



# STATUS OF THE COSPAS-SARSAT PROGRAMME

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Cospas-Sarsat Secretariat

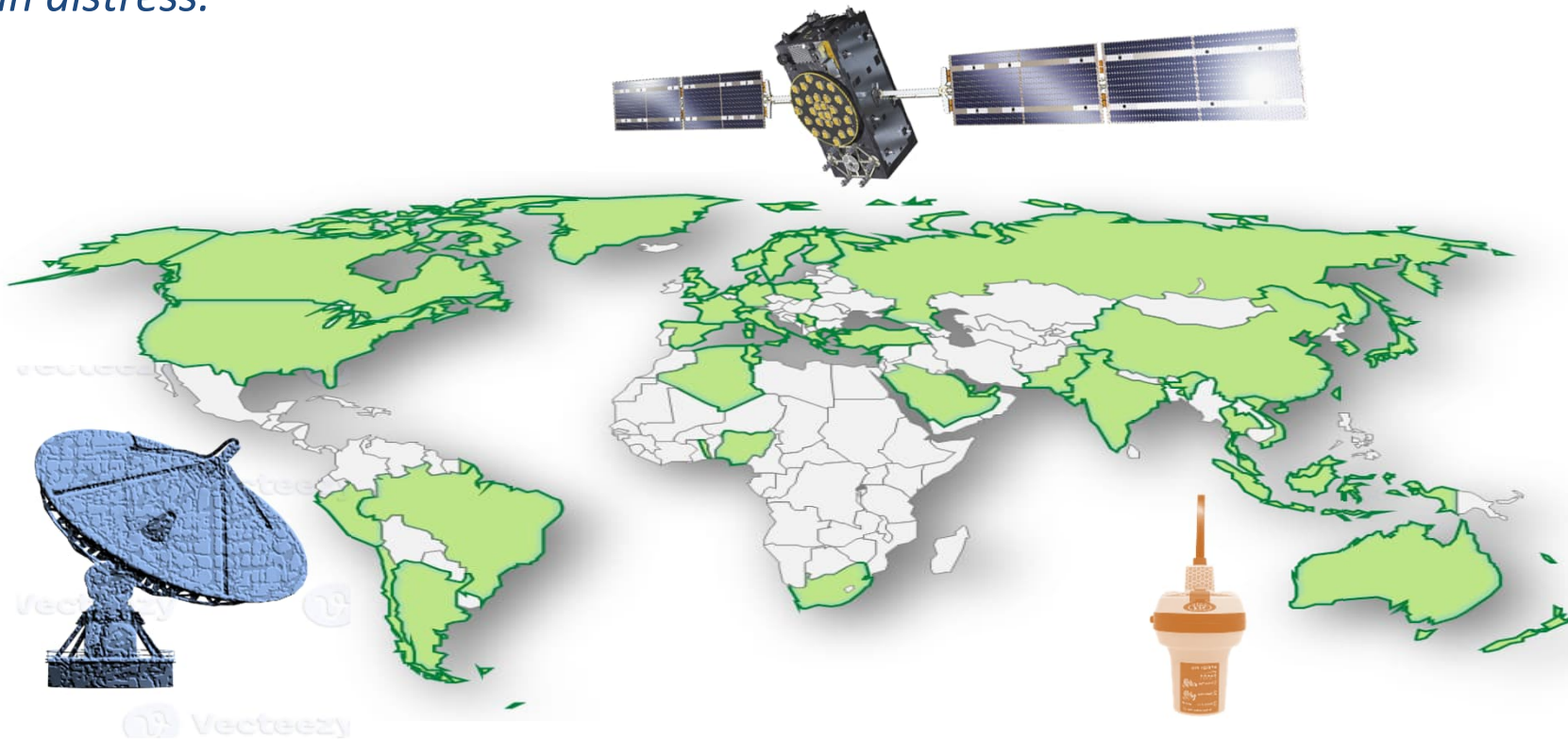
ICAO EURSAR/TF Meeting & Workshop  
(Paris, 19 – 21 November 2025)



