

FACT SHEET



What is EGNOS?

The European Geostationary Navigation Overlay Service (EGNOS) is Europe's regional satellite-based augmentation system (SBAS) used to improve the performance of global navigation satellite systems, such as GPS and Galileo. EGNOS collects data on current GPS signal accuracy and soon on Galileo, provides users with necessary corrections to improve position information accuracy and informs users about current system reliability. Information is passed to users via EGNOS payloads on 2 different geostationary satellites.

Who uses EGNOS and what does it offer?

EGNOS is present across several sectors, providing safety of life navigation services to aviation, maritime, rail and land-based users over most of Europe. The EGNOS Open Service (available since 2009), is used for agriculture and mapping application. The EGNOS Safety-of-Life Service, essential for aviation and maritime application, has been available since 2011. The EGNOS Data Access Service (declared in 2012) allows users to access EGNOS via the internet.

Since 2009, the EGNOS services availability area over Europe has doubled, leading to increased use and important development of the EGNOS markets including:

What is GSA?

The European GNSS Agency (GSA) is the European Union Agency in charge of managing operations and service provision for Europe's Satellite Navigation Systems – Galileo and EGNOS. The GSA works to support the EU's goals of achieving the maximum return on European GNSS investments and ensure that the safe and secure Galileo and EGNOS services help users increase economic growth and competitiveness.

For more information visit:

www.gsa.europa.eu/egnosc/what-egnosc

2011

First **LPV** implemented at Pau Pyrenees, in France, allowing equipped airplanes to fly down to **254 feet** before deciding to land

2015

First EGNOS based **helicopter** approach procedure to a hospital is implemented

2016

First **LPV 200** implemented at Charles de Gaulle Airport, flown by ATR 42-600, Dassault Falcon 2000 aircraft and Airbus A350

2021



98% of mapping and GIS receiver models are EGNOS compatible



97% of new tractors in Europe using GNSS are equipped with EGNOS (the preferred low-cost entry technology for precision farming in Europe)



6 European countries are using EGNOS as a source of DGPS corrections in their IALA beacon or AIS stations to contribute to merchant shipping safety following IALA Guidelines



90% of maritime receiver manufacturers have a product that is SBAS-enabled



700 EGNOS based approach procedures implemented in **367** airports in **24** countries



In 2019, more than **40 000** flights per month were EGNOS capable



European
Global Navigation
Satellite Systems
Agency

Navigation solutions
made in Europe



What is next for EGNOS?

In the next 5 years, EGNOS V3 will be available and the user experience will be maximised through the strengthening of Galileo and GPS.

The development of markets will continue across sectors, and specifically all airports with instrument runway ends will have EGNOS approaches.

Who uses satellite navigation?

Billions of people around the world rely on GNSS applications, especially in fields such as transport, agriculture, critical infrastructure and other location-based services. This number is set to grow with increased use of services such as 5G, Automated Driving, Smart Cities and the Internet of Things.

The global installed base of GNSS devices in use is forecast to increase from 6.4 billion in 2019 to 9.5 billion in 2029. In terms of global annual GNSS receiver shipments, the market should increase from 1.8 billion units in 2019 to 2.7 billion units in 2029.

GNSS serves a wide range of applications, services and user communities, to find out more www.usegalileo.eu



Take the pulse of the GNSS market!

The European GNSS Agency (GSA) produces a series of intelligence reports providing GNSS stakeholders with up-to-date information on the status of the GNSS market, the latest technological developments in the industry, and users' requirements for position, navigation and time. This series includes:

GNSS MARKET REPORT

www.gsa.europa.eu/market/market-report

GNSS USER TECHNOLOGY REPORT

www.gsa.europa.eu/european-gnss/gnss-market/gnss-user-technology-report