COSPAS-SARSAT SYSTEM DATA

No.42
December 2016
Revision 1

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TABLE OF CONTENTS

SUMMARY STATUS
(December 2016)

PARTICIPANTS

Parties to the International Cospas-Sarsat Programme Agreement (ICSPA):	4
Ground Segment Providers:	27
User States:	10
Ground Segment Operators:	2
Total number of Participants:	**43**

SPACE SEGMENT

LEOSAR system:	5 satellites in polar orbit
GEOSAR system:	5 satellites in geostationary orbit

GROUND SEGMENT

30	Mission Control Centres (MCCs)
53	Local User Terminals (LEOLUTs) in the LEOSAR system
21	Local User Terminals (GEOLUTs) in the GEOSAR system

All co-located LUTs are counted as two (with the exception of the French LEOLUTs, which operate as one LUT).

406 MHz BEACON POPULATION (end of 2015)

Total beacon population estimated:	about 2,000,000
Registered beacon population:	about 1,513,000

SYSTEM OPERATIONS (end of 2015)

From **January to December 2015**, the Cospas-Sarsat System provided assistance in **rescuing 2,185 persons in 718 SAR events**	**Type of Distress**	**Persons Rescued**	**SAR Events**
	Aviation	233	121
	Maritime	1,615	345
	Land	337	252
	Total	**2,185**	**718**

From **September 1982 to December 2015**, the Cospas-Sarsat System provided assistance in **rescuing at least 41,750 persons in 11,788 SAR events**.

Figure 1: Geographic Distribution of Confirmed SAR Events for which Cospas-Sarsat Data was Used (January - December 2015)

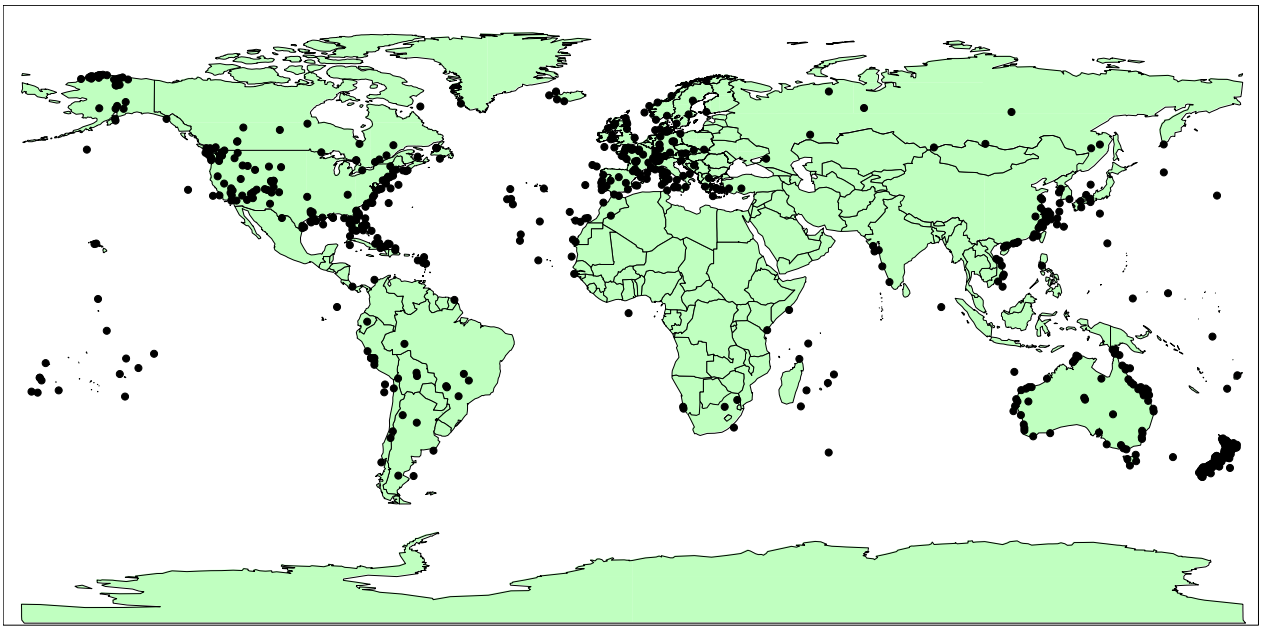


Figure 2: Distribution of SAR Events Assisted by Cospas-Sarsat by Type of Events (January - December 2015)

