



STATUS OF THE COSPAS-SARSAT PROGRAMME

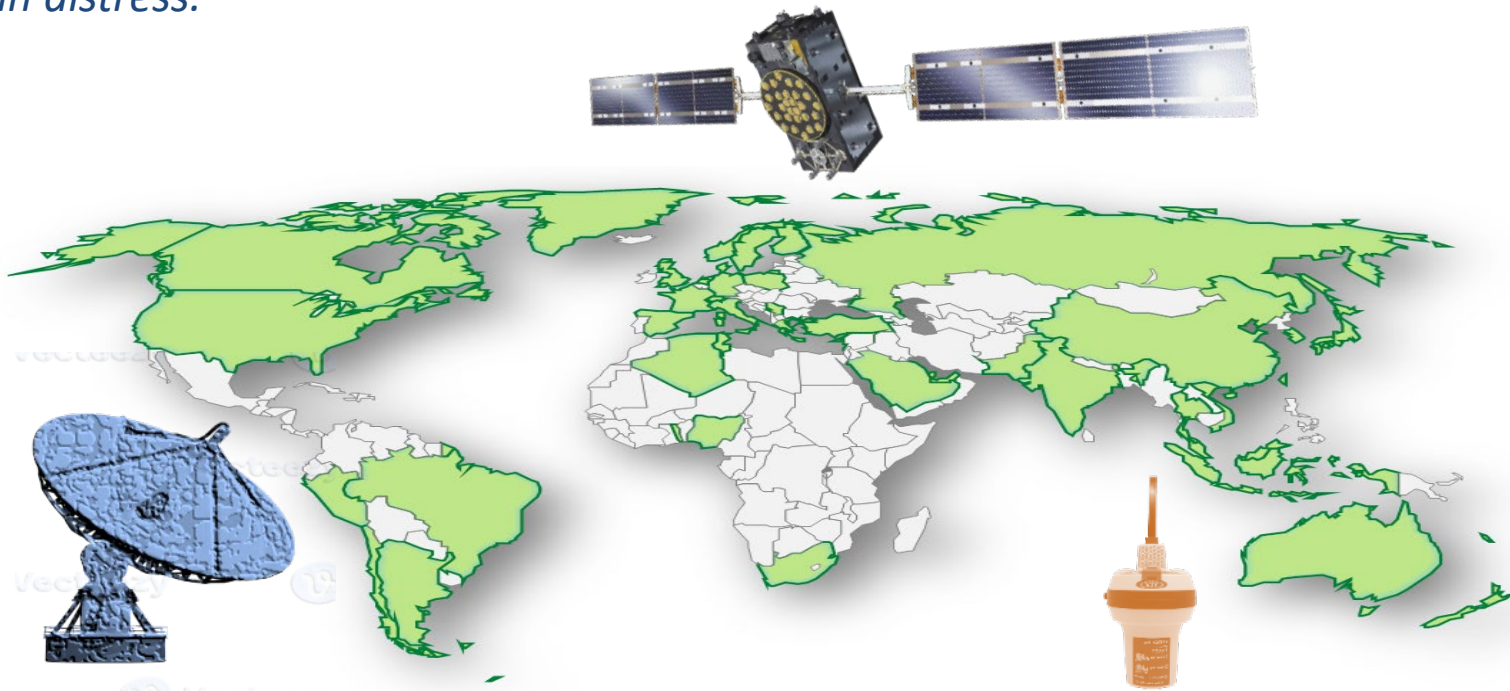
Arnaud Sindou
Cospas-Sarsat Secretariat

Asia/Pacific SAR WG - 11
(Bangkok 5-8 May 2026)



