

# EUROPEAN SPACE WEEK

#EUSpaceWeek

ONLINE EDITION

## *Evolution and new Galileo Services What is coming?*

EU Space Week, December 2020

**Alberto Madrazo, Galileo Services Manager at GSA**

Organised by:



European  
Global Navigation  
Satellite Systems  
Agency



Under the auspices of:



EU Space Programme:





# Coming Today!

- Declaration of SAR Return Link Service (Jan 2020)
- Publication of New version of ICD with improvements for robustness and Time To First Fix
- New Service commitments in OS SDD (May 2019).
- Open Service L3 satellites includes into service provision perimeter (Nov. 2020).





# What is coming?

- Search And Rescue
- Authentication
- High Accuracy





# Search and Rescue Service Evolutions

- Extension of the service coverage for the SAR Forward Link (4th MEOLUT to be commissioned Q3 2021).
- New services definitions ongoing (concept under study):
  - **Remote Beacon Activation:** predefined commands are sent via Return Link Messages (RLMs) to remotely activate or deactivate SAR beacons;
  - **Two-Way Communication:** establishes an effective communication channel between Authorised Rescue Coordination Centres (RCC) and the Beacon User via the Galileo RLMs;
  - **Distress Position Sharing:** enables Authorised Rescue Coordination Centres (RCC) to share the position of a Beacon User in distress with other nearby beacons;



**Galileo Search and Rescue Service Definition Document**

Version 2.0, January 2020





# Authentication

- Navigation Message Authentication
  - Integrated in E1 OS
  - Free of charge
  - OS-NMA Public Testing 2021
- Commercial Service Authentication
  - E6C Spreading Code Encryption



# High Accuracy

- Based on PPP transmission in E6B
  - Gradual introduction (regional/global, accuracy target, convergence time...)
  - Free of charge
  - ICD under final consolidation



# Linking space to user needs



Organised by:



Under the auspices of:



EU Space Programme:



[www.euspaceweek.eu](http://www.euspaceweek.eu)  
[#EUSpaceWeek](https://twitter.com/EUSpaceWeek)

