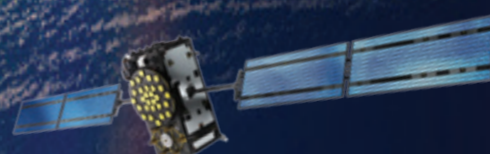
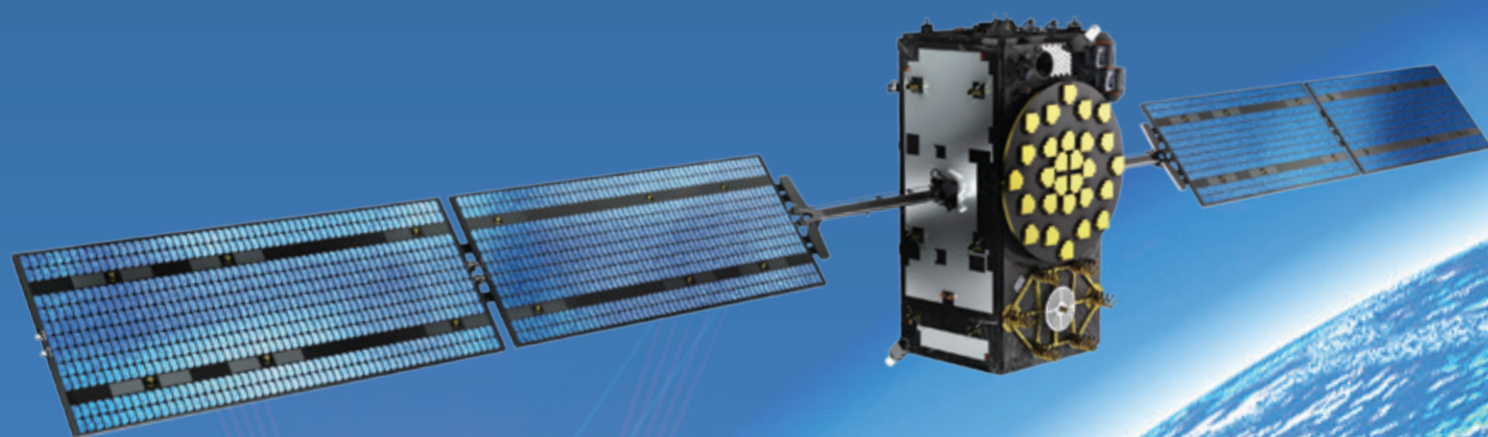
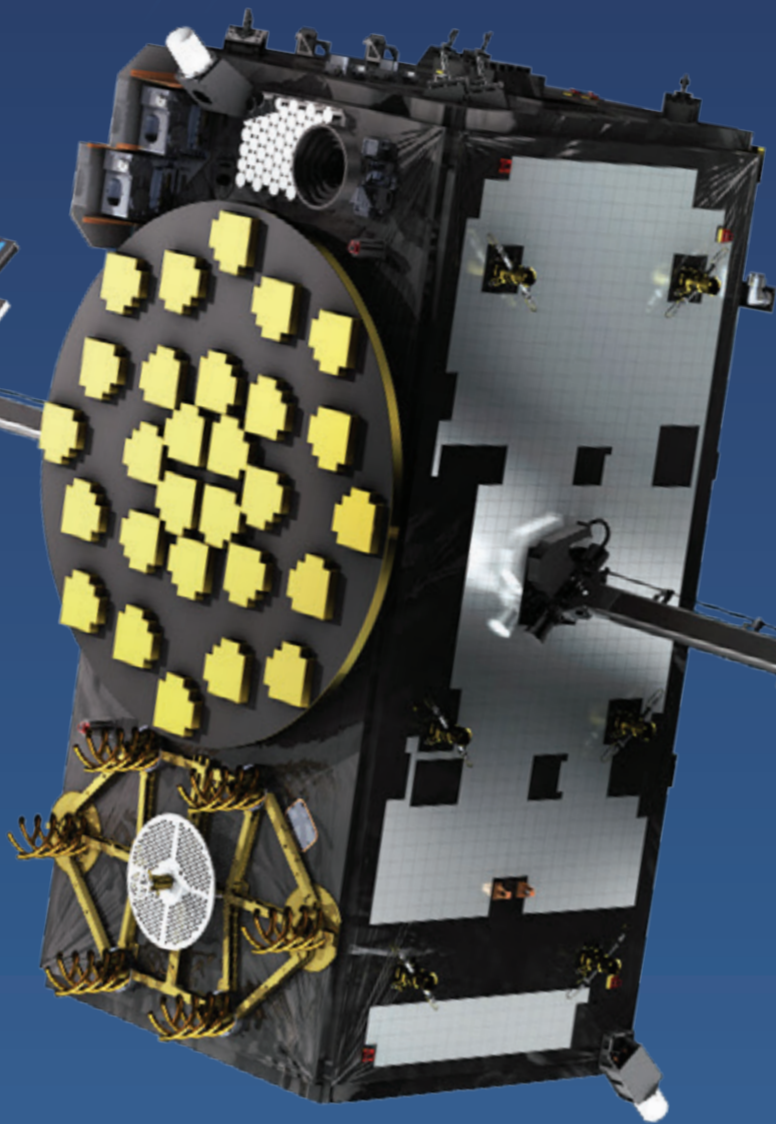


# LINKING SPACE TO USER NEEDS



European  
Global Navigation  
Satellite Systems  
Agency



# THE EUROPEAN GNSS AGENCY (GSA)

## LINKING SPACE TO USER NEEDS

Space is the new technological revolution and it is changing the way we live, work and play.

