WE LOOK AFTER THE EARTH BEAT

COSPAS-SARSAT:

A proven efficiency

MEOSAR:

Opportunity for In-flight events positioning

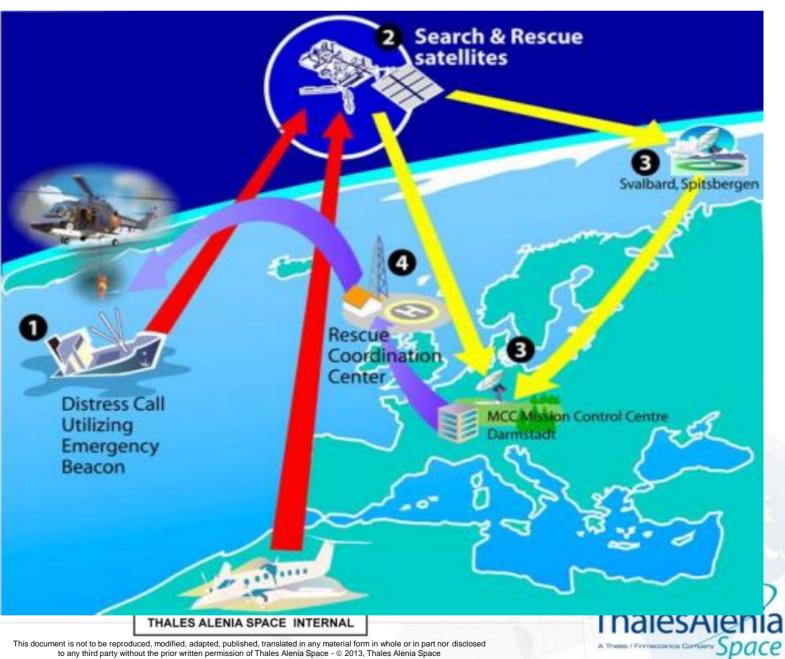


THALES ALENIA SPACE INTERNAL

## COSPAS/SARSAT







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

- 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





Ref.:





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

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	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

29/05/2014

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Thales Alenia
A Trans / Formeconos Correiro Space

## 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
- 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



**ELT Kannad 406AS**