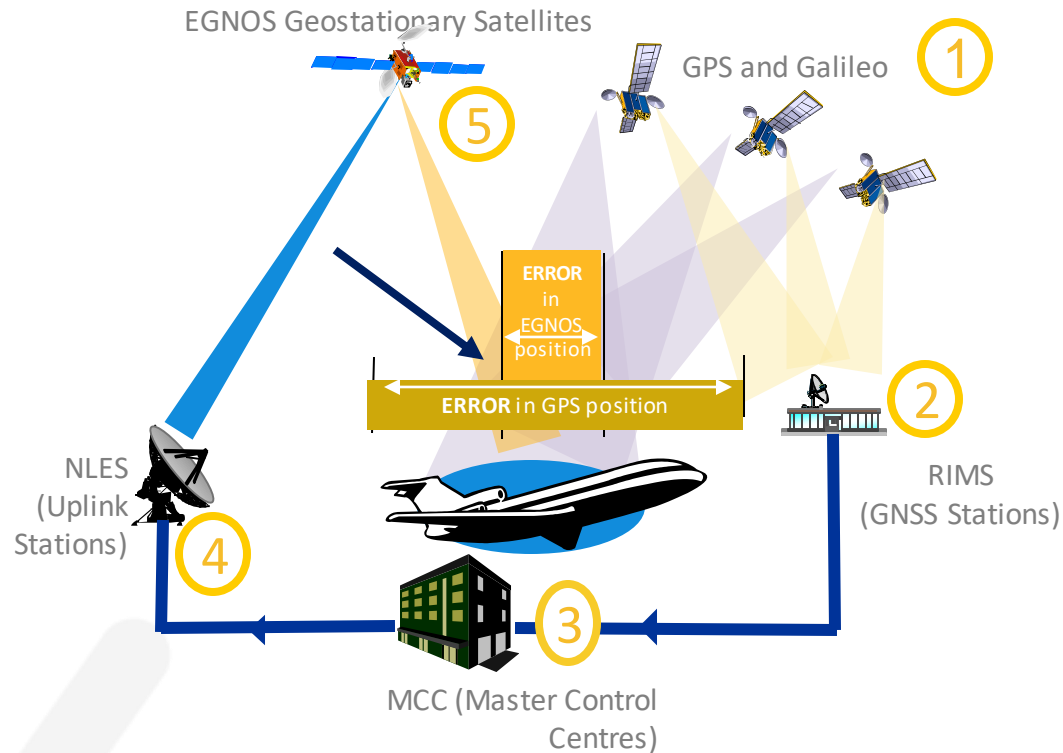
- **Open Service**
- **High-accuracy service**
- Signal authentication service
- **Public regulated service (PRS)**
- Emergency service
- **Timing service**
- **Search and rescue support service (SAR)**
- Integrity – monitoring services
- Space weather information

(Available - In development)



# EGNOS enhances GPS and Galileo in Europe

EGNOS improves position accuracy and provides integrity



Fields of application

- Landing approaches of aircraft
- Precision agriculture
- Toll systems (e.g. Slovakia)
- Aviation and maritime (incl. ports)
- Tracking the transport of hazardous materials
- Surveying

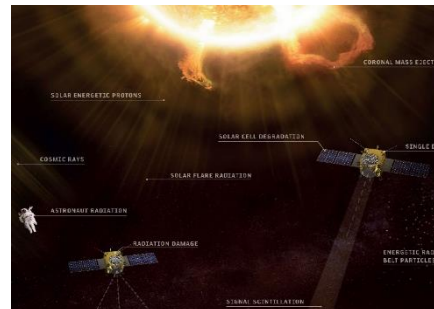
# SSA: An autonomous capability to monitor and protect space assets

## Space Surveillance and Tracking (SST) Services



- Risk assessment of collision, collision avoidance
- Detection and characterisation of in-orbit fragmentations, break-ups or collisions
- Risk assessment of the uncontrolled re-entry of space objects and space debris
- Space debris mitigation and remediation

## Space Weather Activities



- Space Weather services for civil protection and protection of various sectors (e.g. transport)

## Near Earth Objects Activities



- Mapping and pooling Member States capacities
- Development of a routine rapid response service
- Creation an European catalogue

# Govsatcom: EU's secure access to space communication for public service



- Will provide government-authorized users a reliable and secure access to space communication with emphasis on emergency and security related activities
- Ensuring long-term **secure, reliable and cost-effective** SATCOM services to EU and Member State authorities
- ... through **pooling and sharing** of governmental and commercial SATCOM capacities, assembling users and by seeking civil-military synergies
- ... enhancing the EU's **strategic autonomy** and its non-dependence on third parties

# IRIS2 : EU space-based secure connectivity system

Ensure reliable, secure and cost-effective communications services for the protection of critical infrastructures, surveillance, external actions and crisis management



- 🚀 Innovative **multi-orbital** space-based connectivity system
- 🚀 Governmental infrastructure: for **reliable, secure and cost-effective communications** services
- 🚀 Commercial infrastructure: high-speed broadband and seamless connectivity throughout Europe, **removing dead zones**