What is C/S

- 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

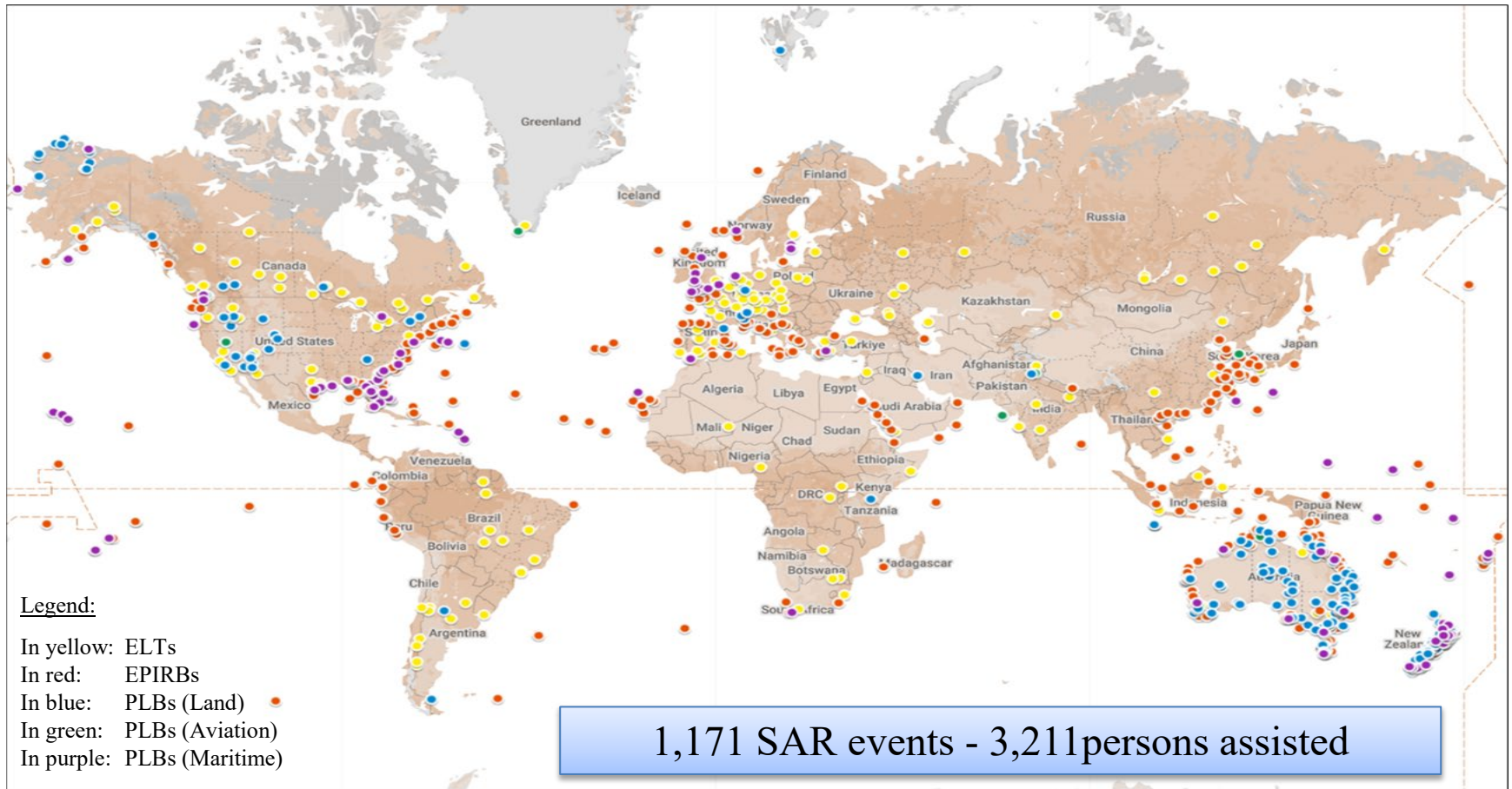


Figure 2-1: 2024 Geographic Distribution of SAR Events

