

OCEAN AND ENVIRONMENTAL TECHNOLOGIES AND SERVICES

Part 1 : Ocean Focus

Wednesday 20 October
9:00 AM to 01:15 PM



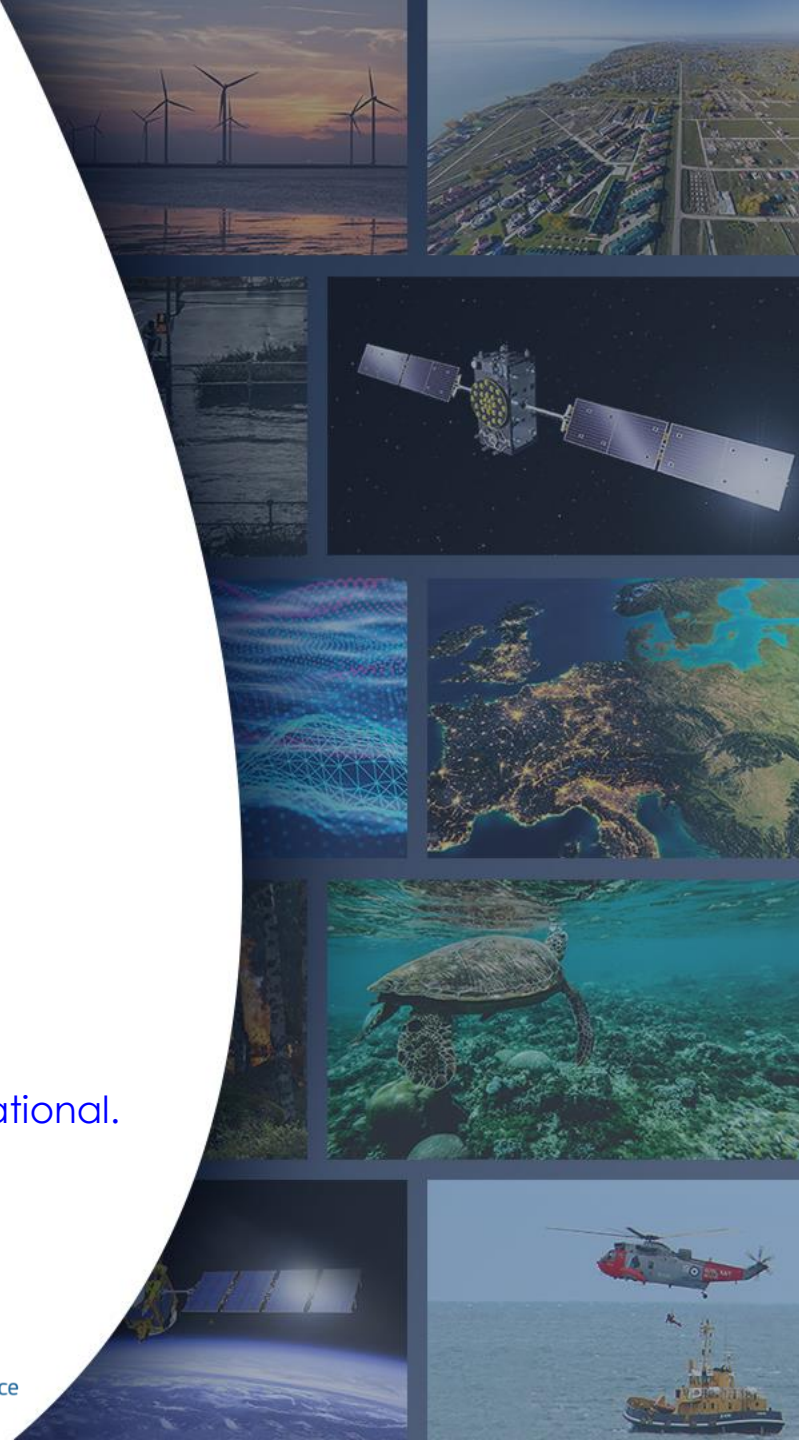
Rescue at Sea Services: EGNSS Services and successful case studies

Moderator:

- **Manuel Lopez**, Sr. Technology Officer for Market Development,
EU Agency for the Space Programme (EUSPA)

Panelists:

- **Sean McCrystal**, Sr. Marketing Manager - [Seas of Solutions](#).
- **Marco Nisi**, CEO of [The Sara Project s.l.](#)
- **Santi Soley**, CEO at [Pildo Labs](#).
- **David Perez-Piñar**, Head of UAS development at [Babcock International](#).