Only a decade ago there was still a lot of 'space' separating satellite navigation technology from the end user. But thanks to the many innovative, space-based applications that are now firmly a part of our daily lives, this gap has nearly closed. From the navigation system in our car to the landing procedure of the last flight we took, to the map on our mobile phone – the benefits of satellite technology can be seen everywhere.

In other words, space is a solution – an invisible infrastructure providing very visible services.

Spearheading this move away from a technology-focused push to an innovation-orientated pull is the GSA. Knowing that without the right tools to access it, technology is powerless, the GSA's core mission is to ensure that users – European Citizens – get the most out of Europe's satellite navigation programmes.

## THE GSA: WHO WE ARE AND WHAT WE DO

### PROMOTING THE USE OF EGNOS AND GALILEO

Over the past decade, the GNSS market, including upstream infrastructure and downstream user applications, has been growing at double-digit rates. This growth is only expected to accelerate as new satellite systems with superior performance, such as EGNOS and Galileo, become operational and further increase the number of applications.

The GSA plays a key role in the development of commercial markets for EGNOS and Galileo by:

- Promoting the use of EGNOS to high-potential user sectors;
- Managing EU-funded research on innovative satellite navigation applications and technologies and leveraging the results;
- Preparing the market for the take-up of Galileo;
- Monitoring the GNSS market and forecasting future developments.

### ENSURING THE SECURITY OF THE EUROPEAN GNSS PROGRAMMES

The proper functioning and performance of the Galileo system and services require that a range of highly sophisticated and state-of-the-art security measures, facilities and plans be put in place now.

The GSA handles a range of matters relating to the security of GNSS systems such as:

- Operating the Galileo Security Monitoring Centre (GSMC) – The GSMC will allow the GSA to monitor the security-

## EUROPEAN SATELLITE NAVIGATION: TODAY AND TOMORROW

With EGNOS operational and Galileo gearing up, many are already benefiting from European Global Navigation Satellite Systems (GNSS).

### EGNOS. IT'S THERE, USE IT.

EGNOS, Europe's first concrete venture into satellite navigation, is already delivering valuable services by augmenting and improving GPS signals and retransmitting them to users via geostationary satellites.

EGNOS renders GPS signals suitable for safety critical applications – such as guiding aircraft during approach procedures or navigating ships through narrow channels – and increases the accuracy of existing satellite-positioning services. Simultaneously, it provides a crucial 'integrity message' that informs users in the event of problems with the satellite signals.

related status and performance of Galileo and the secure operation of the PRS.

- Ensuring the functioning of the Security Accreditation Board of the EU GNSS systems, which takes accreditation decisions related to system and site operations, authorisation to launch satellites and PRS receivers.
- Securing the Galileo Public Regulated Service (PRS) – ensuring its availability, integrity and confidentiality.
- Developing the PRS user segment, making high-performance PRS receivers available at an affordable price.

### THE GSA IS ALSO ENTRUSTED WITH KEY TASKS BY THE EUROPEAN COMMISSION, INCLUDING:

- Operations and service provision for the EGNOS Programme (since 2014)
- Operations and service provision for the Galileo Programme (from 2017)
- Managing EU GNSS research under the Horizon 2020 Programme

### GSA MISSION STATEMENT

The GSA's mission is to support European Union objectives and achieve the highest return on European GNSS investment, in terms of benefits to users and economic growth and competitiveness, by:

- Designing and enabling services that fully respond to user needs, while continuously improving the European GNSS services and Infrastructure;
- Managing the provision of quality services that ensure user satisfaction in the most cost-efficient manner;

The increased accuracy and reliability provided by EGNOS also benefits users on the ground in such areas as precision agriculture, mapping, road and rail applications.

### GALILEO ON THE HORIZON

Galileo is the future European global satellite navigation system. Once operational, Galileo will provide users with an independent European system, under civilian control, offering interoperability with GPS and other international systems. Galileo will provide the following services:

- **Open Service** – a freely accessible service for positioning, navigation and timing.
- **Public Regulated Service (PRS)** – an encrypted, secure service with additional advanced features designed for greater robustness and higher availability.
- **Commercial Service** – authentication and high accuracy services for commercial applications.
- **Search and Rescue Service (SAR)** – assist in locating people, vessels and aircraft in distress.

- Engaging market stakeholders to develop innovative and effective applications, value-added services and user technology that promote the achievement of full European GNSS adoption;
- Ensuring that European GNSS services and operations are thoroughly secure, safe and accessible.



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