System Operation

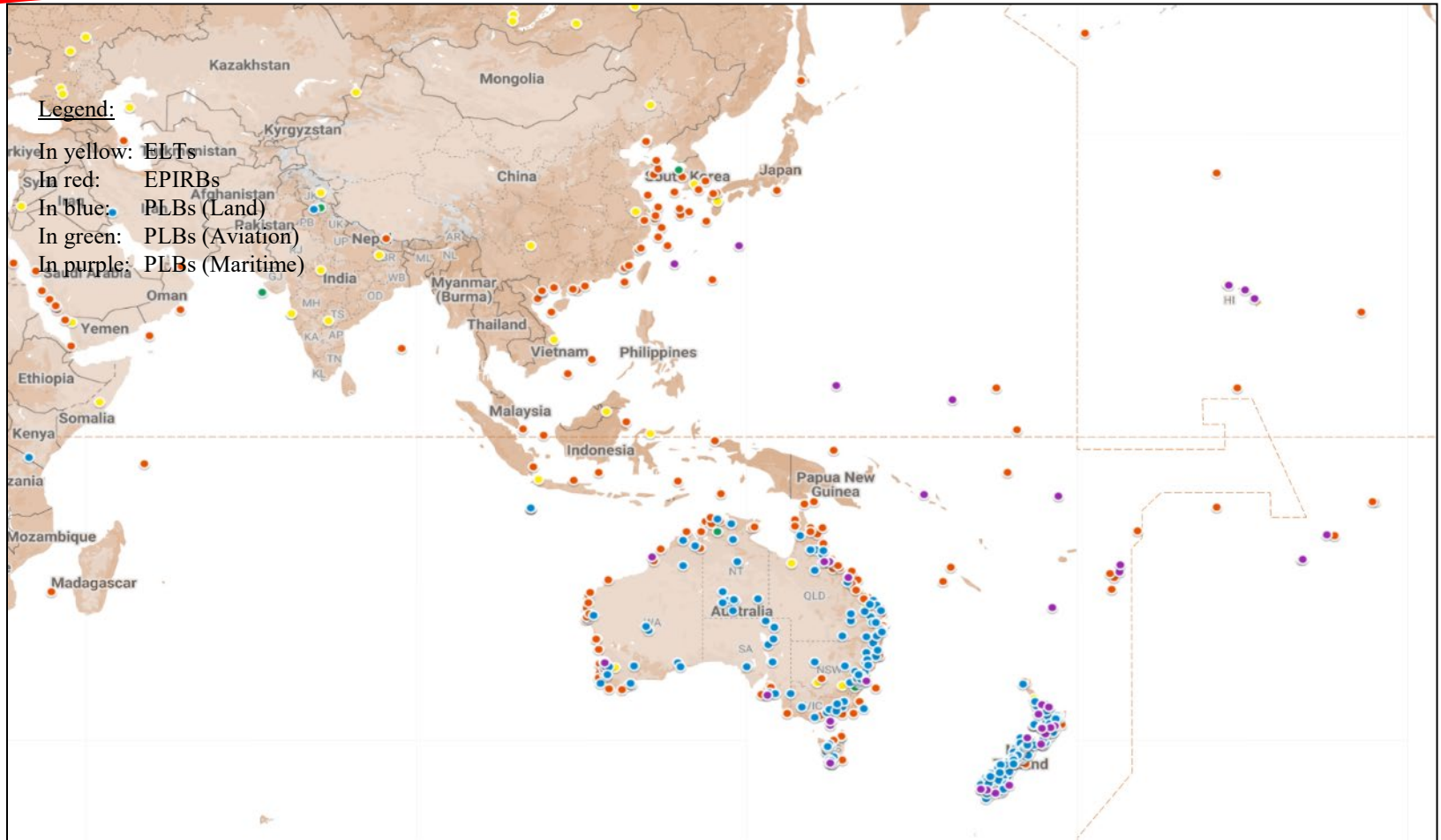


Figure 2-2: 2024 Geographic Distribution of SAR Events over the Asia-Pacific Region

[Link to the map](#)