# IRIS<sup>2</sup> missions & use cases

## A RELIABLE, SECURE AND COST EFFECTIVE GOVERNMENTAL COMMUNICATION SERVICE



### Connecting key infrastructures

- Command and control of smart grids (energy, finance, health, data centres...)
- Management of Infrastructures (air, rail, road, traffic management)
- Galileo (signal augmentation), Copernicus (data relay)
- Institutional communications (Embassies, EUROPOL,...)
- Telemedicine



### Crisis Management and external actions

- Civil protection
- Common Foreign & Security Policy - Common Security & Defence Policy
- Humanitarian aid
- Maritime emergencies (search and rescue)



### Surveillance

- Border and remote areas surveillance
- Remote Piloted Aircraft systems
- Maritime surveillance
- Arctic region coverage
- Complement to military missions

## SECURE CONNECTIVITY INITIATIVE: MULTI-ORBITAL SPACE-BASED STATE-OF-THE-ART CONNECTIVITY SYSTEM



### Allow Mass-market service

- Mobile Broadband
- Fixed Broadband
- Satellite Trunking for B2B services
- Satellite access for transportation – for ships, airplanes, drones, connected cars
- Reinforcement of terrestrial networks (resilience) – as an alternative in cases of disruptive events
- Cloud based services

## EUROQCI



### Encryption capability

- Government and institutional users
- Data centres
- Satellite communication networks
- Terrestrial communication networks
- Banking industry
- Other industries



# Students

## Opportunities relevant to students

- Joining the EU: all competitions are available here: <https://eu-careers.europa.eu/en>
- The IOD/IOV opportunities : see [https://defence-industry-space.ec.europa.eu/eu-space-policy/eu-space-research/orbit-demonstration-and-validation-iodiov\\_en](https://defence-industry-space.ec.europa.eu/eu-space-policy/eu-space-research/orbit-demonstration-and-validation-iodiov_en)
- CASSINI Hackatons: <https://www.cassini.eu/cassini-initiative>
- EUSPA Space Academy : free of charge, online course, open to everyone to learn more about the EU Space Programme : <https://www.euspa.europa.eu/spaceacademy/>

# Space R&I under Horizon Europe



Horizon Europe,  
a programme of the  
European Union



# Space in Horizon Europe

## EU Space R&I

### Horizon Europe • Pillar 1



#### Frontier Research, Science & Basic Technologies

##### ERC

Systems and communications engineering (PE7)

Products and processes engineering (PE8)

Universe sciences (PE9)

Earth system science (PE10)

Materials Engineering (PE11)

Computer Science and Informatics (PE6)

Medical and biotechnologies (LS7, LS9)

ERC Synergy Grants

##### MSCA

Doctoral Networks

Postdoctoral Fellowships

### Horizon Europe • Pillar 2



#### EU Space Programmes R&I

EGNSS Evolution

EGNSS Market uptake

GOVSATCOM Infrastructure evolution

GOVSATCOM Applications & data services

Copernicus Evolution

Copernicus Market uptake

SSA Infrastructure evolution

SSA Applications & data services

IRIS<sup>2</sup> Infrastructure evolution

IRIS<sup>2</sup> Applications & data services



#### Space Technologies, Capabilities, Applications & Pathfinder Missions

Launch Systems & Services

In-Space Operations & Services

Enabling Technologies

Critical Space Technologies for EU non-dependence

Science & Exploration

Pathfinder Missions



#### R&I Booster

Education and Skills

CASSINI & Space Entrepreneurship

IOD/V Service

International Cooperation

### Horizon Europe • Pillar 3



#### Game-changing Innovations & Market Uptake

##### Pathfinder • Transition • Accelerator

Innovative In-Space Applications & Sustainability

Innovative Space Technologies & Systems

Exploration

Prizes

EIC Business Accelerator

### EDF



#### Space

Earth Observation for ISR applications

Space Situational Awareness and early warning

Space data processing

Positioning, navigation, timing, navigation warfare

Secure and robust communication

Responsive space systems

# Pillar I – ERC grants

## Life Sciences

- LS1 Molecules of Life: Biological Mechanisms, Structures and Functions
- LS2 Integrative Biology: From Genes and Genomes to Systems
- LS3 Cell Biology, Development, Stem Cells and Regeneration
- LS4 Physiology in Health, Disease and Ageing
- LS5 Neuroscience and Disorders of the Nervous System
- LS6 Immunity, Infection and Immunotherapy
- LS7 Prevention, Diagnosis and Treatment of Human Diseases
- LS8 Environmental Biology, Ecology and Evolution
- LS9 Biotechnology and Biosystems Engineering

## Physical Sciences & Engineering

- PE1 Mathematics
- **PE2 Fundamental Constituents of Matter**
- PE3 Condensed Matter Physics
- PE4 Physical and Analytical Chemical Sciences
- PE5 Synthetic Chemistry and Materials
- **PE6 Computer Science and Informatics**
- PE7 Systems and Communication Engineering
- PE8 Products and Processes Engineering
- **PE9 Universe Sciences**
- **PE10 Earth System Science**
- PE11 Materials Engineering