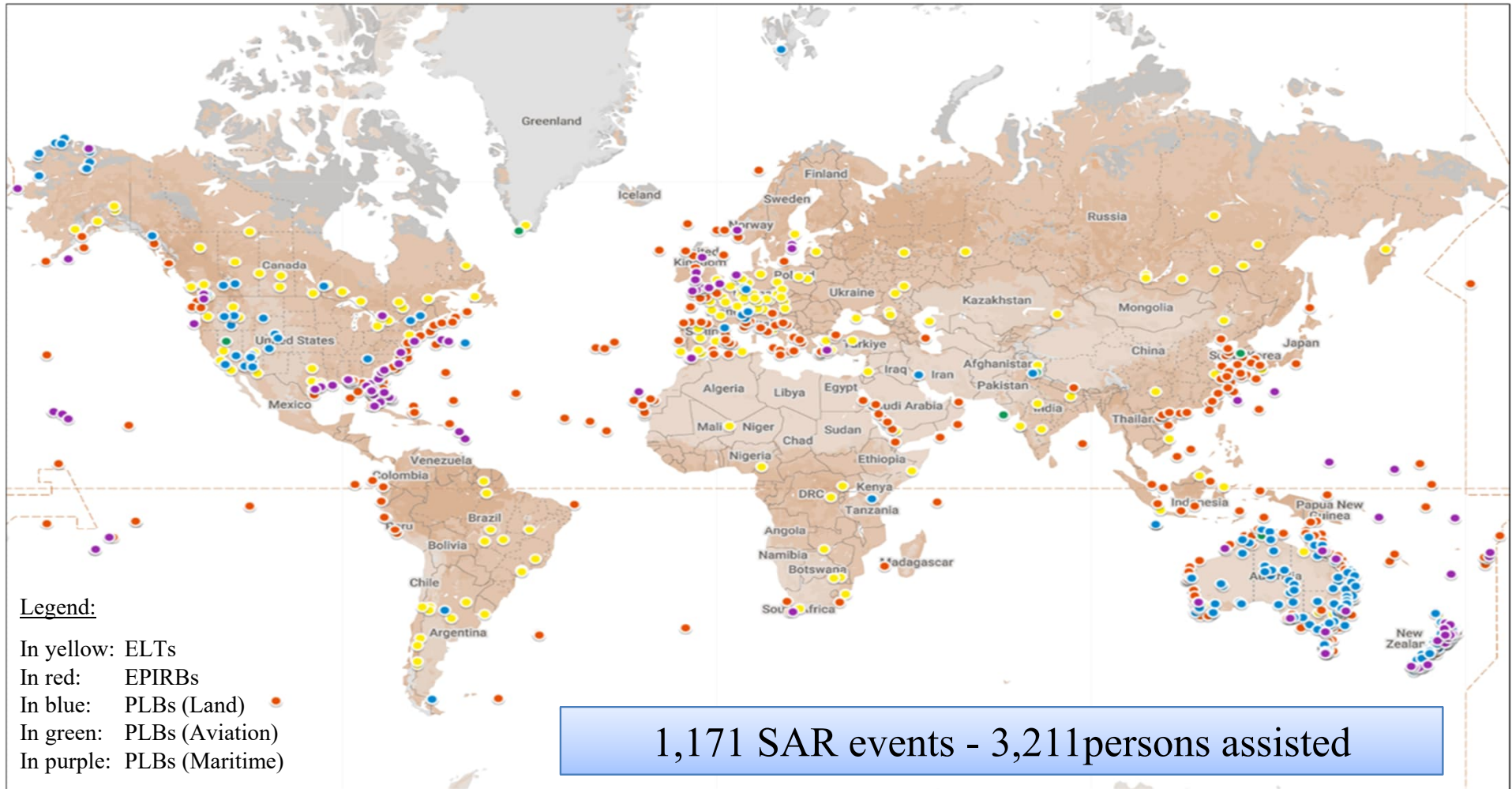
# What is C/S

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- 45 Participants...
- *The International Cospas-Sarsat Programme provides accurate, timely, and reliable distress alert and location data to help search and rescue authorities assist persons in distress.*