System Operation

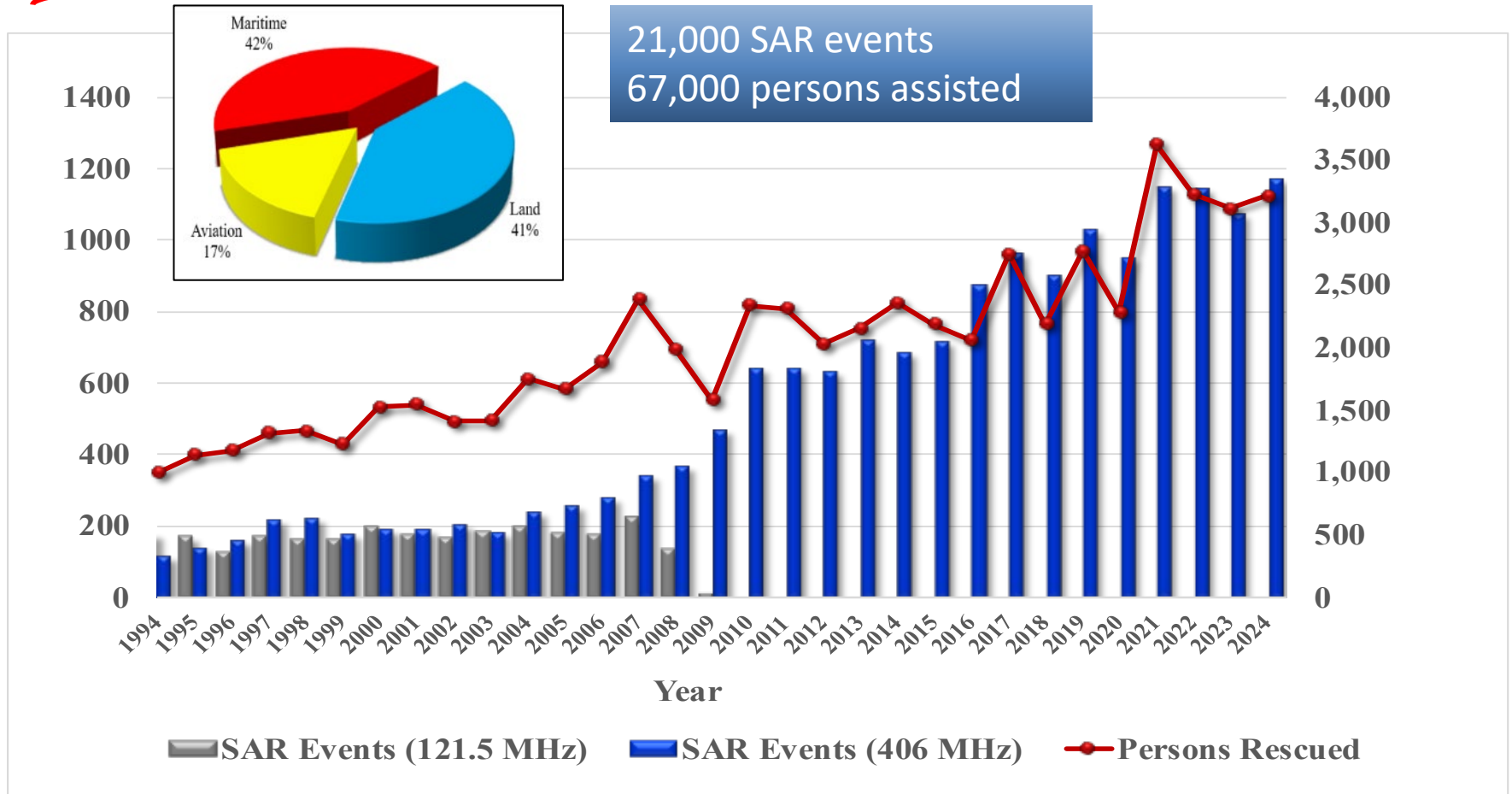


Figure 3: SAR Events with the Assistance of Cospas-Sarsat Data (Jan. 1994 - Dec. 2024)

406 MHz Beacons

3,354,000 beacons deployed (2024)
(80% being GNSS capable)