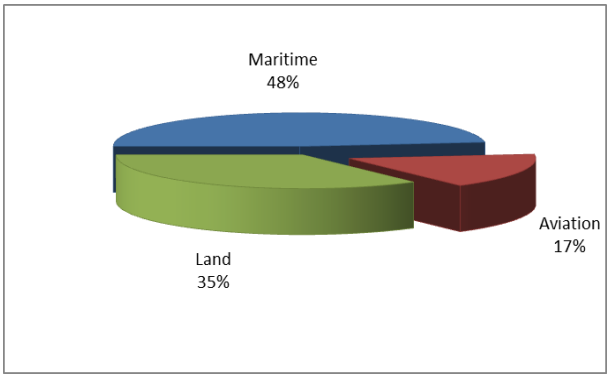


Figure 3: Persons Rescued by Type of SAR Event Assisted by Cospas-Sarsat (January - December 2015)

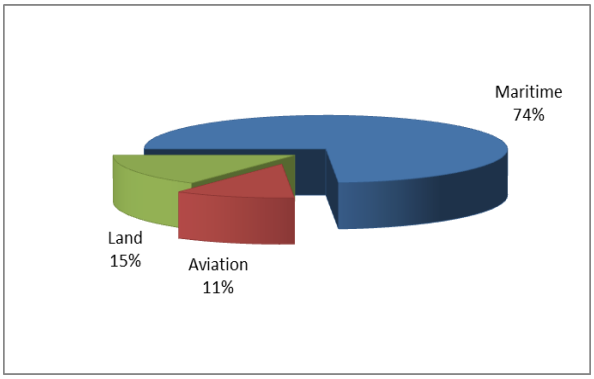


Figure 4: Number of SAR Events and Persons Rescued with the Assistance of Cospas-Sarsat Alert Data (January 1994 - December 2015)

