#EUSpace

EUROPEAN UNION

EU SPACE PROGRAMME OVERVIEW

EU SPACE PROGRAMME

3 MISSIONS

- EARTH OBSERVATION
- NAVIGATION
- PROTECTION & SECURE COMMUNICATION

5 COMPONENTS

COPERNICUS

Earth Observation (EO) and monitoring based on satellite and non-space data

N°1 world provider of space data and information

GALILEO

Global satellite navigation and positioning system (GNSS)

10% of the EU GDP enabled by satellite navigation

EGNOS

Enables the use of GNSS signals for safety of life applications in aviation

Operational in **437** airports & helipads in **34** countries

SSA

Space situational awareness monitoring and protecting space assets

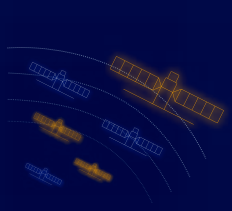
Providing surveillance and tracking services to **310+** satellites

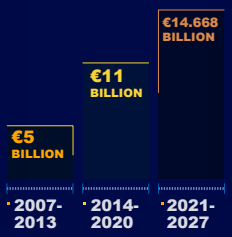
GOVSATCOM

Secure satellite communications for EU security actors

Delivering **rapid support** over crisis areas

BOOSTING THE ECONOMY





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

EU Investment in space

Global GNSS and EO enabled revenues crossed **€200 billion** in 2021

— set to reach almost **€500 billion** over the next decade

Over **2.5 billion** Galileo enabled Smartphones

of the European EO companies use **Copernicus data**

— European Industry holds over 41% of the global EO downstream market

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

AN ENABLER FOR THE DIGITAL TRANSITION

— The EU Space programme provides critical infrastructure for digital transformation. Space data is a key enabler of digital innovations such as Autonomous vehicles, smart solutions and 5G wireless telecommunication networks.

GALILEO

Game changer for autonomous driving and commercial drones

20cm high accuracy

COPERNICUS

Training Artificial Intelligence and enabling big data analytics in many areas of application

16TB of data/day

SOME 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, and 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.

EU SPACE PROGRAMME FOR A COMPETITIVE SPACE ECOSYSTEM

GALILEO

To accelerate the deployment of the Galileo 2nd Generation to increase its performance and robustness.

COPERNICUS

To accelerate the modernisation of both Copernicus infrastructure and services to ensure the world-class role of the EU in Earth Observation.

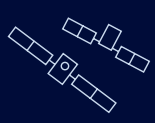
CASSINI

€1 bn Space Investment Fund to accelerate the expansion of innovative SMEs and start-up in space and the development of breakthrough technologies and processes.

AN INVESTMENT IN A FUTURE READY EUROPE

— **EU Space** provides innovative space technology, data and services indispensable in the lives of Europeans, and **addresses an increasing range of EU ambitions and priorities:**

→ Competitive Edge



Completing current satellite constellations, developing and launching the next-generation of satellites

→ Research Innovation

Ambitious research and innovation programme benefiting from Horizon Europe

→ Fighting Climate Change

Monitoring biodiversity, environmental compliance and CO2 emissions (Paris Agreement)

→ EU as a global actor

Supporting disaster relief, humanitarian assistance and security operations

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#EUSpace #CopernicusEU #UseGalileo #EGNOS