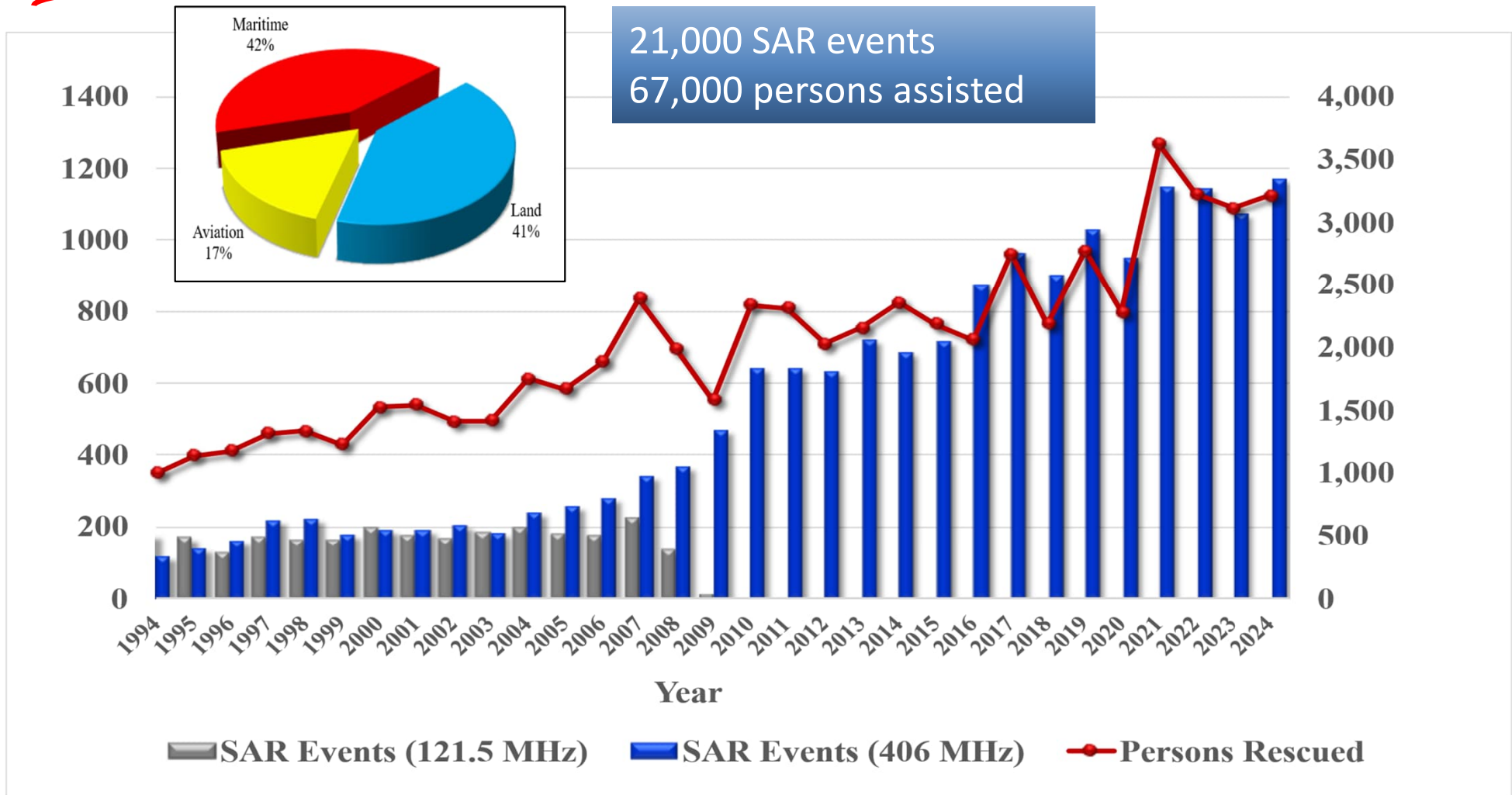


# System Operation



**Figure 2: 2024 Geographic Distribution of SAR Events**

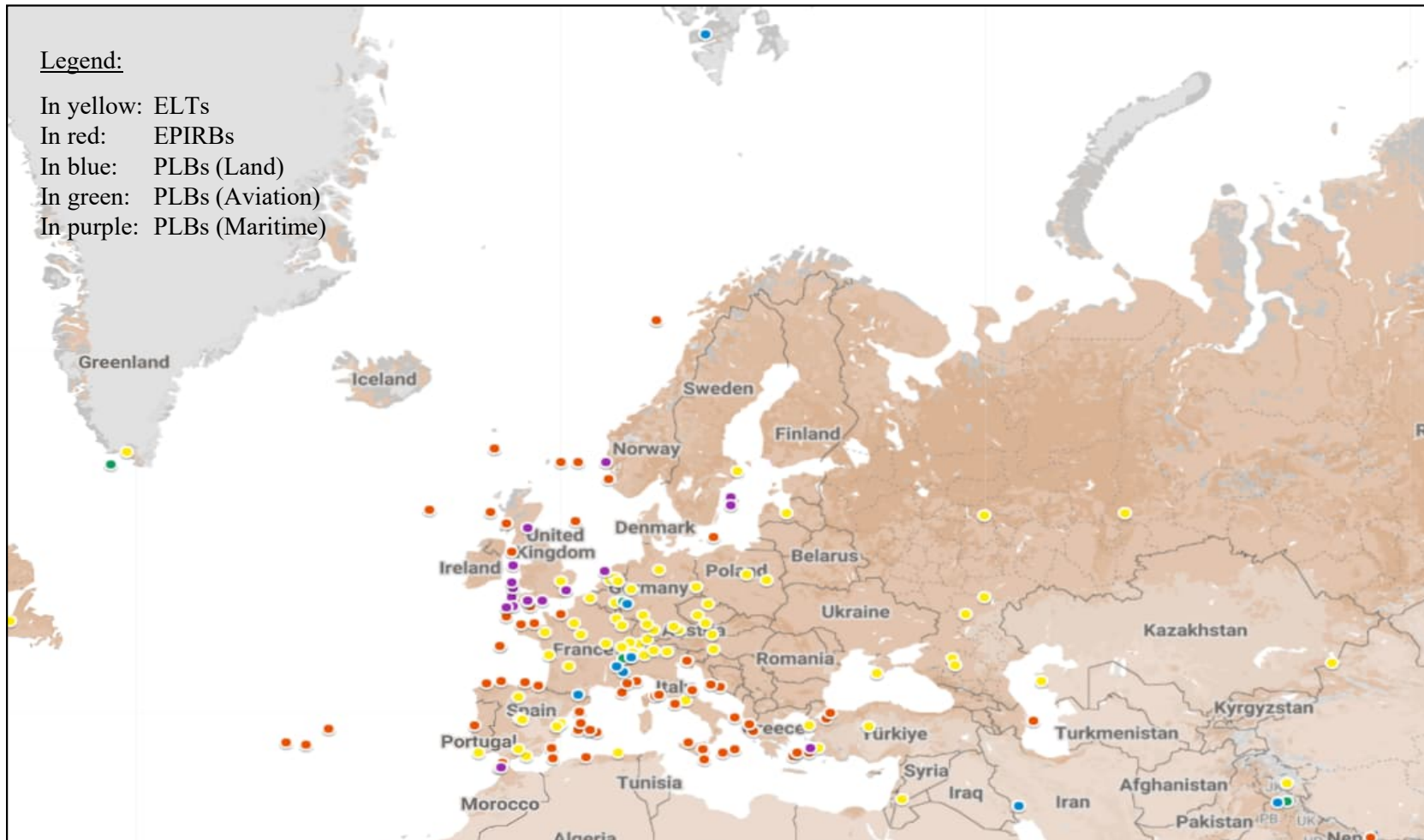
# System Operation



**Figure 1: SAR Events with the Assistance of Cospas-Sarsat Data (Jan. 1994 - Dec. 2024)**



# System Operation



**Figure 2:** 2024 Geographic Distribution of SAR Events in Europe

[Link to the map](#)

# 406 MHz Beacons

**3,360,000** beacons deployed  
(75% being GNSS capable) (2024)



# 406 MHz Beacons



WELCOME TO  
THE  
INTERNATIONAL  
406MHZ BEACON  
REGISTRATION  
DATABASE

Registering a beacon for  
the first time?

Sign up for an account



To register a beacon in the IBRD, you  
must first create an IBRD profile  
account.