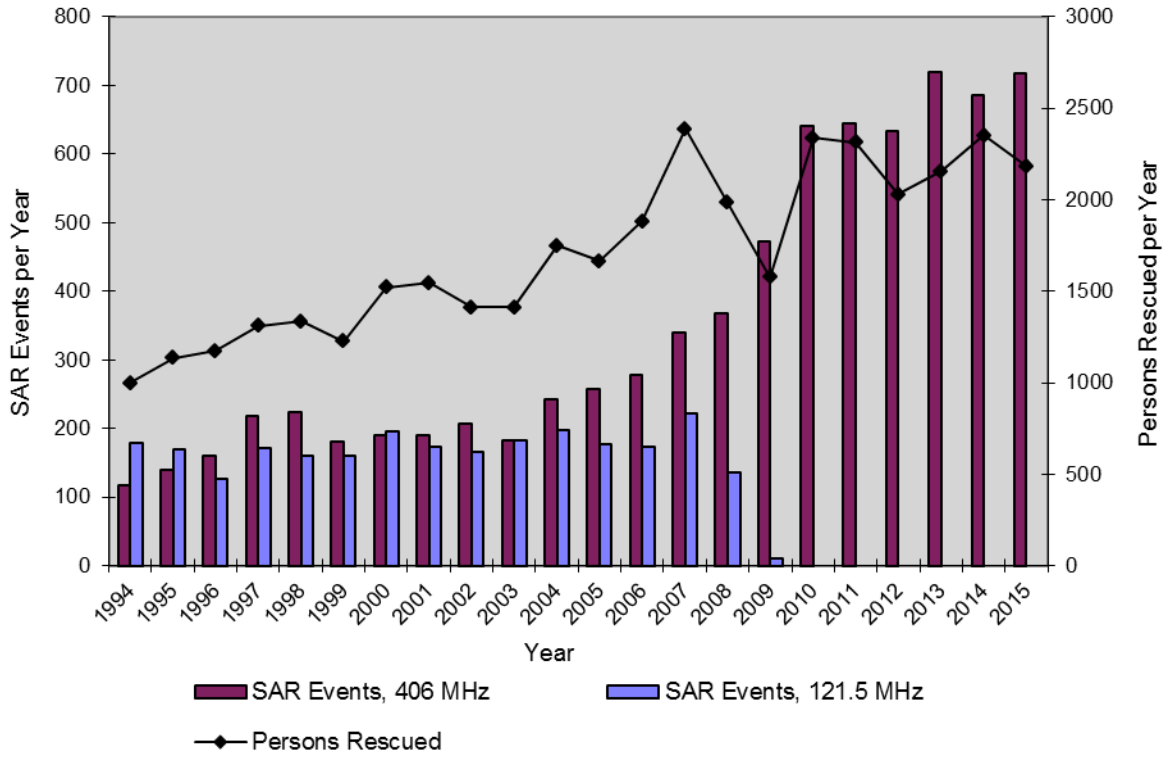


Figure 5: Number of SAR Events where Cospas-Sarsat Assisted and Number of SAR Events where Cospas-Sarsat Provided the Only Alert (January 1990 - December 2015)

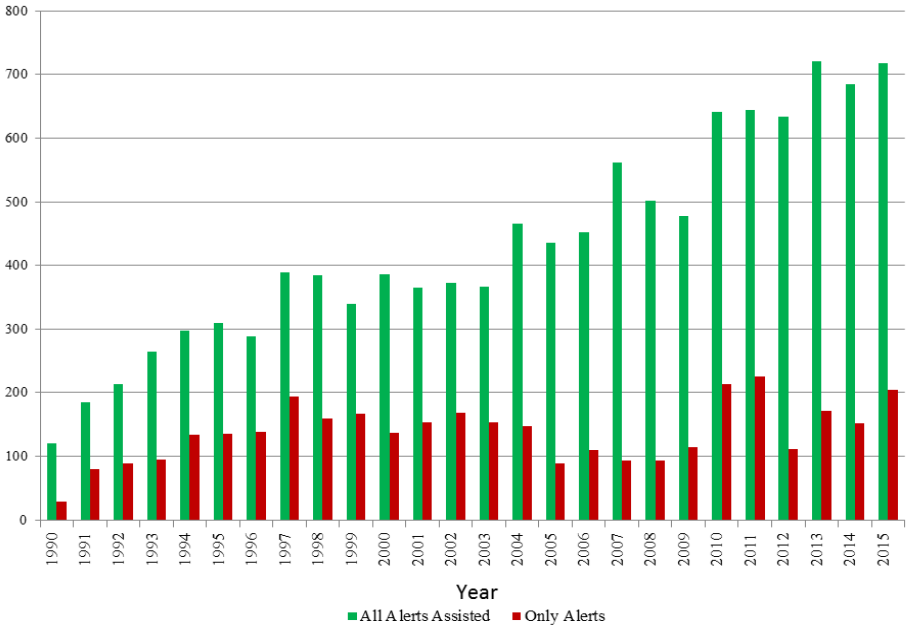


Table I - Cospas-Sarsat Participating Countries and Organisations (December 2016)