## Social Sciences and Humanities

- SH1 Individuals, Markets and Organisations
- SH2 Institutions, Governance and Legal Systems
- SH3 The Social World and Its Interactions
- SH4 The Human Mind and Its Complexity
- SH5 Texts and Concepts
- SH6 The Study of the Human Past
- SH7 Human Mobility, Environment, and Space
- SH8 Studies of Cultures and Arts

# Pillar II

- Publication (HaDEA & EUSPA calls) on the [EU Funding & Tender Portal](https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home) at <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>

The screenshot shows the EU Funding & Tender Portal interface. The header includes the European Commission logo and the text 'Funding & tender opportunities Single Electronic Data Interchange Area (SEDIA)'. The main navigation bar contains 'SEARCH FUNDING & TENDERS', 'HOW TO PARTICIPATE', 'PROJECTS & RESULTS', 'WORK AS AN EXPERT', and 'SUPPORT'. A search bar is visible on the left, and a 'Need help?' button is on the right. The search results for 'CASSINI Prize for digital space applications' are displayed, including details such as 'Programme: Horizon Europe (HORIZON)', 'Status: Open for submission', and 'Deadline date: 03 May 2023 17:00:00 Brussels time'. A table below the search results shows the submission status: Forthcoming (6), Open for submission (1), and Closed (9).

- Funding rates
  - Research and Innovation Actions (RIA): 100%
  - Innovation Actions (IA): up to 70%
  - Coordination and Support Actions (CSA): 100%
- Consortia: must include min 3 entities from min 3 countries (countries: see [https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation\\_horizon-euratom\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation_horizon-euratom_en.pdf))

# WP 2023-2024 – Cluster Digital, Industry, Space – Destination 5 Space

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

## Implemented through:

### 1. Calls from HaDEA

- ~~Call HORIZON-CL4-2023-SPACE-01: will open on 22 Dec 2022, with deadline 28 March 2023~~
- **Call HORIZON-CL4-2024-SPACE-01: will open on 21 Nov 2023, with deadline 21 March 2024**

### 2. Calls from EUSPA

- **Call HORIZON-EUSPA-2023-SPACE: will open on 24 Oct 2023, with deadline 14 Feb 2024**

### 3. Tenders from ESA

### 4. Tenders from the European Commission

Published at: [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)

# 1- Competitiveness

The **Future EU Space Ecosystem** is a highly automated, flexible, sustainable and economically viable space infrastructure enabling growth of innovative applications and competitive services

## Resilience of space assets

- ✓ Establishment of services for maintenance & upgrade
- ✓ Enhanced flexibility, security and scalability

## Non-dependence on technology & capability

- ✓ Key technology maturation
- ✓ Support to game-changing approaches and solutions
- ✓ Contribution to standardisation activities



## Sustainability & protection of the space environment

- ✓ Reduction of space debris and use of resources
- ✓ Active debris removal
- ✓ Promotion of re-usability

## Competitiveness

- ✓ Support to customer-driven ideas and NewSpace actors
- ✓ Creation of confidence in & visibility for EU actors
- ✓ Fostering of new commercial and value-added services

## 2 – Access to Space

- Access to space is **strategic for Europe**
- (Micro-) Launcher are a globally **ultra-competitive environment**
- Necessity to support a cost-efficient, responsive and **flexible access to space**
- Horizon Europe programme has **four R&I priorities**:
  - **Innovation for launcher competitiveness** – targeting initial operational capability by 2030
  - **Disruptive concepts for access to space** – starting at low technological readiness levels
  - Fostering and enabling **new commercial space transportation solutions**
  - Modern, flexible and efficient European **test, production and launch facilities**, means and tools



**Rapidly improve launch competitiveness**, in terms of cost and increased flexibility



**Stimulate the development of new space transportation solutions**, including through the emergence of new launch systems



© PLD technologies

## 3 – Quantum

- Quantum theory explains the nature and behaviour of matter and energy **on the atomic and subatomic levels**
- **“Atom interferometry”** can be used to make highly sensitive gravity detectors, accelerometers and gyroscopes
- A whole **range of applications has emerged** in science but also for our daily life like laser, electronics and medical imagery
- The EU must seize this opportunity and **make the best and most strategic use of quantum technologies for space**
- Promotion of developments for
  - Secure communication, time and frequency services
  - Earth sensing and observation
  - Use of quantum computing for space data processing and mission planning



**Support the EU space policy and the EU Space Programme**



**Reinforce EU non-dependence for the development of EuroQCI (the EU Quantum Comm. Infrastructure)**



**Build a dynamic and innovative industrial ecosystem in Europe**

*“Europe should invest massively in quantum technologies. This is a matter of technological sovereignty. Quantum could have important applications in the space domain like in encryption or in the mapping from space of the underground landscape.”*

*Commissioner T. Breton,  
22 January 2020*

## 3 – Quantum

### Quantum Space Gravimetry

- Satellite gravity missions provide **unique observations** not yet covered by other Earth observation missions
- Quantum technology is a **game-changer to monitor the Earth** and predict climate change and future disasters
- HE project CARIOQA develops an engineering model of the **atomic accelerometer** for a future mission



