

Search and Rescue (SAR) Service

What is the Galileo SAR Service?

The Galileo SAR Service contributes to lifesaving missions by quickly relaying distress signals to rescue teams using satellites and ground stations across Europe. It is the EU's contribution to the Cospas-Sarsat system, the international satellite-based search and rescue network.

Galileo enhances global SAR capabilities by improving distress signal detection and providing faster response times and saving lives in the process.

Launch:

The delivery of the Galileo SAR Initial Services started in December 2016.



Sectors:

Galileo SAR supports the Maritime and Emergency Management sectors.



Purpose:

To locate SAR beacons and provide accurate, timely, and reliable alert data to SAR authorities contributing to the worldwide efforts towards Cospas-Sarsat.



What does it do?

Every second counts in a search and rescue mission. The Galileo SAR Service works with efficiency and accuracy:

- 1 **SAR/Galileo Forward Link Service:** Relay of Cospas-Sarsat distress signals to the ground.
- 2 **Signal** detected by **Galileo satellites** carrying SAR **almost immediately**.
- 3 **Data** relayed to **ground stations Medium Earth Orbit Local User Terminal**.
- 4 **Location** calculated and sent to **Mission Control Centres (MCCs)**.

SAR/Galileo Return Link Service

Galileo is the only GNSS that provides a return link alert which informs the sender that their distress alert has been received and help is on the way.

Global coverage with MEOSAR

Galileo's inclusion in the MEOSAR (Medium Earth Orbit Search and Rescue) system ensures near real-time detection and location of distress signals worldwide.

EUSPA's role



EUSPA is the provider of the Galileo SAR Service and holds the following responsibilities:

- Oversees the **operations, maintenance and service performance** of Galileo SAR.
- Acts as the **contracting authority** of the System and Services operations.
- Performs the **Security Monitoring** of the system under operations.

Facts and figures

< 1 min

Average **delivery** of a **Return Link Message** from Galileo to beacon.

2 km

Localisation accuracy: in the European coverage area, better than **2 km** in **95%** of cases.

1.3 million

Supported beacons: **1.3 million** GNSS-enabled SAR beacons in use (2024).

23,000

Galileo SAR saves lives: **23,000** since 2016.