- 167 Administrations
- 125,000+ beacons

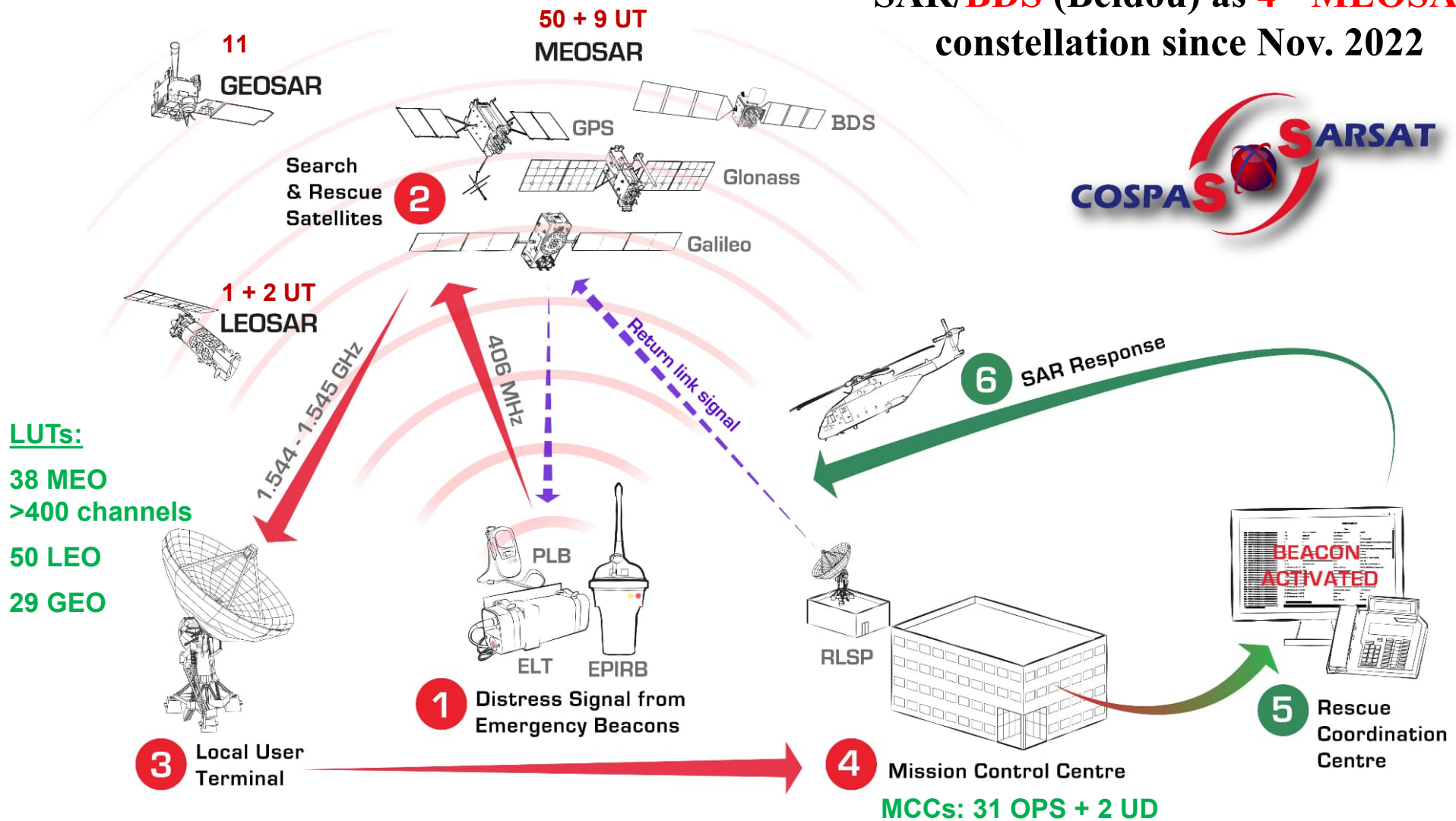
Allows:

All beacon types, including

- ELT(DT)s,
- RLS-capable beacons,
- SGBs

# The System

SAR/BDS (Beidou) as **4<sup>th</sup> MEOSAR** constellation since Nov. 2022



**LUTs:**  
 38 MEO  
 >400 channels  
 50 LEO  
 29 GEO



# SPOC Communication

	2020	2021	2022	2023	2024
Number of SPOCs tested by MCCs	166	171	171	161	<b>165</b>
Non-responsive SPOCs (no response to tests)	7.23%	8.19%	5.26%	4.97%	<b>6.66%</b>
Rarely responsive SPOCs (less than 20% successful tests)	6.02%	3.51%	5.85%	4.97%	<b>4.84%</b>
SPOCs with low success ratio (between 20 and 50% successful tests)	7.23%	9.94%	8.19%	11.18%	<b>10.30%</b>
<b>Insufficiently responsive SPOCs</b>	<b>20.48%</b>	<b>21.64%</b>	<b>19.30%</b>	<b>21.12%</b>	<b>21.80%</b>



# MCC-SPOC Agreements

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## Agreements signed between MCCs-SPOCs within the ICAO EUR Region and sent to the Cospas-Sarsat Secretariat

- French MCC – Austria (Austro-Control),
- French MCC – France, MRCC Gris-Nez
- French MCC – France, ARCC Lyon
- French MCC – Germany, ARCC Münster,
- French MCC – Morocco, ARCC Rabat
- French MCC – Switzerland
- French MCC – Tunisia (ACC Tunis)
- Italian MCC – Albania
- Italian MCC – Bosnia and Herzegovina
- Italian MCC – North Macedonia
- Italian MCC – San Marino
- Italian MCC – Serbia
- Italian MCC – Sudan (CAA)
- **Norwegian MCC – Denmark\***
- **Norwegian MCC – Poland\***
- Norwegian MCC – Sweden (Mar. Admin.)
- UK MCC – Ireland (C. G.)

