

IMPROVING PEOPLE'S LIVES AND BOOSTING EUROPE'S COMPETITIVENESS

EU space programmes deliver services that benefit millions of people. Space data is used in many areas, such as emergency services, aviation, agriculture, energy, transportation, banking or insurance.

Europe's space strategy focuses on fostering new services, creating business opportunities, promoting Europe's leadership in space and maintaining Europe's strategic autonomy.

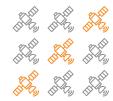
THE EUROPEAN SPACE INDUSTRY IS STRONG AND COMPETITIVE



► Employs over **230.000 people**



▶ Value estimated at €46-54 billion in 2014, representing around **21%** of the value of the global space sector.



A third of the world's satellites are made in Europe



▶ Keeps upgrading the family of **European launchers** with the next generation Ariane 6 and Vega C

THE EU HAS THREE WORLD-CLASS SPACE PROGRAMMES

The EU is investing more than EUR 12 billion over 2014-2020 to develop high quality space projects. More than 30 further Galileo and Copernicus satellites will be launched in the next 10-15 years.



Copernicus, the EU's Earth Observation programme: Free, full and open access satellite data used to provide services in six areas: land monitoring, marine environment monitoring, atmosphere monitoring, climate change, emergency management and security.



Galileo, the EU's global satellite navigation system: Gradually providing more accurate and reliable positioning and timing information for autonomous and connected cars, railways, aviation and other sectors.



EGNOS, the EU's regional satellite navigation system: Monitors and corrects satellite navigation signals for aviation, maritime and land-based users over most of Europe.

Europe's Spaceport is situated in **Kourou, French Guiana**. Close to the equator, the Centre Spatial Guyanais provides optimum conditions for satellite launches and hosts industrial production facilities for new European launchers such as Vega-C and Ariane 6.



EU SPACE PROGRAMMES DELIVER INDISPENSABLE SERVICES

EU space data is transforming our daily lives with services such as:



Responding to natural disasters: In 2017, Copernicus maps showing the extent and magnitude of damage have helped rescue teams deal with forest fires (Italy, Spain, Greece and Portugal), earthquakes (Mexico), hurricanes (countries hit by hurricanes Harvey, Irma and Maria), and floods (Ireland, Germany), amongst others.



• Saving lives at sea: Copernicus supports the European Coast and Border Guard Agency's missions in the Mediterranean, helping spot unsafe vessels and rescuing people. Galileo can be used on all the merchant vessels worldwide, bringing increased accuracy and more resilient positioning for safer navigation.



▶ Search and Rescue: A new Galileo service reduces the time it takes to detect a person equipped with a distress beacon to less than 10 minutes in a variety of locations including at sea, in mountains or deserts, and in urban areas



▶ Monitoring oil spills: The European Maritime Safety Agency (EMSA) uses Copernicus data for oil spill and vessel monitoring.



Landing of airplanes: 247 airports in 23 EU countries are currently using EGNOS, making landing in difficult weather conditions more secure, thus avoiding delays and re-routing.



▶ Road safety: From April 2018, EGNOS and Galileo will be integrated in every new car model sold in Europe, supporting the eCall emergency response system. From 2019, they will be integrated in digital tachographs of lorries to ensure the respect of driving time rules and improve road safety.



▶ **Agriculture:** 80% of farmers using satellite navigation for precision farming are EGNOS users. And Copernicus data is used for crop monitoring and yield forecasting.

STRONG MARKET UPTAKE OF SPACE DATA

Space-based applications are changing our lives, our economy, our industry. In addition to the public sector, a number of companies and innovative start-ups are using satellite data and enabling their devices, for example:



Smartphones

All leading smartphone companies now offer Galileo enabled smartphones: Sony (Xperia XZ), Huawei (P10) Samsung (S8) and Apple (iPhone 8). App developers can now create innovative Galileo products and services, using the enhanced accuracy.



Health

HappySun helps prevent sunburn with an app providing UV radiation forecasts and personal sun protection advice based on the user's skin type and location.



Internet of Things

Geko navsat uses positioning data for applications in the Internet of Things.



Fishery

The Asimuth project helps fish and mussel farmers optimise their harvesting schedules to reduce losses from algal blooms by at least 12.5%.



Wine production

Terranis has developed an app which provides information in the weeks before harvest time so that wine makers can adjust cultivation methods.