Participant	Agency	Status
Algeria	Ministry of National Defense, Search and Rescue Services	Ground Segment Provider
Argentina	Argentine Air Force, Satellite Emergency Alert Service (SASS)	Ground Segment Provider
Australia	Australian Maritime Safety Authority (AMSA)	Ground Segment Provider
Brazil	Air Space Control Department (DECEA), Operations Sub-Department (SDOP)	Ground Segment Provider
Canada	National Search and Rescue Secretariat (NSS)	Party-Space Segment Provider
Chile	Search and Rescue Service of the Chilean Air Force	Ground Segment Provider
China (P. R. of)	Maritime Safety Administration, Bureau of Harbour Superintendency	Ground Segment Provider
Cyprus	Larnaca Joint Rescue Co-ordination Centre (JRCC)	User State*
Denmark	Denmark Transport Authority, Aviation Department	User State
Finland	Ministry of the Interior, Finnish Border Guard	User State
France	Centre National d'Etudes Spatiales (CNES)	Party-Space Segment Provider
Germany	Federal Ministry of Transport and Digital Infrastructure	User State
Greece	Ministry of Maritime Affairs and Insular Policy	Ground Segment Provider
Hong Kong, China	Hong Kong Marine Department	Ground Segment Operator
India	Indian Space Research Organisation (ISRO)	Space / Ground Segment Provider
Indonesia	National SAR Agency of Indonesia (BASARNAS)	Ground Segment Provider
Italy	Department of Civil Protection	Ground Segment Provider
ITDC	International Telecommunication Development Company - Chunghwa Telecom Co., Ltd. (Chinese Taipei)	Ground Segment Operator
Japan	Japan Coast Guard, Information - Communications Division	Ground Segment Provider
Korea (Rep. of)	Korea Coast Guard	Ground Segment Provider
Malaysia	Maritime Enforcement Agency	Ground Segment Provider**
Netherlands (The)	The Netherlands Coastguard	User State
New Zealand	Rescue Coordination Centre New Zealand (RCCNZ)	Ground Segment Provider
Nigeria	National Emergency Management Agency (NEMA)	Ground Segment Provider***
Norway	Ministry of Justice	Ground Segment Provider
Pakistan	Space and Upper Atmosphere Research Commission (SUPARCO)	Ground Segment Provider
Peru	General Directorate of Captaincies and Coastguard	Ground Segment Provider
Poland	Civil Aviation Authority	User State
Russian Federation	Federal State Unitary Enterprise Morsviazsputnik	Party-Space Segment Provider
Saudi Arabia	General Authority of Civil Aviation, Directorate of Air Traffic Services	Ground Segment Provider
Serbia	Civil Aviation Directorate of the Republic of Serbia	User State
Singapore	Civil Aviation Authority of Singapore	Ground Segment Provider
South Africa	South African Maritime Safety Authority (SAMSA)	Ground Segment Provider
Spain	National Institute of Aerospace Engineering (INTA)	Ground Segment Provider
Sweden	Swedish Civil Contingencies Agency (MSB)	User State
Switzerland	Federal Office of Civil Aviation, Safety Division	User State
Thailand	Department of Civil Aviation	Ground Segment Provider
Tunisia	Ministry of Transport (DGAC)	User State
Turkey	Ministry of Transport, Maritime Affairs and Communication	Ground Segment Provider
UAE	Telecommunications Regulatory Authority (TRA)	Ground Segment Provider
UK	Department for Transport, Maritime and Coastguard Agency	Ground Segment Provider
USA	National Oceanic and Atmospheric Administration (NOAA)	Party-Space Segment Provider
Vietnam	Ministry of Transport, Vietnam Maritime Administration (VINAMARINE)	Ground Segment Provider

Notes: * Before the LGM MCC commissioning Cyprus' status will be changed to the Ground Segment Provider.

** The Malaysian ground segment equipment is not commissioned yet.

*** Due to the unavailability of its ground segment equipment, Nigeria is configured as a SPOC of the SPMCC.

Table II - LEOSAR Spacecraft Availability (December 2016)

Cospas-Sarsat Payload	Spacecraft	Launch Date	Status	SAR Processor (SARP)		SAR Repeater (SARR)
				Global Mode	Local Mode	
Sarsat-7	NOAA-15	May 1998	O	O	O	O
Sarsat-10	NOAA-18	May 2005	O	O	O	O
Sarsat-11	Metop-A	October 2006	O	O	O	O
Sarsat-12	NOAA-19	February 2009	O	O	O	O
Sarsat-13	Metop-B	September 2012	O	O	O	O
Sarsat-14	TBD	Projected 2021	-	-	-	-
Cospas-13	Meteor-M No.2-1	Projected second quarter of 2017	-	-	-	-
Cospas-14	Meteor-M No.2-2	Projected fourth quarter of 2017	-	-	-	-
Cospas-15	Meteor-M No.2-3	Projected 2020	-	-	-	-
Cospas-16	Meteor-M No.2-4	Projected 2021	-	-	-	-

Notes: O Operational.
TBD To be determined.

Table III - GEOSAR Spacecraft Availability (December 2016)

Spacecraft	Launch Date	Position	Status
GOES-13 (East)	May 2006	75º W	In operation
GOES-14	June 2009	105º W	In-orbit spare
GOES-15 (West)	March 2010	135º W	In operation
GOES-16	November 2016	TBD	Under test. Future slot (75º W or 135º W) for GOES-16 is not determined yet
GOES-17	Projected third quarter 2017	TBD	-
GOES-18	Projected fourth quarter 2019	TBD	-
GOES-19	Projected first quarter 2025	TBD	-
INSAT-3D	July 2013	82º E	In operation
INSAT-3DR	September 2016	74º E	Under test
GSAT-17	Projected first quarter 2017	TBD	-
MSG-1*	August 2002	41.5º E	TBD
MSG-2	December 2005	9.5º E	In operation
MSG-3	July 2012	0º	In operation
MSG-4	July 2015	3.4º W	Under test
Electro-L No.1**	January 2011	14.5º W	TBD
Electro-L No.2	December 2015	77.8° E	Under test
Louch-5A	December 2011	167º E	Under test
Louch-5V	April 2014	95° E	Under test

Notes: * At CSC-57 in December 2016, the UAE indicated that it might upgrade its Abu-Dhabi GEOLUT to motorize its antenna and be able to track the MSG-1 satellite over 24 hour. When this capability will be commissioned, a revised status will be provided.