Rescue at Sea Services: EGNSS Services and successful case studies

Presentations:

- **Manuel Lopez,** Galileo Search and Rescue
- **Sean McCrystal,** Galileo Return Link Emergency Beacons.
- **Marco Nisi,** SARA: Surveillance, Monitoring, Search and Rescue Aid Using Drones
- **Santi Soley,**
David Perez-Piñar, Manned and Unmanned Aerial Vehicles supporting Emergency Operations at Sea with EGNSS



Galileo Search and Rescue

Manuel Lopez

Sr. Technology Officer for Market Development,
EU Agency for the Space Programme (EUSPA)



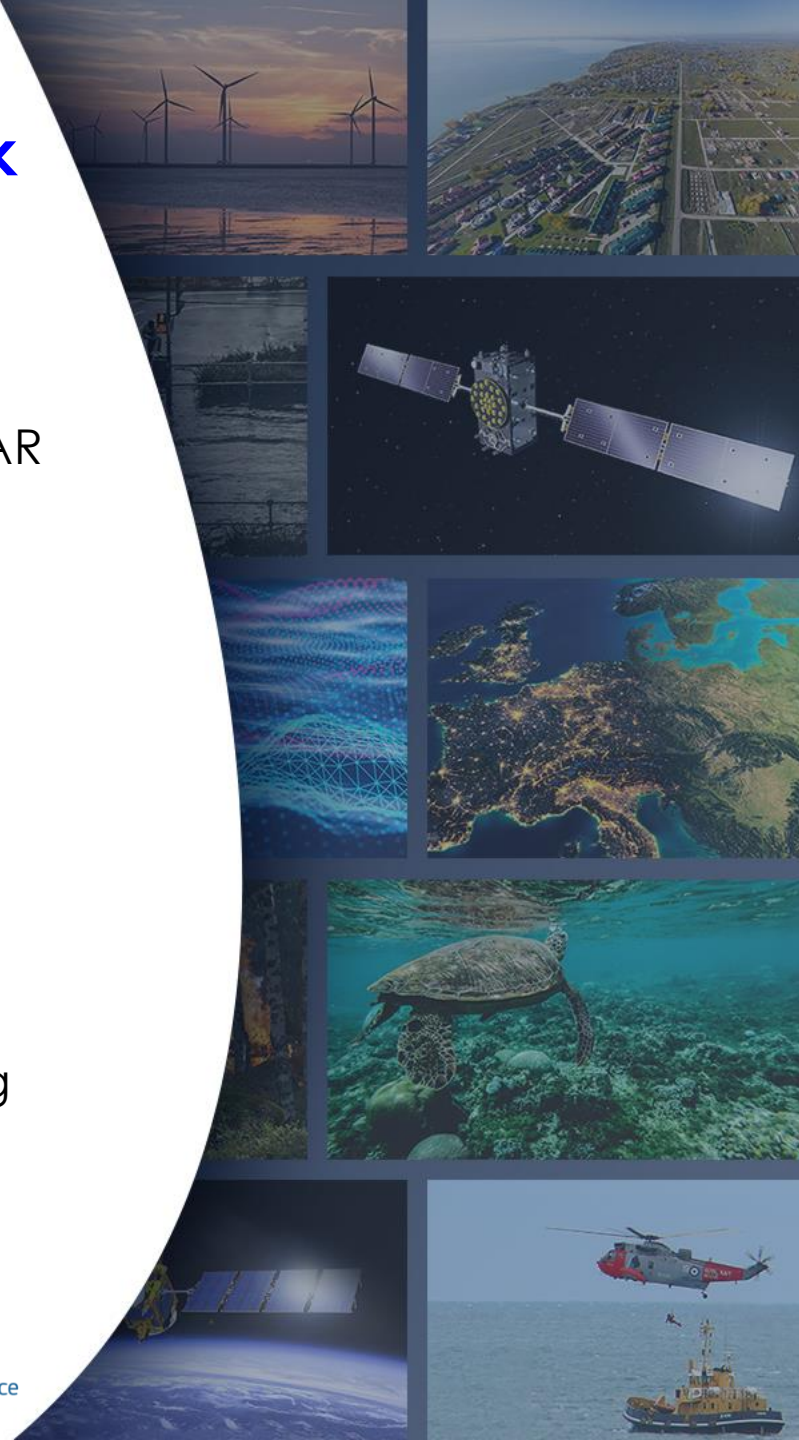
Search and Rescue Galileo Forward Link and Return Link (FL/RL)

High-Level Concept

Galileo Search and Rescue is the EU contribution to Cospas-Sarsat MEOSAR programme, saving c.a. 2000 lives per year.