# New SIT 185

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- **Grouped into 6 Paragraphs**
- **GNSS vs ENCODED**
- **MCC REFERENCE POSITION vs CONFIRMED POSITION**
- **Omitted vs “NIL” when allowed**

1. **DISTRESS** COSPAS-SARSAT INITIAL LOCATED ALERT

2. **MSG** NO 00741 AUMCC REF 3266E2019CFFBFF

3. **BEACON MESSAGE INFORMATION**

BEACON TYPE STANDARD LOCATION - ELT

AIRCRAFT 24 BIT ADDRESS 7100CE ASSIGNED TO SAUDI ARABIA

HEX ID 3266E2019CFFBFF

COUNTRY OF BEACON REGISTRATION 403/SAUDI

HOMING SIGNAL 121.5 MHZ

4. **ALERT POSITION INFORMATION**

**GNSS** – 32 49.6 N 081 55.5 E

**MCC REFERENCE** – 32 49.2 N 081 54.6 E

DETECTED AT 22 APR 07 0912 UTC BY LEOSAR SARSAT 10

DOPPLER A - 32 49.1 N 081 54.2 E PROB 69 PERCENT

DOPPLER B - 24 18.1 N 041 18.2 E PROB 31 PERCENT

5. **OTHER INFORMATION**

DETECTION FREQUENCY 406.0247 MHZ

LUT ID 4191

6. **REMARKS** NIL

END OF MESSAGE

# System Enhancements

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- **MEOSAR**  
Initial  
Operational  
Capability  
Apr. 2023



# System Enhancements

**F**ull  
**O**perational  
**C**apability  
for

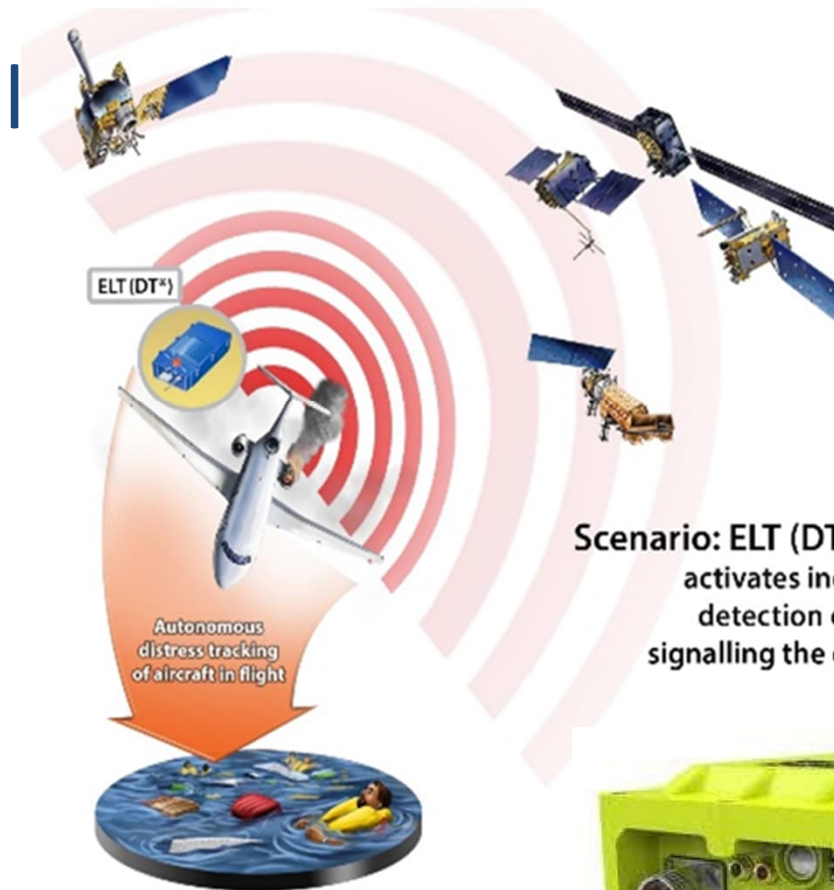
**ELT(DT)s**

**FGB**

1 Jan 2023

**SGB**

1 Jan 2024



Scenario: ELT (DT) "Distress Tracking" 406 Beacon activates independently upon autonomous detection of in-flight aircraft emergency, signalling the distress to Cospas-Sarsat satellites



Loss of  
121.5  
MHz

# System Enhancement

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## **SGBs**

- more info in MSGs
- Greater accuracy
- Improved Transmission Rate
- Expected from 2026

