

Linking space to user needs

Galileo services

Satellite-based Services for Disaster Risk Management

Wednesday 26th February 2025

Aitor Alvarez Rodriguez, GSC Manager, EUSPA



EU Space Programme 2021-2027

EU Space activities **under one umbrella**



EGNOS

EGNOS “Makes navigation signals more accurate and trustable for Safety-critical applications”

Operational in **480+ airports** & helipads in 26 countries

97% of new tractors with GNSS in Europe equipped with EGNOS



Galileo

Global satellite navigation and positioning system (GNSS)

More than 4 billion Galileo receivers worldwide



Copernicus

Earth Observation (EO) and monitoring based on satellite & non-space data

Nr. 1 world provider of space data and information (16TB/day)



GOVSATCOM

Secure satellite communications for EU governmental actors

Rapid support over crisis areas



IRIS²

Infrastructure for Resilience, Interconnection & Security by Satellites

Sovereign multi-orbit constellation

Cutting-edge technologies focused on government service



Space Situational Awareness (SSA)

Space Surveillance and Tracking (SST)

Space Weather Events (SWE)

Near-Earth Objects (NEO)

Galileo Services: Not only positioning



Provided worldwide since December 2016

Open Service (OS)

Freely accessible service for positioning and timing

Under Initial Operational Capability Phase:
Navigation Message Authentication (OSNMA)

Public Regulated Service (PRS) – Governmental Service

Encrypted service designed for greater robustness and higher availability – secure satellite communication

Search and Rescue Service (SAR)

Locates people in distress and acknowledges that the distress signal has been received

High Accuracy Service (HAS)

Delivers high accuracy services, freely accessible

Under preparation

Emergency Warning Satellite Service (EWSS)

Supports and complements the civil protection services and the resilience of its infrastructures.

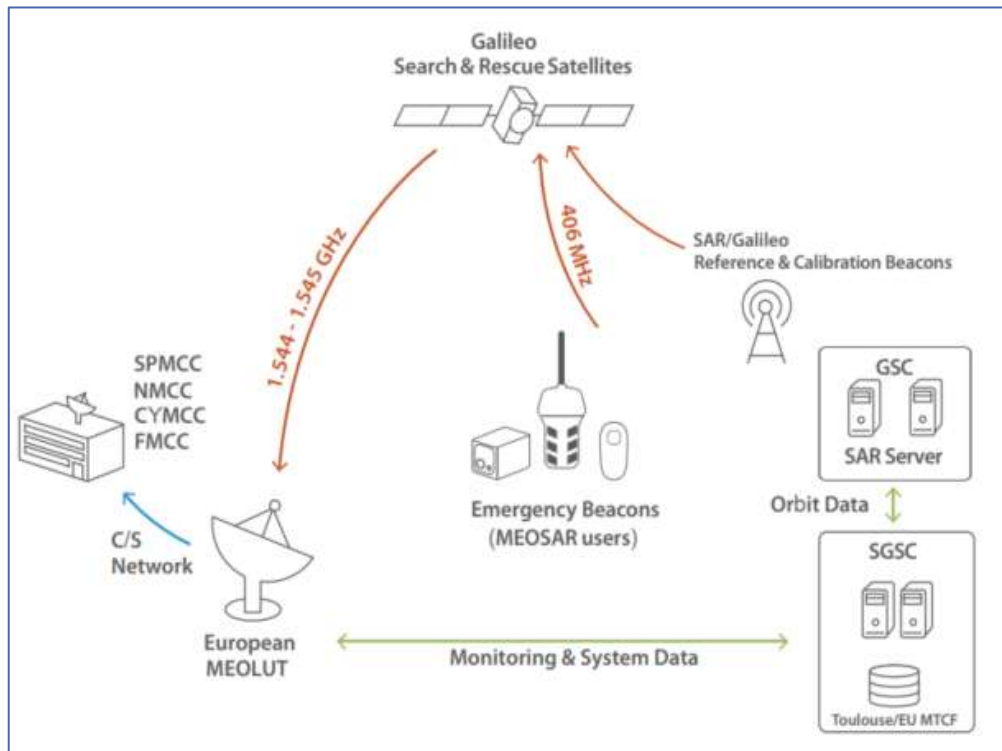
Under preparation

Signal Authentication Service (SAS)

