

Linking space to user needs

EU Space Contribution to Search And Rescue

Satellite-based Services for Disaster Risk Management

26 February 2025

Aitor Alvarez-Rodriguez



Galileo Services



Galileo Services are provided to worldwide users 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)

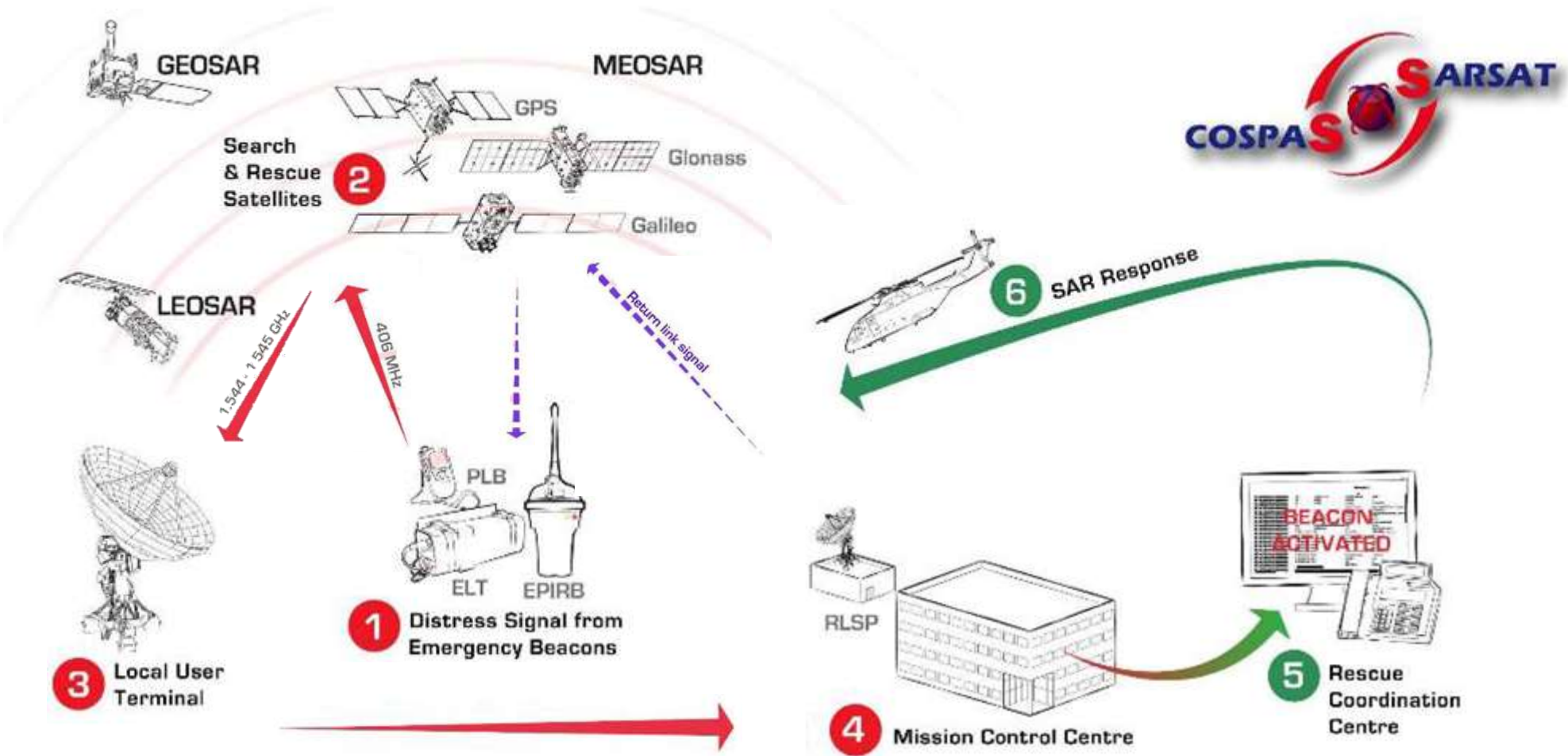
Supports and complements the civil protection services and the resilience of its infrastructures.

Under preparation

Commercial Authentication Service (CAS)

Delivers authentication services for commercial applications

COSPAS-SARSAT MEOSAR Evolution



SAR/GALILEO

One of the major contributors to the MEOSAR

27 SAR payloads within GALILEO constellation!

4 Ground Stations (MEOLUT)

Galileo contributes to Cospas/Sarsat Alert Detection (Forward Link Service)

Galileo 1st provider of Distress Acknowledgment to End Users (Return Link Service → RLSP)



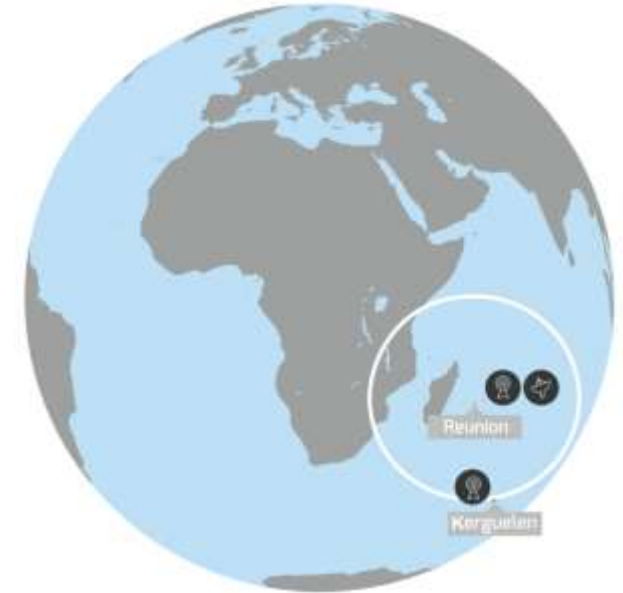
SAR/GALILEO **Ground Segment**

European SAR/Galileo Coverage (SGC)