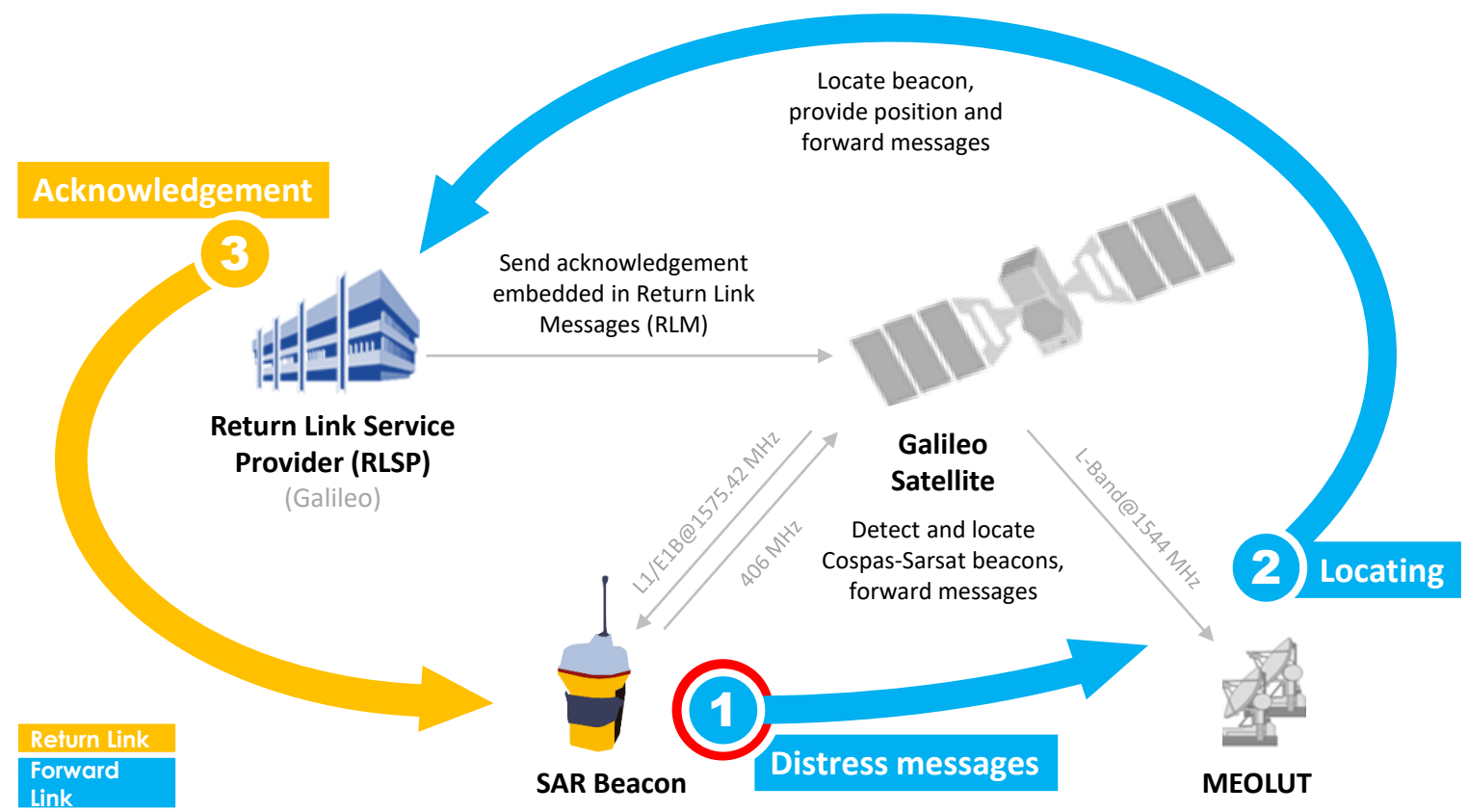
Galileo is offering **2** services to **final users**:

- **Forward Link Service:** Galileo satellites are used to retransmit the distress signal coming from an **emergency beacon** to the ground segment, where the alarm is processed and the confirmed location is sent to the Rescue coordination centres.
- **Return Link Service:** Ground segment sends via Galileo satellites an acknowledgement receipt to the active **emergency beacon**, informing the user that the alarm has been processed.