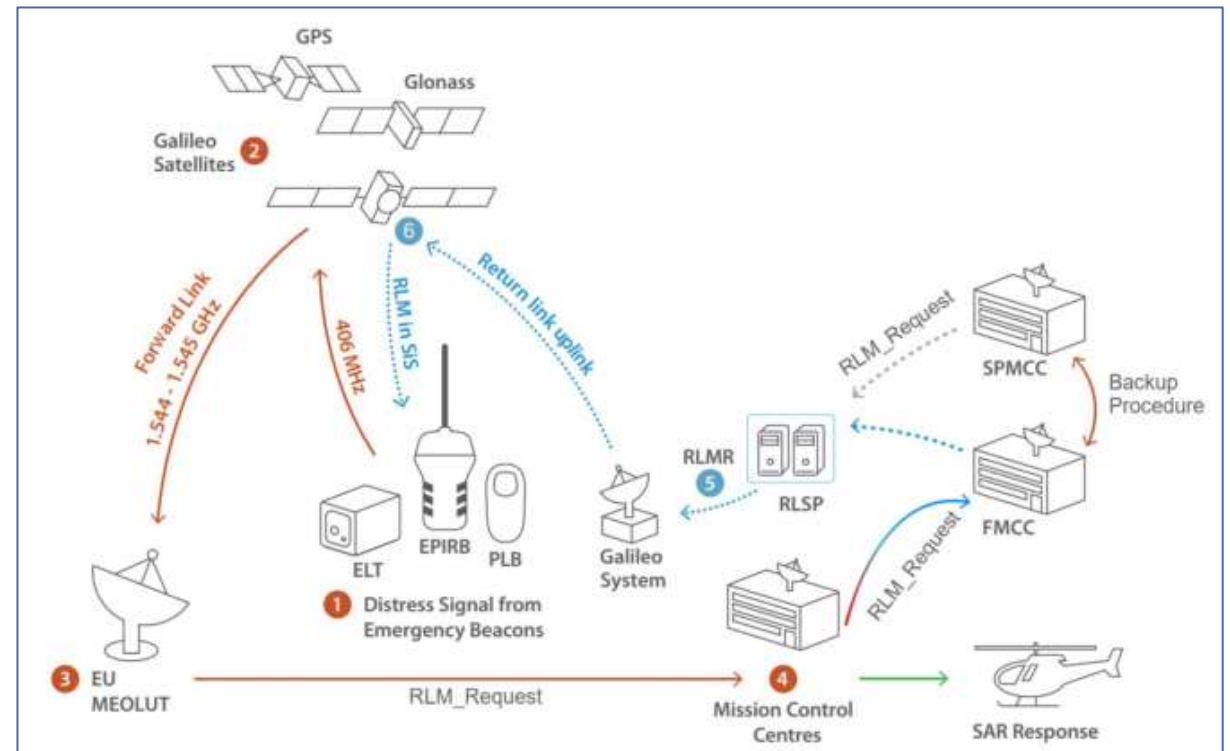
Delivers authentication services for commercial applications

Galileo SAR (Search and Rescue)