406 MHz Beacons

- 167 Administrations
- 127,000+ beacons

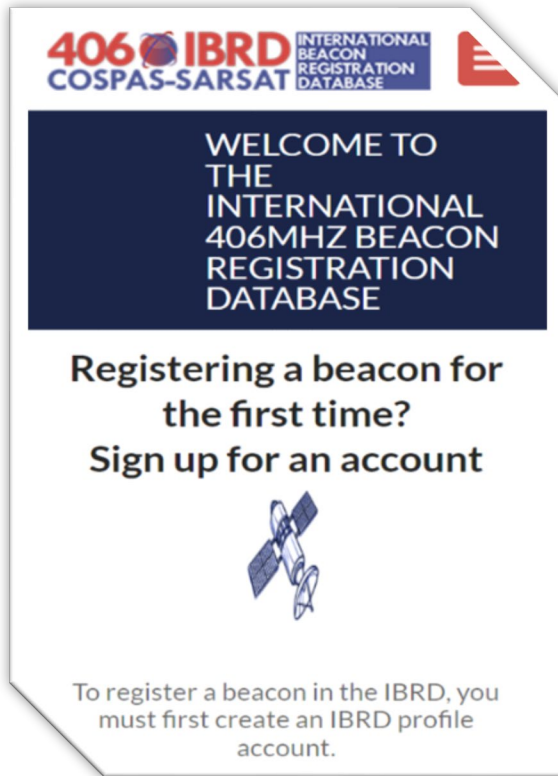
Allows:

All beacon types, including

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

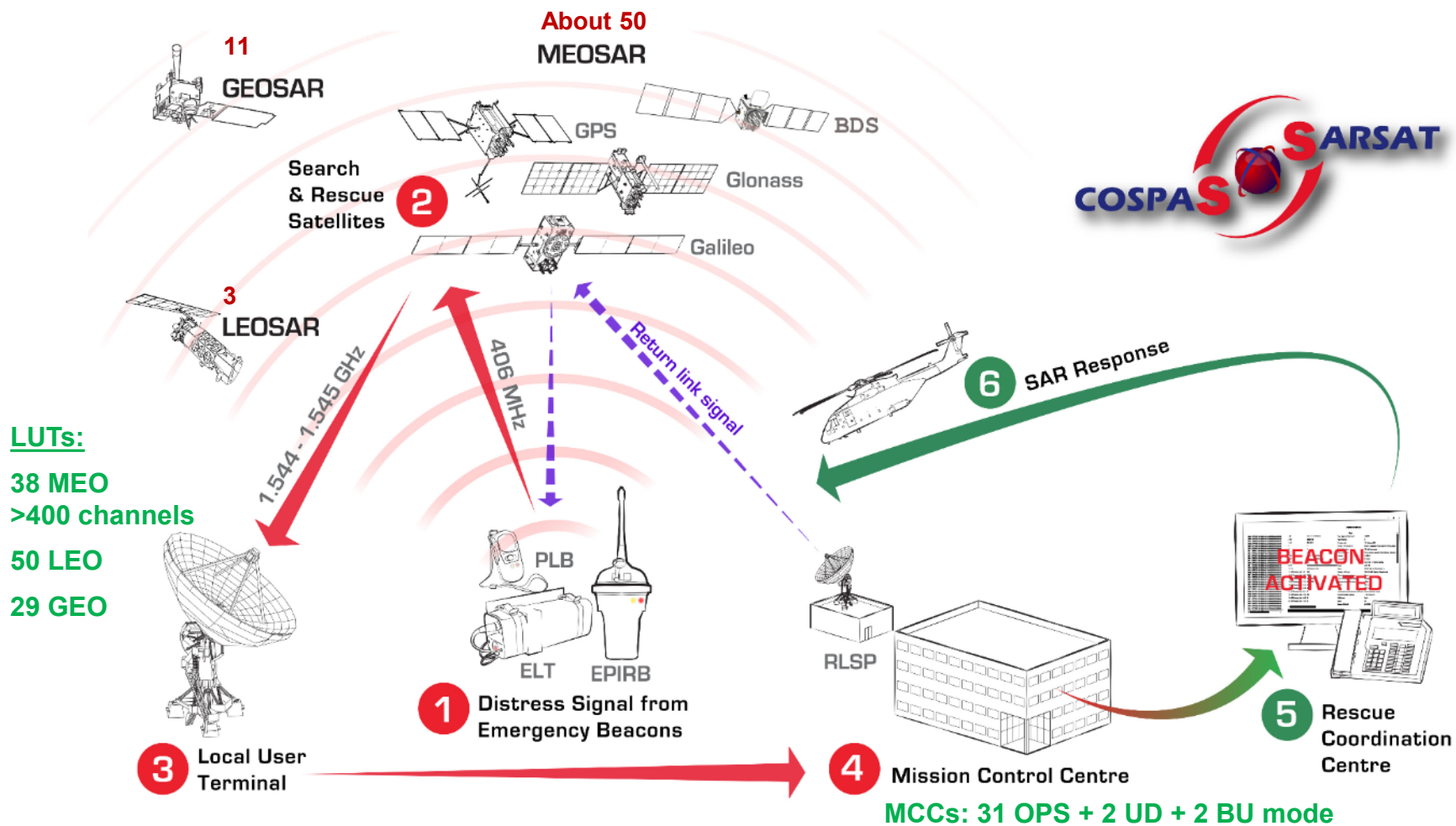
Connection as:

- Beacon owner
- National Data Provider
- SAR Services
- Inspectors



The screenshot shows the top of a website with the logo '406 IBRD INTERNATIONAL BEACON REGISTRATION DATABASE' and 'COSPAS-SARSAT'. Below the logo is a dark blue box with white text: 'WELCOME TO THE INTERNATIONAL 406MHZ BEACON REGISTRATION DATABASE'. Underneath is a white box with the text: 'Registering a beacon for the first time? Sign up for an account'. There is a small satellite icon. At the bottom, it says: 'To register a beacon in the IBRD, you must first create an IBRD profile account.'

The System



SPOC Communication

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

MCC-SPOC Agreements

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

MCC	SPOC	Region	Initial date	Revised
FMCC	France, JRCC Tahiti	Asia-Pacific	Feb-20	
FMCC	France, MRCC La Réunion - SOI	Indian Ocean	Dec-19	Feb-26
INMCC	Maldives	Indian Ocean	Jun-23	
INMCC	Nepal, CAA	Asia-Pacific	Jan-15	
VNMCC	Cambodia	Asia-Pacific	Mar-13	
VNMCC	Laos	Asia-Pacific	Dec-13	

New SIT 185 Format

- **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

Recent System Enhancements

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



FOC
2026

Recent System Enhancement

SGBs

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



ELT(DT) for Distress Tracking in Flight

Full
Operational
Capability
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**

ELT(DT) for Distress Tracking in Flight

ELT(DT) activations by means of activation

1600

ELT(DT)s activate within 5 seconds

Initial Transmission Rates :

- $T < 2$ min => Every 5 sec (24)
- $2 < T < 5$ min => Every 10 sec (18)
- $T > 5$ min => Every ~30 sec (...)