### Quantum Key Distribution

- European Quantum Communication Infrastructure (QCI) develops a terrestrial and space segment
- The **space segment based on satellites** to overcome the limitations of ground-based segments
- Objective is to mature the new technologies and perform the qualification for space and ground





## 4 – Copernicus Services

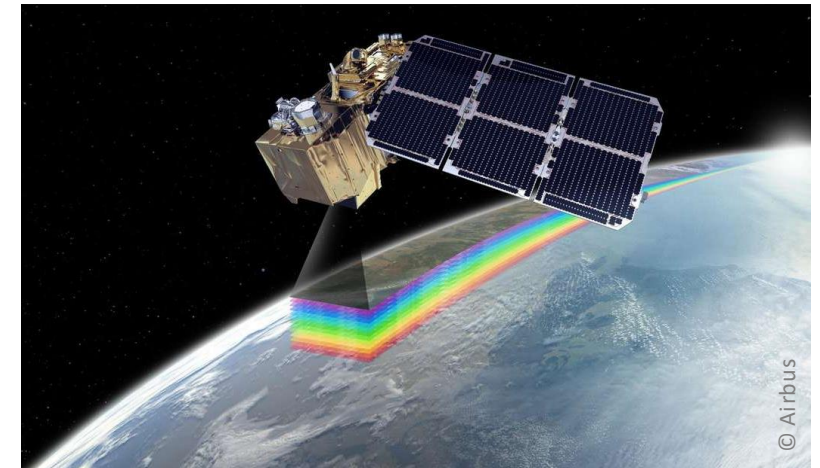
- Through Earth Observation (EO) satellites the **status of and changes in Earth's systems** can be monitored and assessed
- Copernicus serves as an independent and powerful European EO solution with services to **benefit all European citizens**
- Its own fleet of Earth observation satellites (Sentinels) **provides global data free of charge**
- Additionally, the commercial market demand for EO products is expected to grow quickly in the next years with a focus on
  - Advanced, very high-resolution satellite imagery and
  - Affordable, high-resolution, high-revisit products



**Preparing the evolution and expansion of Copernicus** to address EU policy and user needs



**Underpin competitiveness** and contribute to the integration of space into society and the economy



# 5 – Space science & technological non-dependence

- Space increasingly represents an **invaluable asset in many sensitive and high-stakes matters**
- COVID-19 pandemic has shown the necessity to **strengthen Europe's industrial base**
- Space-grade electronic devices and other space systems are **often subject to restrictive trade rules**
- To be non-dependent with a resilient and flexible supply chain, Europe has to develop its **own domestic production of critical technologies**

*Achieving strategic autonomy while preserving an open economy is a key objective of the EU and calls for developing EU autonomy in the space sector.*

*(EU Council conclusions, EUCO 13/20 Oct 2020)*



**Reduce the dependence on critical technologies and capabilities**



Develop or regain in the medium term the EU capacity to **operate independently** in space



**Enhance the technical capabilities and overall competitiveness** of European space industry



**Open new competition opportunities** for European manufacturers



**Improve the overall European space technology landscape** and complement and create synergies

## 6 – Space Situational Awareness (SSA)

- SSA is a component of the **EU Space Programme** (Regulation (EU) 2021/696)
- SSA means a **holistic approach**, including comprehensive **knowledge** and **understanding**, of the **main space hazards**, encompassing:
  - collisions between space objects
  - fragmentation and re-entry of space objects into the atmosphere
  - space weather events
  - near-Earth objects



[Space Situational Awareness \(europa.eu\)](https://europa.eu)

# 7 – Applications for Galileo, EGNOS and Copernicus, including Galileo PRS & GOVSATCOM

- R&I is necessary to **strengthen and evolve** European space assets and value-added services using their synergies
- Activities target **innovative applications** in



**Agriculture:** Optimisation of fertiliser, fuel, pesticide and water use, assurance of food security and traceability



**Security and emergency:** Provision of crucial information and assistance in disaster mitigation, preparedness & recovery,



**Digital innovation:** Applications supporting smart cities, urban planning, smart waste management



**Climate change:** Monitoring Earth's changes and support the supply of clean, affordable and secure renewable energy



**Health:** Forecasting UV radiation or air pollution levels enable the use of autonomous robots in support of humans



**Provide Europe with cutting-edge space-based services**



**Evolve and improve** to continue responding to today's evolving challenges and market needs



**Build a dynamic and innovative downstream ecosystem in Europe**



## 8 – Cassini (see <https://www.cassini.eu/cassini-initiative> and [www.cassini.eu](http://www.cassini.eu))

The **CASSINI Actions** covers the whole entrepreneurship cycle:

- **Cassini Facility** deploys a 1€ B investment for Venture Capital funds interested in investing in EU-based companies in the space sector (up- and downstream)
- **CASSINI Matchmaking** supports start-ups, scale-ups and SMEs by connecting them with potential investors and/or corporate partners
- The **IOD/IOV** service enables new technologies to be tested in orbit
- **CASSINI Business Accelerator** seeds grant and six months of business acceleration for space-based start ups
- **CASSINI Prizes** trigger entrepreneurs to develop close-to-market digital applications based on EU space data
- EU-wide **CASSINI Hackathons**: an opportunity to stimulate entrepreneurship and to develop ideas for digital applications building on space data