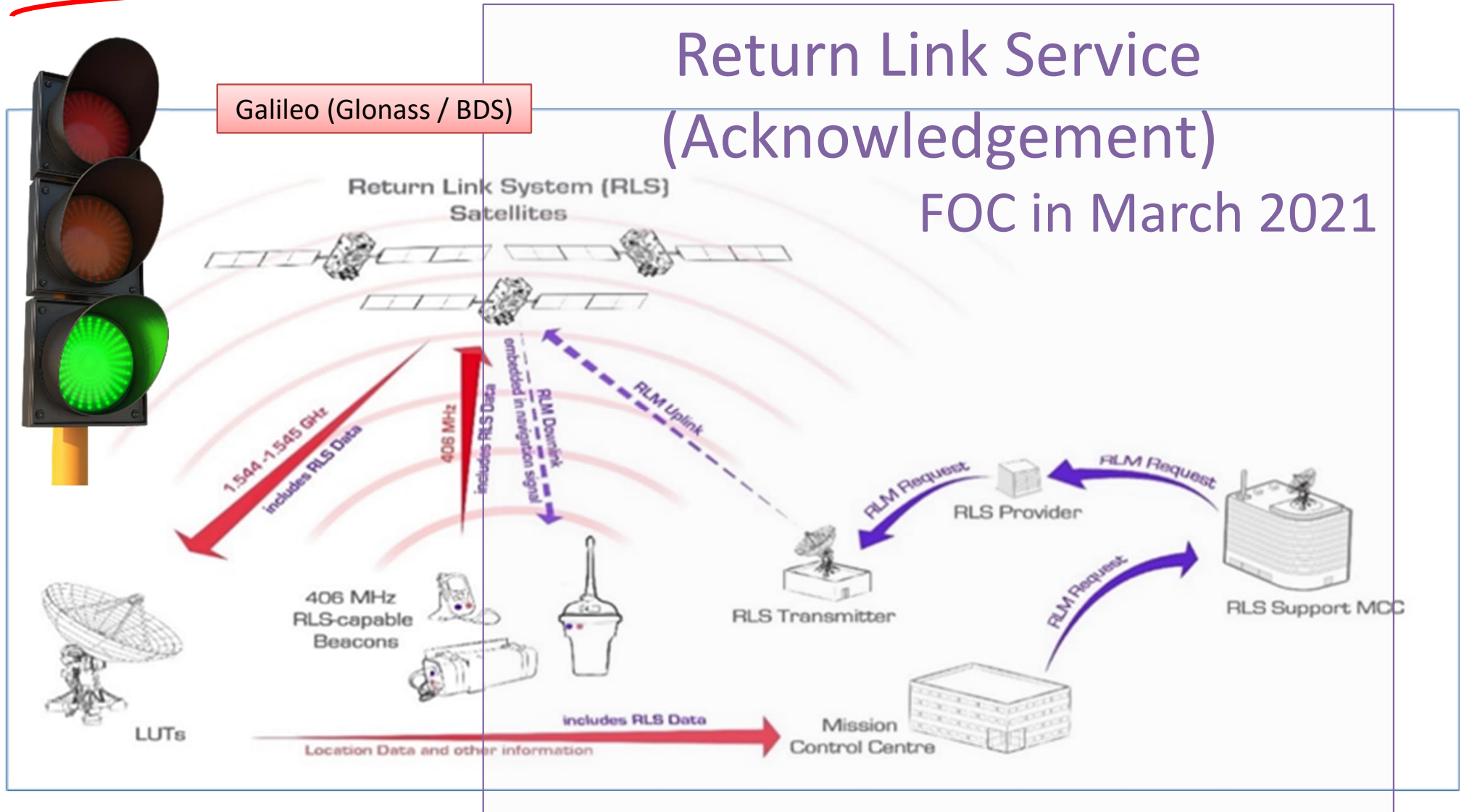


# System Enhancements

Galileo (Glonass / BDS)