** In July 2016, the Electro-L No.1 satellite was given a corrective impulse with a view to propel the satellite toward its new position of 14.5° W. At the end of December 2016, the Electro-L No.1 satellite did not complete its orbital manoeuvres and its SAR payload was switched off.

TBD To be determined.

Table IV - LEOSAR Ground Segment Status (December 2016)

Participant	MCC			LEOLUT		
	Designator	Location	Status	Location	SARP	SARR
Algeria	ALMCC	Algiers	O	Ouargla Algiers	CNO CNO	CNO CNO
Argentina	ARMCC	El Palomar	O	El Palomar Rio Grande	O O	O O
Australia	AUMCC	Canberra	O	Albany Bundaberg	O O	O O
Brazil	BRMCC	Brasilia	O	Brasilia Manaus Recife	O O O	O O O
Canada	CMCC	Trenton	O	Churchill Edmonton Goose Bay	O O O	O O O
Chile	CHMCC	Santiago	O	Easter Island Punta Arenas Santiago	O O O	O O O
China (P. R. of)	CNMCC	Beijing	O	Beijing (1) Beijing (2)	O O	O O
France	FMCC	Toulouse	O	Toulouse (1) Toulouse (2)	O O	O O
Greece	GRMCC	Athens	O	Penteli	O	O
Hong Kong, China	HKMCC	Hong Kong	O	Hong Kong (1) Hong Kong (2)	O O	O O
India	INMCC	Bangalore	O	Bangalore Lucknow	O O	O O
Indonesia	IDMCC	Jakarta	O	Jakarta	O	O
Italy	ITMCC	Bari	O	Bari	O	O
ITDC	TAMCC	Taipei	O	Keelung (1) Keelung (2)	O O	O O
Japan	JAMCC	Tokyo	O	Gunma	O	O
Korea (Rep. of)	KOMCC	Sejong	O	Incheon	O	O
New Zealand*	-	-	-	Wellington	O	O
Nigeria	NIMCC	Abuja	CNO	Abuja	CNO	CNO
Norway	NMCC	Bodoe	O	Spitsbergen	O	O
Pakistan	PAMCC	Karachi	O	Karachi	O	O
Peru	PEMCC	Callao	O	Callao	O	O
Russia	CMC	Moscow	O	Nakhodka	O	O
Saudi Arabia	SAMCC	Jeddah	O	Jeddah (1) Jeddah (2)	O O	O O
Singapore	SIMCC	Singapore	O	Singapore	O	O
South Africa	ASMCC	Cape Town	O	Cape Town	O	O
Spain	SPMCC	Maspalomas	O	Maspalomas	O	O
Thailand	THMCC	Bangkok	O	Bangkok (1) Bangkok (2)	O O	O O
Turkey	TRMCC	Ankara	O	Ankara (1) Ankara (2)	O O	O O
UAE	AEMCC	Abu Dhabi	O	Abu Dhabi	O	O
UK	UKMCC	Fareham	O	Combe Martin	O	O
USA	USMCC	Suitland	O	Alaska (1) Alaska (2) Florida (1) Florida (2) Guam (1) Guam (2) Hawaii (1) Hawaii (2)	O O O O O O O O	O O O O O O O O
Vietnam	VNMCC	Haiphong	O	Haiphong	O	O

Notes: CNO Commissioned, not operational.

O Operational.