The **EIC Actions** identifies & develops breakthrough technologies:

- The EIC Pathfinder & Transition programmes support **research teams exploring bold ideas at low TRLs** for radically new & emerging breakthrough technologies, with grants of up to 4€ M
- Providing **grant funding and equity investments** for individual start-ups and small companies with TRLs above 5 to develop and scale up innovations



# 9 – EGNSS Upstream

- Today, the use of a Global Navigation Satellite System (GNSS) **is deeply ingrained in our everyday lives**
- The European GNSS encompasses
  - **Galileo**, a state-of-the-art global satellite navigation system
  - **EGNOS**, a regional satellite-based augmentation system
- Both services create **extensive socio-economic benefits** through a range of applications spanning numerous markets
- The Galileo infrastructure evolves with the arrival of the second generation of Galileo (G2G) satellites
  - **Enabling diversification** of downstream applications
  - **Strengthening the robustness** with frequency diversity, increased power, signal encryption & authentication features
  - **Increasing the accuracy** in time and position



**Preparing the new generations** on a user-driven basis, considering the technological progress

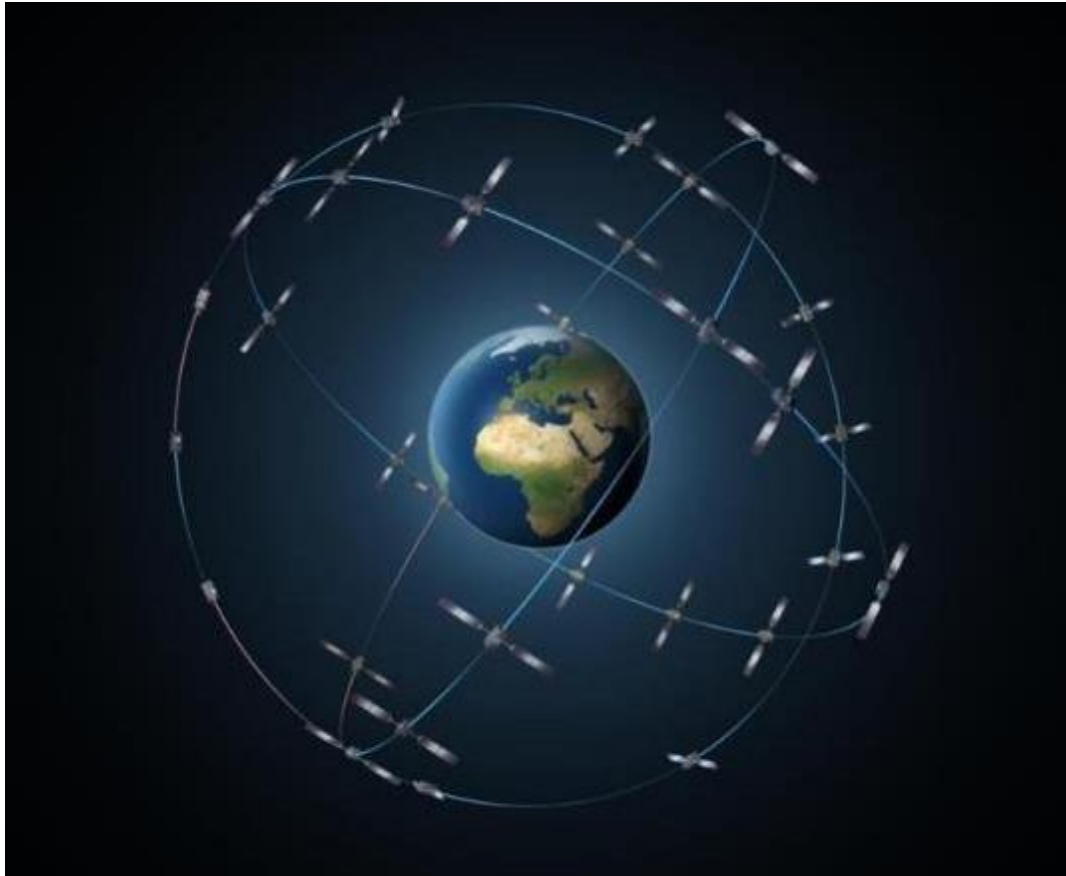


**Addressing the vulnerability of the European supply chain** by supporting the R&I of critical space components and technologies



## 9 – EGNSS Upstream

### GALILEO TODAY



- 28 satellites in orbit
- Remarkable performance
- Strong link with users, market and industry
- Modernization on-going

# 10 – Secure Connectivity – IRIS<sup>2</sup>

## Why IRIS<sup>2</sup>?

New satcom needs cannot be fulfilled by current EU assets



Increased level of threats of hybrid nature, incl. cyber



growing governmental satcom needs for secure, reliable and diverse services



need for EU based available solutions



# 11 – IOD/IOV

See [https://defence-industry-space.ec.europa.eu/eu-space-policy/eu-space-research/orbit-demonstration-and-validation-iodiov\\_en](https://defence-industry-space.ec.europa.eu/eu-space-policy/eu-space-research/orbit-demonstration-and-validation-iodiov_en)