## Return Link Service (Acknowledgement)

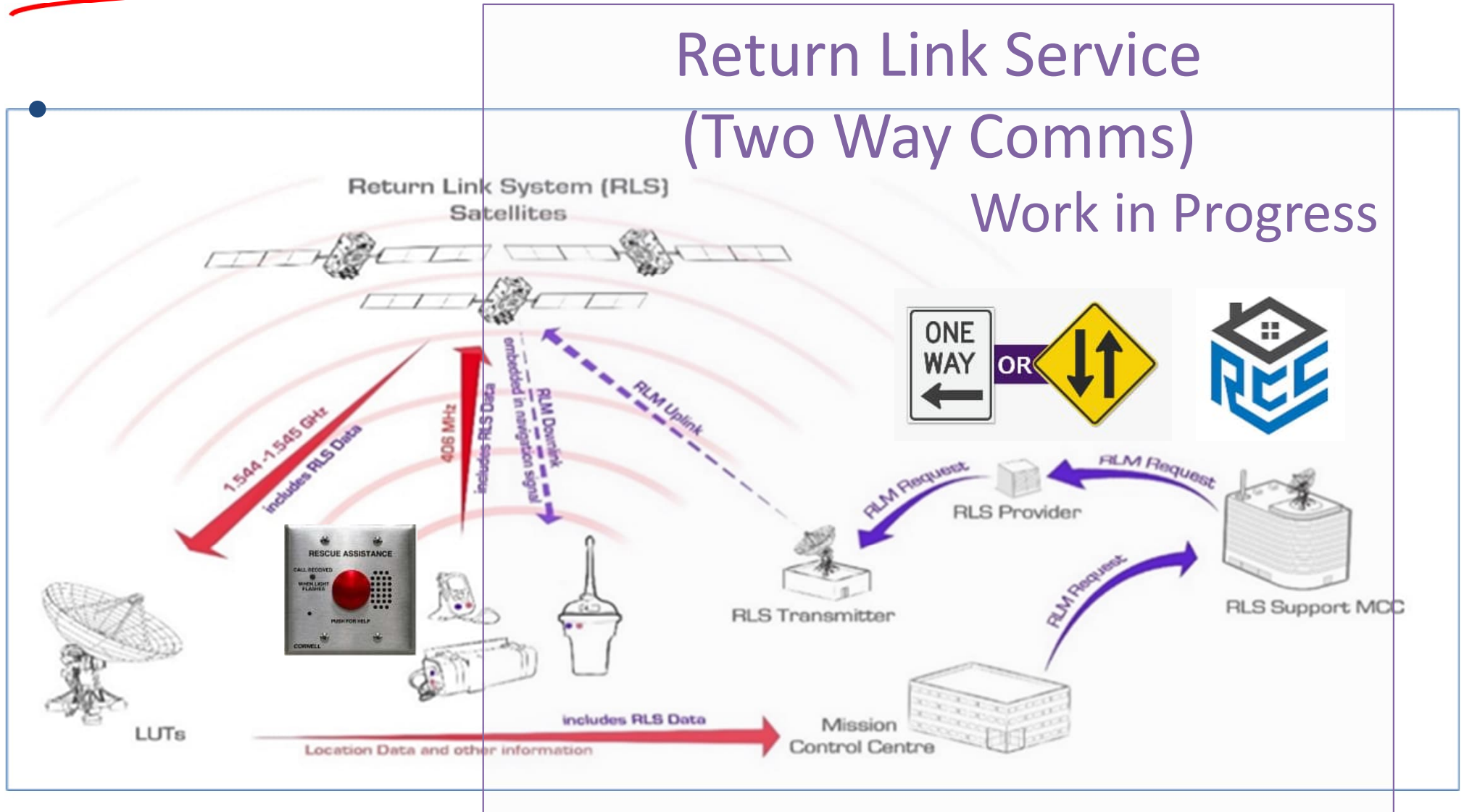
FOC in March 2021



# System Enhancements

## Return Link Service (Two Way Comms)

Work in Progress



# Training Materials

- RCC Manual G.007
- Videos

# You

# Tube



moodle



<https://www.cospas-sarsat.int/en/search-and-rescue/programme-videos-en>

<https://moodle.406.org/>

# How to Join Cospas-Sarsat

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- A Community of **Experts** dedicated to **SAR**, building a long-term **saving-life project**
- Required **international cooperation**
- Provide your **feedback**, share your **needs**
- **Letter of Association** signed by H.o.S, Chief of Gvt., M.o.F.A., deposited to ICAO/IMO LEB
- Contact [mail@cospas-sarsat.int](mailto:mail@cospas-sarsat.int)



# Questions ?

**COSPAS-SARSAT**  
INTERNATIONAL SATELLITE SYSTEM FOR SEARCH AND RESCUE  
406<sup>TH</sup> DISTRESS ALERTING SERVICE

FRANÇAIS | РУССКИЙ

COSPAS-SARSAT PROFESSIONALS ▶

BEACON OWNERSHIP ▾ SYSTEM OVERVIEW ▾ MEDIA GALLERY ▾ ABOUT US ▾

## COSPAS-SARSAT

SEARCH AND RESCUE SATELLITES  
LISTEN **WORLDWIDE** FOR DISTRESS CALLS

### Register Your Beacon

Ensure that Search and Rescue Authorities in an Emergency Can Retrieve Crucial Information About You, Your Aircraft or Vessel, and Your Emergency Contacts.

REGISTER YOUR BEACON

#### QUICK LINKS

▶ Videos About H...

[asindou@406.org](mailto:asindou@406.org)