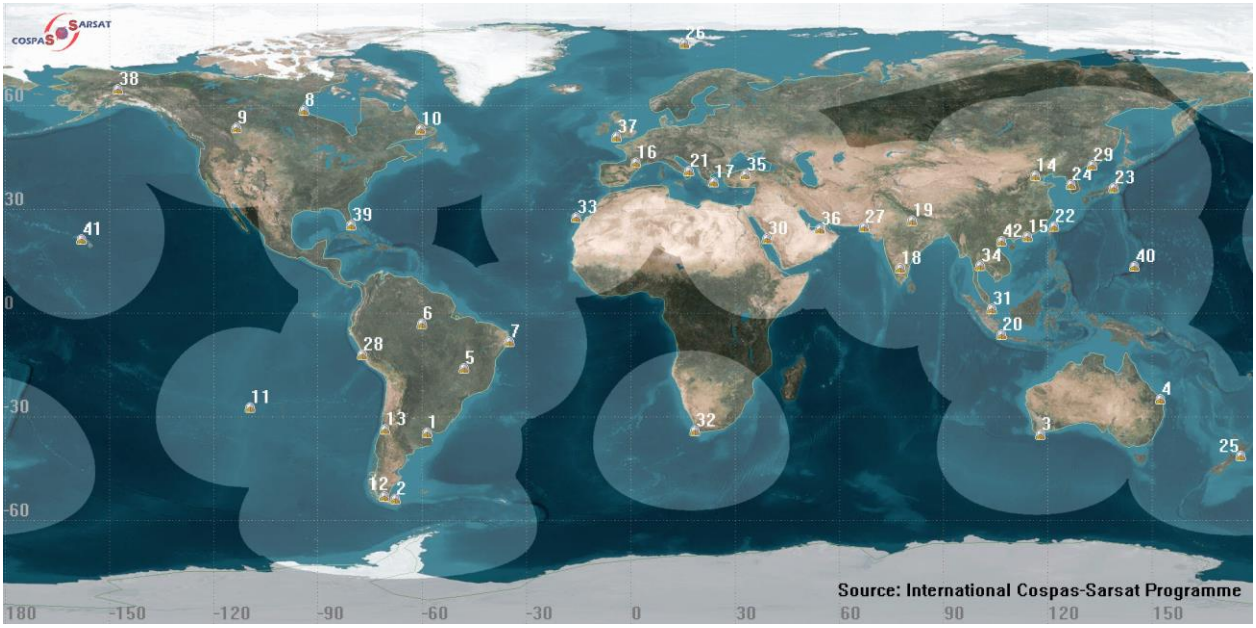
SARP SAR processor (provides local and global mode coverage).

SARR SAR repeater (provides local mode coverage only).

* The New Zealand LEOLUT is directly connected to the Australian MCC (AUMCC).

Figure 6: Satellite Visibility Area of Cospas-Sarsat Operational LEOLUTs (December 2016)

Note: White areas shows where the satellite/LEOLUT have mutual visibility. The LEOSAR SARP stores alerts in memory on the satellite and continuously transmits allowing each LEOLUT to receive and process data from distress beacons anywhere in the world.



LEOLUTs (Figure 6):

1 El Palomar, Argentina	15 Hong Kong, China*	29 Nakhodka, Russia
2 Rio Grande, Argentina	16 Toulouse, France*	30 Jeddah, Saudi Arabia*
3 Albany, Australia	17 Penteli, Greece	31 Singapore
4 Bundaberg, Australia	18 Bangalore, India	32 Cape Town, South Africa
5 Brasilia, Brazil	19 Lucknow, India	33 Maspalomas, Spain
6 Manaus, Brazil	20 Jakarta, Indonesia	34 Bangkok, Thailand*
7 Recife, Brazil	21 Bari, Italy	35 Ankara, Turkey*
8 Churchill, Canada	22 Keelung (ITDC)*	36 Abu Dhabi, UAE
9 Edmonton, Canada	23 Gunma, Japan	37 Combe Martin, UK
10 Goose Bay, Canada	24 Incheon, Korea (Rep. of)	38 Alaska, USA*
11 Easter Island, Chile	25 Wellington, New Zealand	39 Florida, USA*
12 Punta Arenas, Chile	26 Spitsbergen, Norway	40 Guam, USA*
13 Santiago, Chile	27 Karachi, Pakistan	41 Hawaii, USA*
14 Beijing, China (P. R. of)*	28 Callao, Peru	42 Haiphong, Vietnam

Notes: * These LEOLUTs are dual systems.

This map was created assuming a satellite altitude of 850 km with a 5° elevation angle at each LEOLUT.