European Coverage Area (ECA)

Indian Ocean Coverage Area (IOCA)



- **4** MEOLUTs (Local User Terminals)
- **1** MTCF (MEOLUT Tracking Coordination Facility)
- **8** SAR/Galileo References beacons (REFBE) for FLS/RLS service monitoring
- **5** SAR/Galileo Calibration beacons (CALBE) for FLS calibration purposes

SAR/GALILEO Ground Segment – MEOLUT Facilities



SVALBARD (Norway)



LARNACA (Cyprus)



MASPALOMAS (Spain)

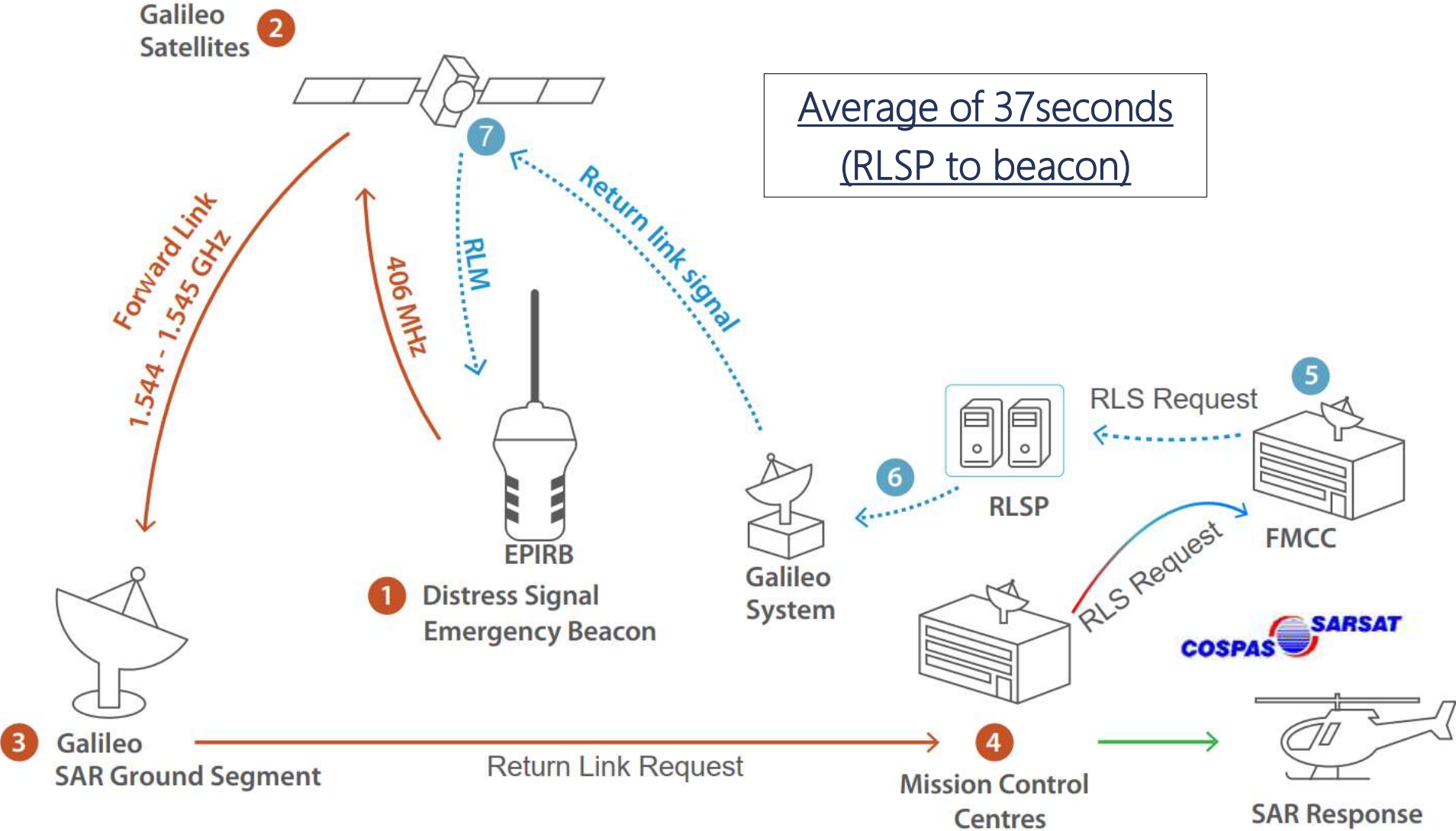


New - LA REUNION (France)

Return Link Service Adoption

- Operational since January 2020 in its Initial Operational Capability (IOC)
- RLS (declared fully operational in 2021)
 - 64th Council of Cospas-Sarsat (17-26 March 2021) authorised the upgrade to Full Operational Capability
- RLS beacons can be sold with all country codes (provided that the country has approved the RLS protocol)

SAR/GALILEO – Return Link Service (RLS)



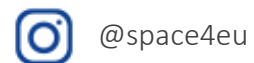
Average of 37seconds
(RLSP to beacon)



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!