400

200

0

Q1-2023 Q2-2023 Q3-2023 Q4-2023 Q1-2024 Q2-2024 Q3-2024 Q4-2024 Q1-2025 Q2-2025 Q3-2025 Q4-2025 Q1-2026

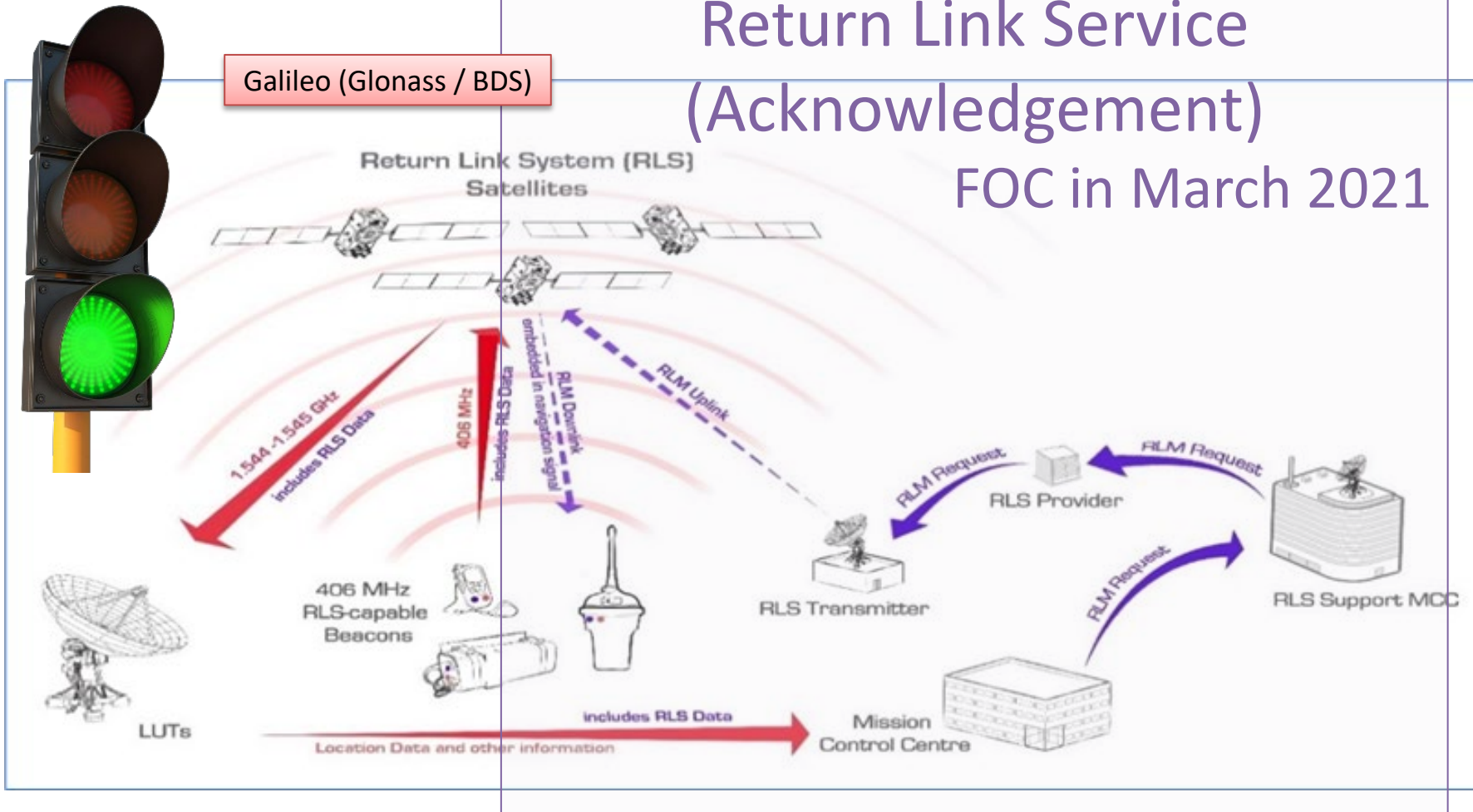
■ Manual ■ Avionic ■ Shock ■ Unknown

RLS Beacons

Return Link Service (Acknowledgement)

FOC in March 2021

Galileo (Glonass / BDS)



TWC & Second-Generation Beacons



1. POB = 2
 2. Request Medic Assistance
 3. Aviation Accident
- => Send

... Special requirements
... Allergies
... Survival equipment



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

A Community of **Experts** dedicated to **SAR**, building a long-term **saving-life project**, requiring **international cooperation**.

- **Support** the Programme,
- 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

Annual contribution



Questions ?

COSPAS-SARSAT.INT
INTERNATIONAL SATELLITE SYSTEM FOR SEARCH AND RESCUE
406™ DISTRESS ALERTING SERVICE

Home | 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 U

asindou@406.org