Table V - GEOSAR Ground Segment Status (December 2016)

Country	GEOLUT Name	Number on Map (Figure 7)	Geostationary Satellite	GEOLUT Status
Algeria	Algiers	1	MSG-3	Not in operation
Argentina	El Palomar	2	GOES-East	In operation, commissioned
Brazil	Brasilia	3	GOES-East	In operation, commissioned
	Recife	4	GOES-East	In operation, commissioned
Canada	Edmonton	5	GOES-West	In operation, commissioned
	Ottawa	6	GOES-East	In operation, commissioned
Chile	Santiago	7	GOES-East	In operation, commissioned
France	Toulouse	8	MSG-3	In operation, commissioned
Greece	Penteli	9	MSG-2	In operation, commissioned
India	Bangalore	10	INSAT-3D	In operation, commissioned
Italy	Bari	11	MSG-3	In operation, commissioned
New Zealand	Wellington (1)	12	GOES-West	In operation, commissioned
	Wellington (2)		Louch-5A	Under test with Louch-5A; GOES-West used as a standby satellite when needed
Norway	Fauske	13	MSG-3	In operation, commissioned
Peru	Callao	14	GOES-West	In operation, commissioned
Russia	Moscow	15	Electro-L No.1*	Not in operation, awaiting Electro-L No.1 satellite repositioning
Spain	Maspalomas (1)	16	GOES-East	In operation, commissioned
	Maspalomas (2)		MSG-3	In operation, commissioned
Turkey	Ankara	17	MSG-2	In operation, commissioned
UAE	Abu Dhabi**	18	MSG-3	In operation, commissioned
UK	Combe Martin	19	MSG-3 GOES-East	In operation, commissioned GOES-East used as a standby satellite when needed
USA	Maryland (1)	20	GOES-East	In operation, commissioned
	Maryland (2)		GOES-West	In operation, commissioned

Notes: * See Table III note on Electro-L No.1.

** See Table III note on MSG-1.

Figure 7: GEOSAR Satellite Coverage and GEOLUTs (December 2016)

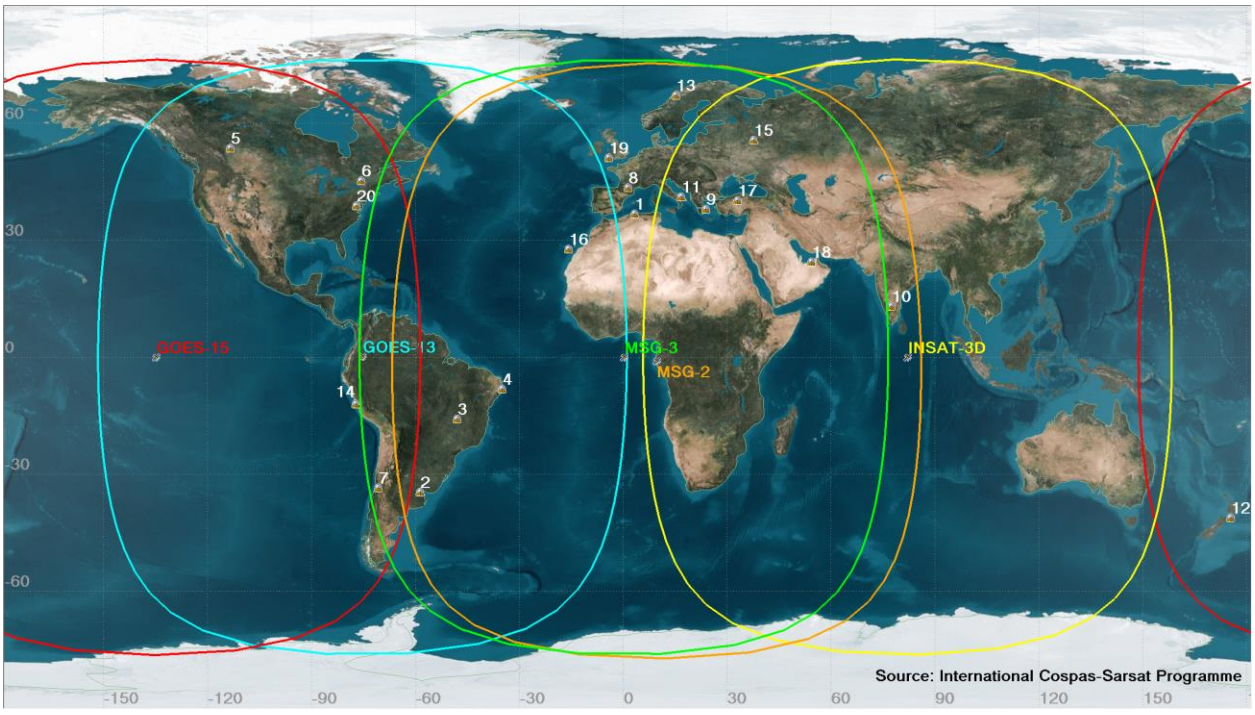


Table VI - C/S Type-Approved 406 MHz Beacons (December 2016)