- Validating concepts and testing innovative technologies in real conditions **accelerates their entry into the market**
- In-orbit testing is a costly and complex endeavour resulting in the infamous “**valley of death**” for many innovators
- This is why the EU started the **IOD/IOV initiative** enabling new technologies to be tested in orbit
- **1<sup>st</sup> call 2018, 2<sup>nd</sup> call 2020**
  - 100+ proposals from various European entities
  - Technology innovation for EO, PNT, SatCom, STM and more
  - The first selected IOD/IOV experiment **UPMSat-2** was launched incl. six innovative payloads



Ensure the global competitiveness by allowing technologies to be effectively tested in orbit



Provide cost-effective services based on EU solutions



Prepare a generation of European engineers with hands-on experience



UPMSat-2

© UPM

# Pillar III - EIC

## Pathfinder (TRL1-4)

- For consortia
- Early stage research on breakthrough technologies
- Grants up to €3/4 million

## Transition (TRL 4-6)

- For consortia and single entities
- Technology maturation from proof of concept to validation
- Business & market readiness
- Grants up to €2.5 million

## Accelerator (TRL 6-9)

- For individual SMEs
- Development & scale up of deep-tech/ disruptive innovations by startups/ SMEs
- Blended finance (grants up to €2.5 million; equity investment up to €15 million or above)

- Focus on **breakthrough, game-changing, market-creating, deep-tech**
- **Mainly bottom up** complemented by targeted funding on strategic technologies/ challenges
- Steered by **EIC Board** of leading innovators (entrepreneurs, investors, researchers, ecosystem)
- **Business Acceleration Services** (coaches/ mentors, corporates, investors, ecosystem)
- **Pro-active management** (roadmaps, reviews, re-orientations, etc) with EIC Programme Managers
- **Fast track access** to Accelerator for results from EIT, EIC Pathfinder

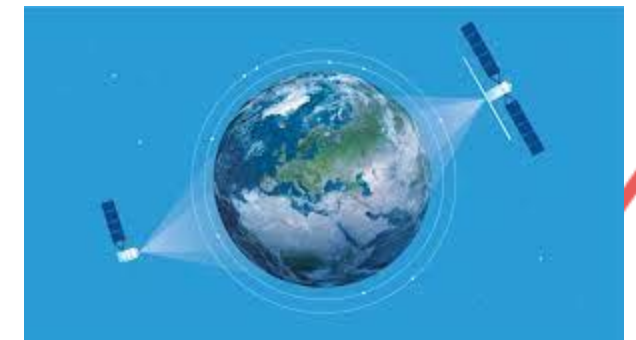
# The Large Scale Skills Partnership in the space sector



