

WE LOOK AFTER THE EARTH BEAT

***COSPAS-SARSAT :***

***A proven efficiency***

***MEOSAR :***

***Opportunity for In-flight  
events positioning***



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# COSPAS/SARSAT



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# COSPAS/SARSAT : A strong heritage in safety of Life Rescue

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- COSPAS/SARSAT: A strong operational heritage
  - Operational and used in civil aviation for more than 30 years
    - Nbre of ELT : **250'000 beacons**
    - Part of ICAO Regulation
    - Nbre of Civil Aviation distress : **150 events/year**
    - Compatible with professional aviation
  - An already operational rescue chain, from distress call to the most appropriated rescue Center
  - A free institutional worldwide Service for a last resort distress event



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# SAR from LEO-GEO SAT to MEOSAR a major evolution

	GEO	LEO	MEO
Beacons Identification	YES	YES	YES
Global Coverage	NO	YES	YES
Real Time Coverage	YES	NO	YES
Beacons Localisation	NO	10km – moving beacon NO	<1km – moving beacon YES
Potential Remote Activation	NO	NO	YES



# COSPAS-SARSAT : A proven efficiency

## MEOSAR : Opportunity for In-flight events positioning

- Many Advantages for MEOSAR
  - No major evolution for COSPAS/SARSAT System
  - Instantaneous and independent location,
  - Resilience to GNSS failures, spoofing and jamming



ELT Kannad 406AS

### ➤ Space Segment

- Partly deployed (14 satellites already in orbit)
- Plan to be fully operational in 2018

### ➤ Second Generation Beacons

- Improved independent location accuracy including in fast moving scenarios (~1km)
- Also includes GNSS positions in the transmitted message
- Possible remote activation through Return Link Service

The Civil Aviation community could take benefit of the COSPAS-SARSAT evolution to implement position and status reporting in case of in-flight events or anomalies