Forward Link Service → localisation



Return Link Service → acknowledgment



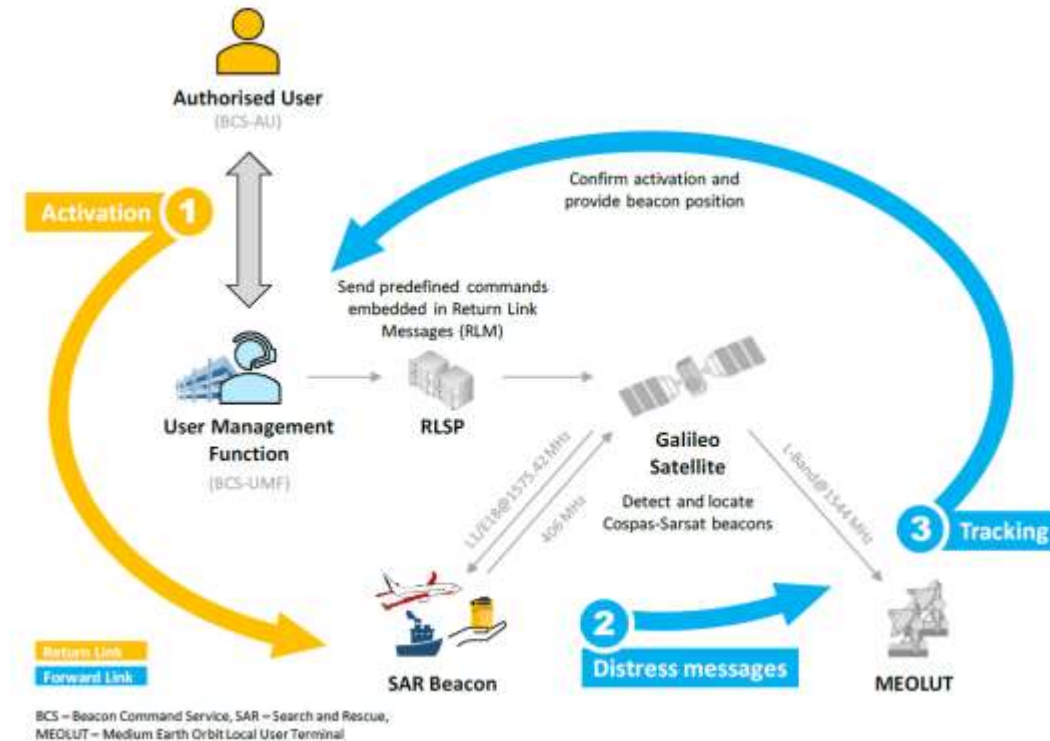
Galileo SAR (Search and Rescue). Evolutions

BCS-RBA (Beacon Command Service for Remote Beacons Activation)