Horizon Europe,  
a programme of the  
European Union

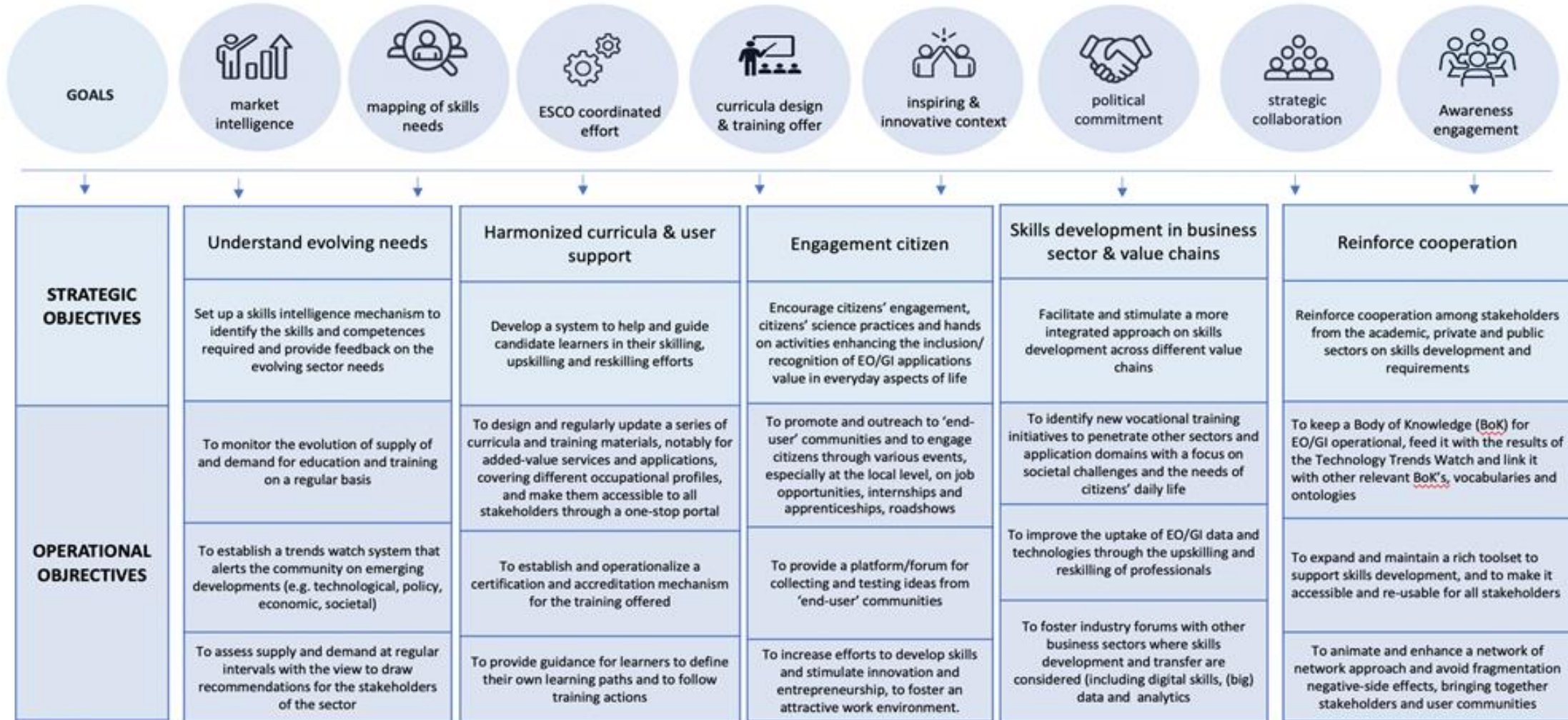
# Background

- The EO4GEO Alliance ([www.eo4geo.eu](http://www.eo4geo.eu)) was established in 2022
  - Governance based on a Network Agreement.
  - Objectives defined in the EU Sector Skills Strategy
- It evolved towards the new **Large Scale Partnership on Space Data, Services and Applications – SPACE4GEO, with official launch on 25 April 2023**
- SPACE4GEO is complementary with the existing LSP on Aerospace and Defence and with the LSPs representing other vertical sectors e.g. agriculture, tourism, health, insurance and finance, ...



# Objectives

## According to the EU Sectoral Skills Strategy



# Details

- **The Sector Skills Strategy** and Long-term Action Plan were released within the EO4GEO project
  - Embrace the full downstream ecosystem, including: Positioning, Navigation & Timing, satellite communications and, in general, all skills needed to implement current and future policies, i.e. EC Communication on Space Security and Defence.
- The LSP aims to **raise awareness and attract talent** to apply for jobs in a segment of the space economy which is recognised to have a strong growth potential for next decade(s).
- It currently has **49 members** from 14 EU countries
  - Public Agencies, Academia, VET providers, companies, sectoral associations
  - Open to all key stakeholders in the sector (and beyond).

# Members

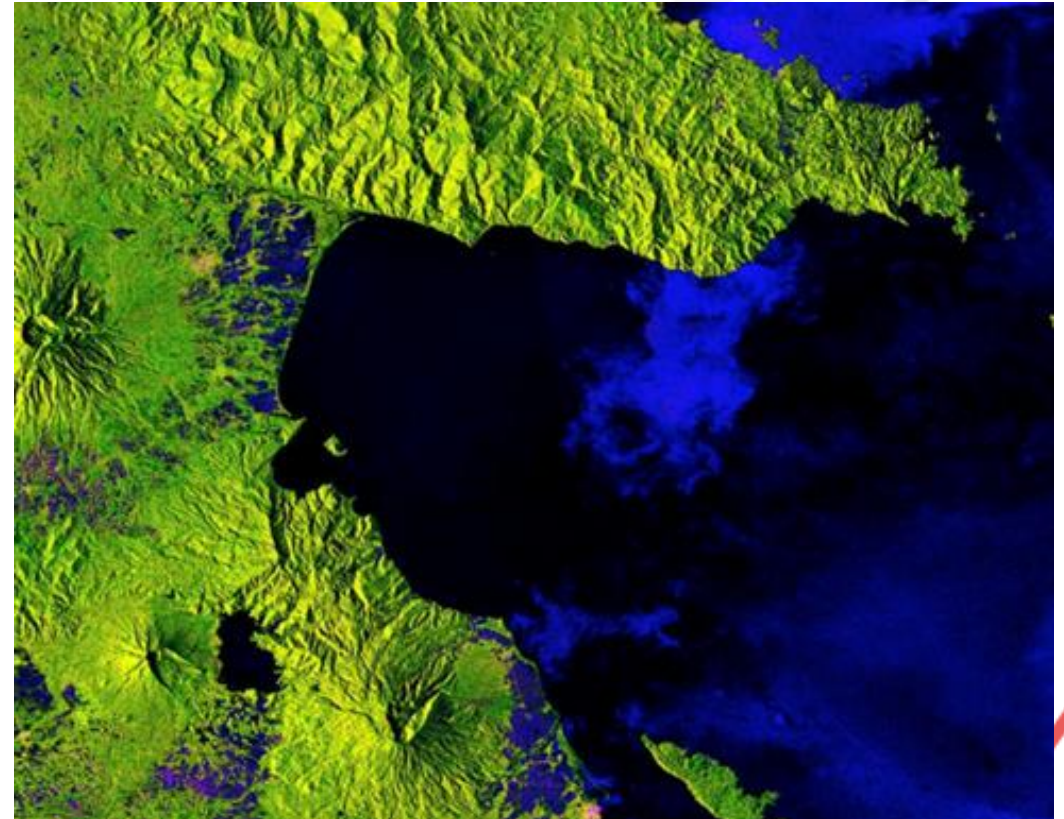


coordinator



# General commitments of Large-Scale Partnerships

- 👉 Ensure continuous exchange and **cooperation among stakeholders** on skills development and requirements
- 👉 Establish a shared understanding of the type and amount of **skills needs and capacity requirements** to achieve the high level vision of a successful space downstream and geoinformation sector
- 👉 **Bridge the skills gaps** and mismatches and an improved user uptake of space data, services and applications



