

Meet the EUSPA Proofs of Concept

Four tools funded by EUSPA, already tested by European cities, turn EU Space data into everyday decisions.



EcoRoute: cool and clean routes

Plans walking and cycling routes with less heat, pollution and UV, and more greenery.



EnvAir360: street-level air quality forecasts

Forecasts tomorrow's pollution street by street, so cities can act before limits are exceeded.



Urban park irrigation monitoring

Spots stressed parks early, so teams can prioritise irrigation and protect urban trees.



Coastal water quality monitoring

Flags pollution risk on every beach daily, so cities can target sampling and warn bathers sooner.



Scan to watch and download

See each tool in action, and get the presentations, factsheets and this brochure.

Want to test a tool in your city? Talk to us.

EUSPA booth · Barcelona, 3–5 November 2026

The EU Space Programme

The EU Space Programme is the first integrated space programme created by the European Union to support its space policy, address societal challenges such as climate change and technological innovation, support the EU internal market – and more.

Copernicus

The EU's Earth Observation programme, monitoring our planet's environment. Its services draw information from satellites and in-situ (non-space) data. Copernicus looks at our planet and its environment and provides data and information that benefits all European citizens.

Galileo

Galileo, the EU's Global Navigation Satellite System (GNSS), provides accurate, reliable and precise positioning, navigation and timing and safety services to over 4 billion users worldwide.

EGNOS

EGNOS, which stands for the European Geostationary Navigation Overlay Service, is Europe's regional Satellite-based Augmentation System (SBAS). It increases the accuracy of GNSS signals and provides a crucial integrity message informing users in the event of signal problems.

Secure SATCOM

Secure satellite communications (SATCOM) enable security- and safety-critical missions and operations, including crisis management, land and border surveillance and protection of key infrastructure.

The EU is deploying the GOVSATCOM Hub, to pool and share secure satellite communication capacity across the EU, including capacity from IRIS², the new EU Secure Connectivity Programme.

Space Situational Awareness

Space Situational Awareness (SSA) refers to the knowledge of the space environment, including the location and the function of space objects and space weather phenomena.



EUSPA operates Galileo and EGNOS, promotes the market uptake of EU Space data and services, and links space to user needs.

www.euspa.europa.eu



Greener, safer and more resilient cities

EU SPACE FOR SMART CITIES

#EUSpace 



Space data for smarter, greener cities

Cities already host more than half of the world's population, close to 7 in 10 people by 2050, and generate over 80% of global GDP. In the EU, buildings alone account for around 40% of energy use.

Heatwaves, air pollution, ageing infrastructure and pressure on green space call for city-wide, objective and frequently updated information. Earth observation and satellite navigation deliver exactly that, at a fraction of the cost of dense in-situ networks.

Copernicus Sentinels provide free, high-quality imagery of the urban fabric, **Galileo** pinpoints people, assets and measurements with high accuracy, and secure satellite communications keep public authorities connected when ground networks fail.

A growing market

€157m

EO data and services for urban applications in 2024

> €420m

expected by 2034

> 520,000

GNSS devices for urban surveying shipped per year by 2034

EU Space supports:



Urban greening

Mapping tree cover and vegetation health to plan and protect green space.



Urban heat and energy efficiency

Land-surface temperature and thermal maps to locate hotspots, design cooling and target building renovation.



Ground motion and building stability

Millimetre-scale monitoring of subsidence affecting buildings and networks.



Air quality

Monitoring and forecasting pollutants to protect health and steer traffic measures.



Resilient city operations

Secure satellite links for civil protection and critical infrastructure when ground networks fail.



Surveying, mapping and digital twins

Accurate positioning for cadastre, construction and 3D city models.



Cultural heritage

Mapping risks such as subsidence, erosion and floods around monuments.



Sustainable mobility and city services

Positioning for shared mobility, public transport, utilities and waste collection.

The added value of EU Space



Copernicus

- Free, full and open satellite data on heat, air quality, greenery and land use for every city in Europe.
- Ready-to-use services: Urban Atlas land-use maps, air quality forecasts (CAMS) and climate data (C3S) for adaptation planning.
- The European Ground Motion Service maps ground movement across Europe with millimetre precision.



Galileo

- Free High Accuracy Service: better than 20 cm horizontal accuracy for digital twins and smart mobility.
- OSNMA authentication, operational since July 2025, for trusted positioning information data.
- Precise timing for the telecom and energy networks that keep a smart city running.



EGNOS

- More accurate positioning, with a warning to users if there's a problem with the signal, for fleets, transport and city services.



GOVSATCOM and IRIS²

- GOVSATCOM, operational since 2026: secure satcom for civil protection and critical infrastructure when ground networks fail.
- IRIS² will add secure, resilient connectivity for city infrastructure, traffic management and smart grids.

Better together

Copernicus shows where the city is overheating or polluted; Galileo and EGNOS guide people, vehicles and teams precisely there; secure satcom keeps them connected, even in a crisis. Together, they help cities deliver the **European Green Deal**.