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High-Level Concept

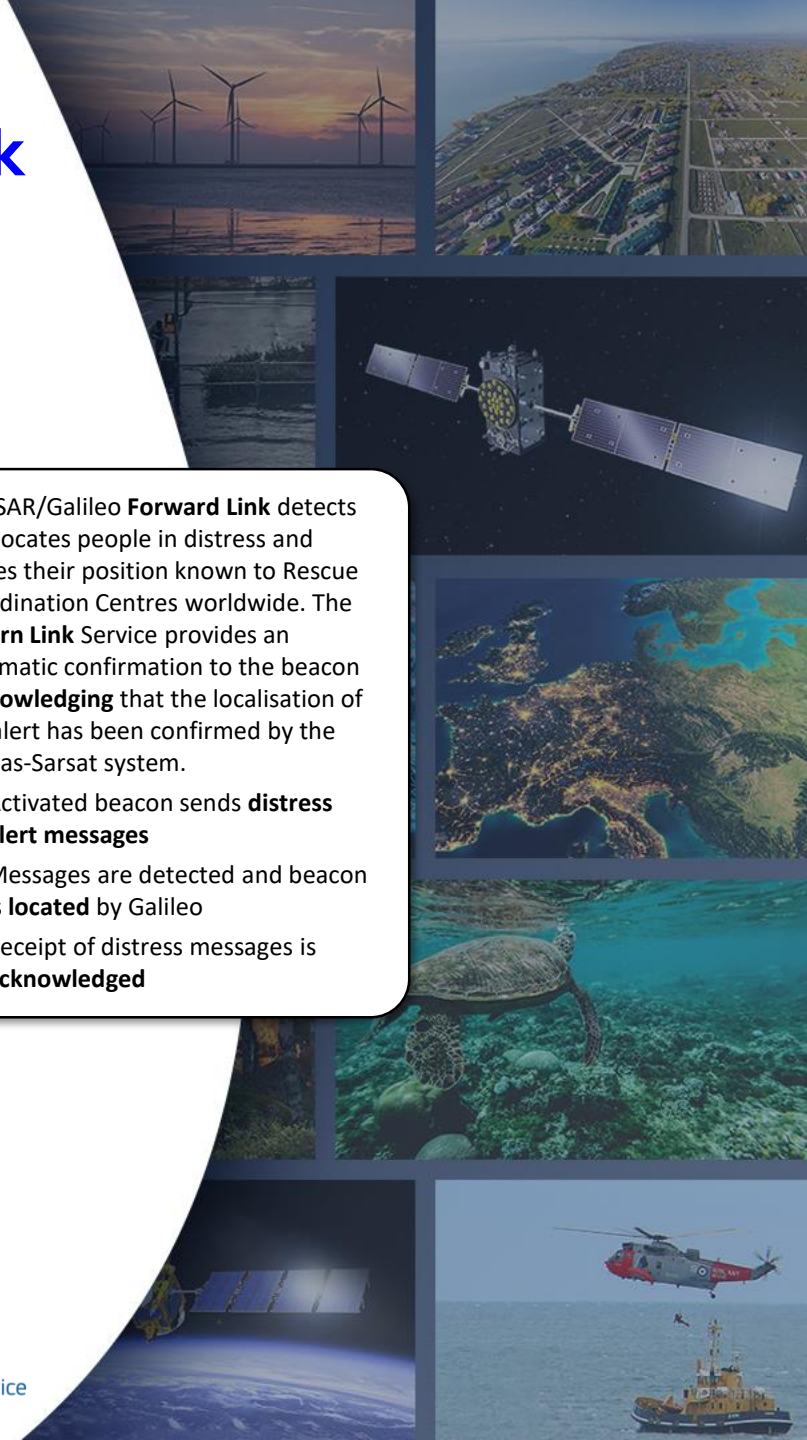


The SAR/Galileo **Forward Link** detects and locates people in distress and makes their position known to Rescue Coordination Centres worldwide. The **Return Link** Service provides an automatic confirmation to the beacon **acknowledging** that the localisation of the alert has been confirmed by the Cospas-Sarsat system.

1. Activated beacon sends **distress alert messages**
2. Messages are detected and beacon is **located** by Galileo
3. Receipt of distress messages is **acknowledged**

Return Link
Forward Link

SAR – Search and Rescue,
MEOLUT – Medium Earth Orbit Local User Terminal



EUSPA is funding the development of emergency applications under H2020, Fundamental Elements and Adoption Grants

Next presentations will showcase 3 successful applications:

2. Galileo Return Link Emergency Beacons (Seas of Solutions).
3. SARA: Surveillance, Monitoring, Search and Rescue Aid Using Drones (The sara Project s.l.)
4. Manned and Unmanned Aerial Vehicles supporting Emergency Operations at Sea with EGNSS (Pildo Labs and Babcock Int).

Thank you !

Questions ?

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