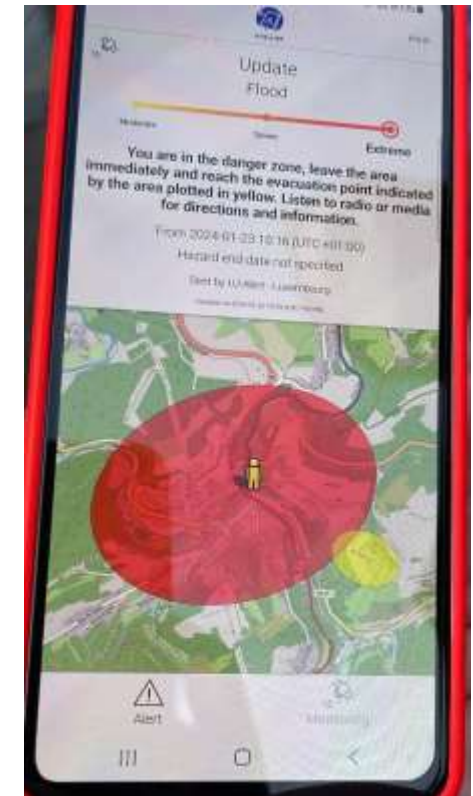
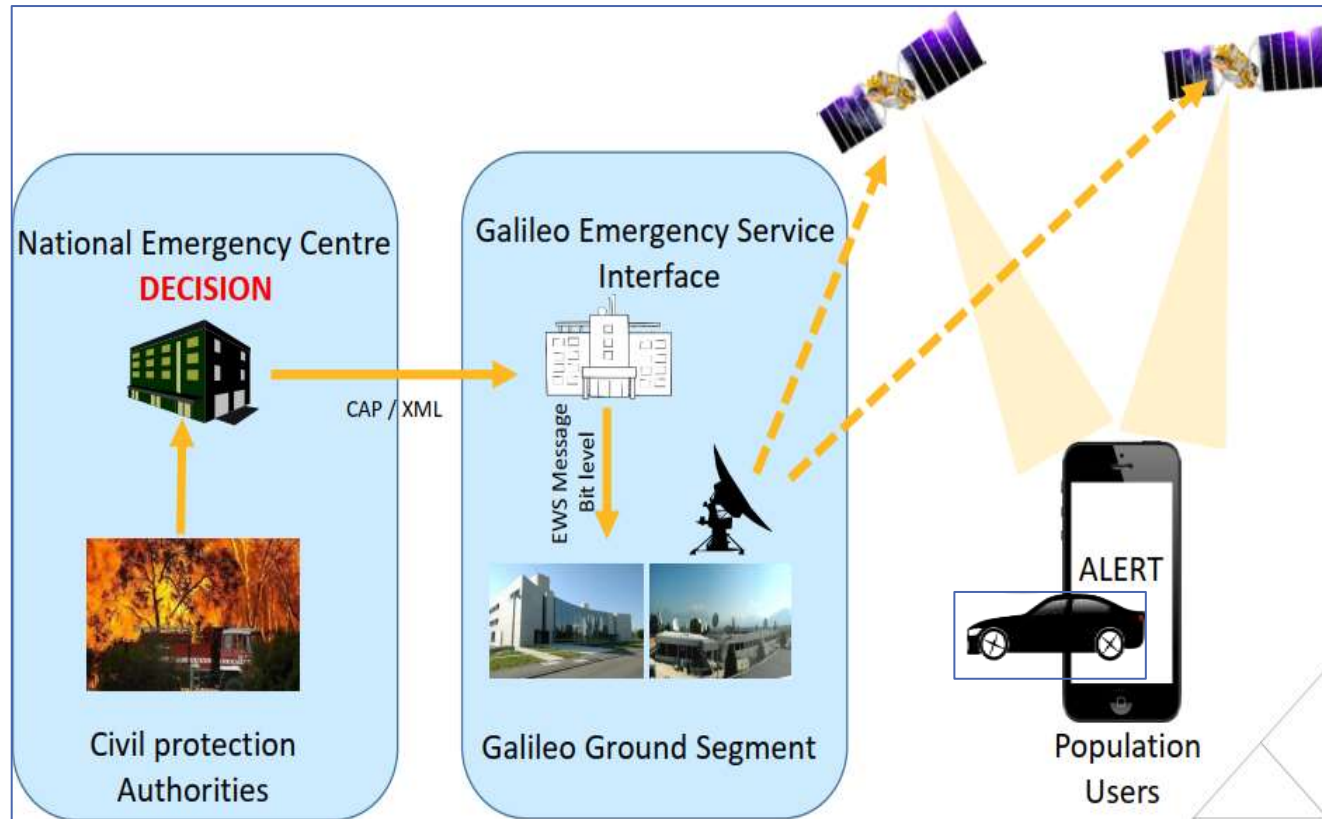
Use of the Return Link Service (RLS) to send predefined commands, allowing Authorised Users to request:

- Remote Beacon Activations;
- Remote Deactivations; and
- Remote Triggering of Self-Tests.

Concept of Operations designed with Cospas-Sarsat Aviation and Maritime standards in mind.



Galileo EWSS: Emergency Warning Satellite Services

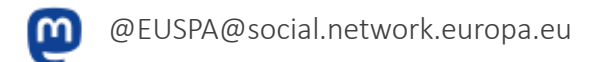
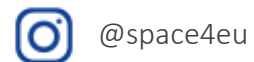




Linking space to user needs

Get in touch with us

www.euspa.europa.eu



EUSPA is hiring!

Apply today and help shape the future of #EUSpace!