Mount Mayon, Philippines  
Copernicus Sentinel-1 data (2018)



# Specific commitments of Large-Scale Partnerships

- To monitor the occupational supply and demand to **identify the skills and competences required** and provide feedback on the evolving sector needs.
- To help and **guide candidate learners** in their skilling, upskilling and reskilling efforts, supporting them to access quality training.
- To facilitate and stimulate a more integrated and inclusive approach on **skills development across different value chains** (vertical sectors), at different levels, including local and regional level.
- To encourage **citizens' engagement**, citizens' science practices, recognizing the space & geoinformation applications' value in everyday aspects of life, and **attracting new talents** for emerging professions



# Benefits of joining SPACE4GEO

Members of the Partnership have access to knowledge on upskilling and reskilling needs, advice on relevant funding instruments to boost the skills of adults in their regions and countries, and partnership opportunities within a growing community

By joining SPACE4GEO you can also:

- Participate in key **discussion panels** at the EU level
- Be part of a dynamic international partnership allowing you to access expertise to:
  - ✓ Set-up strong **transnational consortia** to submit proposals for funding
  - ✓ Participate to **tenders and procurements** with the right partners
  - ✓ Submit **offers for commercial exploitation** of added value services and training
  - ✓ Propose and develop **initiatives** to mainstream the results at national and regional level
- Be part of a **recognised brand** acting collectively towards relevant institutions and reaching out to key stakeholders with a stronger impact
- Have **visibility** on the Partnership website and promote your activities via the channels operated by the Partnership, including social media, newsletters, sectoral events of interest

# How to join?

Connect to the [Pact for Skills Application Form](#)

Answer question 1

Answer question 2

Would you like to:

- Sign the Pact for Skills charter and make a specific commitment **for your organisation**
- Register **a new partnership under the Pact as the coordinator**
- Subscribe to the [Pact newsletter](#) and to receive information on the Pact activities (*please note that members of the Pact and members of existing large scale and regional partnerships are automatically registered to the newsletter and other communication activities*)
- Modify an existing application and/or change your communication preferences
- Input a contact relevant to the Pact (limited to the Pact for Skills Support Services Team)

Step 5, indicate partnership N. 1227 and click on “SPACE4GEO”

**Please indicate the registration number of the partnership you are part of:**  
 You can ask the registration number to the partnership coordinator or check the online database of members to identify your partnership here ([https://ec.europa.eu/eusurvey/publication/Pact\\_for\\_Skills\\_FORM](https://ec.europa.eu/eusurvey/publication/Pact_for_Skills_FORM))

**Please indicate the large-scale skills partnerships you are member/coordinator of:**  
 Please note that the skills partnerships for Retail, Health and the Energy Intensive Industries are still in preparation and have not been officially launched yet.

- Skills partnership for Aerospace and Defence
- Skills partnership for Construction
- Skills partnership for Microelectronics
- Skills partnership for Offshore Renewable Energy (ORE)
- Skills partnership for Shipbuilding and Maritime Technology
- Skills partnership for Textile, clothing, leather and footwear industries (TCLF)
- Skills partnership for the Agri-food Ecosystem
- Skills partnership for the Automotive Ecosystem (Automotive Skills Alliance)
- Skills partnership for the Cultural and Creative Industries (CCI) Ecosystem
- Skills partnership for the Digital Ecosystem
- Skills partnership for the Proximity & Social Economy ecosystem
- Skills partnership for the Tourism Ecosystem
- Skills partnership for Retail
- Skills partnership for Health
- Skills partnership for the Energy Intensive Industries
- Skills partnership for Long-Term Care
- Skills Partnership for the Renewable Energy Ecosystem
- Skills Partnership on Space Data, Services and Applications (SPACE4GEO)
- Skills Partnership for Energy Efficiency (upcoming)

\* Is your organisation already a member of a:

- Large-scale Skills Partnership (LSP)
- Regional Skills Partnership
- Partnership already member of the Pact (not LSP or regional partnership)
- None of the above

For any questions, please contact the Support Services at [PactforSkillsMembers@ecorys.com](mailto:PactforSkillsMembers@ecorys.com).

**Thank you for  
your attention!**

**[isabelle.maes@ec.europa.eu](mailto:isabelle.maes@ec.europa.eu)**

**[https://defence-industry-  
space.ec.europa.eu/eu-space-policy/  
eu-space-research\\_en](https://defence-industry-space.ec.europa.eu/eu-space-policy/eu-space-research_en)**