All information on Cospas-Sarsat type-approved 406 MHz beacons, as well as a list of 406 MHz beacon manufacturers, is available on the Cospas-Sarsat website at www.cospas-sarsat.int.

Table VII - Cospas-Sarsat Documents (December 2016) 1/5

C/S A.000 Series - Operational

Cospas-Sarsat Data Distribution Plan
C/S A.001, Issue 7 - Revision 1, December 2016

Cospas-Sarsat Mission Control Centres Standard Interface Description
C/S A.002, Issue 6 - Revision 1, December 2016

Cospas-Sarsat System Monitoring and Reporting
C/S A.003, Issue 2 - Revision 7, December 2016

Cospas-Sarsat Mission Control Centre Performance Specification and Design Guidelines
C/S A.005, Issue 4 - Revision 1, December 2016

Cospas-Sarsat Mission Control Centre Commissioning Standard
C/S A.006, Issue 4 - Revision 1, December 2016

C/S D.000 Series - IBRD

Functional Requirements for the Cospas-Sarsat International 406 MHz Beacon Registration Database
C/S D.001, Issue 2 - Revision 1, October 2014

Cospas-Sarsat International 406 MHz Beacon Registration Database (IBRD), Software Maintenance Manual
C/S D.002, Issue 1, November 2005

Cospas-Sarsat International 406 MHz Beacon Registration Database (IBRD), System Maintenance Manual
C/S D.003, Issue 1 - Revision1, October 2013

Operations Plan for the Cospas-Sarsat International 406 MHz Beacon Registration Database
C/S D.004, Issue 1 - Revision 5, October 2013

C/S G.000 Series - General

Introduction to the Cospas-Sarsat System
C/S G.003, Issue 6 - Revision 2, October 2014

Cospas-Sarsat Glossary
C/S G.004, Issue 2, December 2016

Cospas-Sarsat Guidelines on 406 MHz Beacon Coding, Registration and Type Approval
C/S G.005, Issue 2 - Revision 7, October 2014

Table VII - Cospas-Sarsat Documents (December 2016) 2/5

C/S G.000 Series - General (Cont.)

Handbook on Distress Alert Messages for Rescue Coordination Centres (RCCs), Search and Rescue Points of Contact (SPOCs) and IMO Ship Security Competent Authorities
C/S G.007, Issue 2, December 2016

Operational Requirements for the Cospas-Sarsat Second Generation 406 MHz Beacons
C/S G.008, Issue 1 - Revision 3, October 2014

Action Plan in the Event of Possible LEOSAR Degradation Prior to MEOSAR Full Operational Capability
C/S G.009, Issue 1, December 2015

C/S P.000 Series - Programme

The International Cospas-Sarsat Programme Agreement
C/S P.001, 1 July 1988

Procedure for the Notification of Association with the International Cospas-Sarsat Programme by States Non-Party to the Cospas-Sarsat Agreement
C/S P.002, December 1992

Arrangement between Canada, the Republic of France, the Russian Federation and the United States of America Regarding the Headquarters of the International Cospas-Sarsat Programme
C/S P.005, 5 April 2005

Understanding between the Cospas-Sarsat Programme and the Gouvernement du Québec Concerning Exemptions, Fiscal Advantages and Courtesies Accorded to the Programme, Representatives of Member States and Officials of the Secretariat
C/S P.006, 17 May 2005

Guidelines for Participating in the Cospas-Sarsat System
C/S P.007, Issue 5, October 2009

Arrangement on Cooperation between the Cooperating Agencies of the Parties to the International Cospas-Sarsat Programme Agreement and the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) on the EUMETSAT Contribution to the Cospas-Sarsat GEOSAR System
C/S P.008, 25 October 2010

Understanding between the States Parties to the International Cospas-Sarsat Programme Agreement and the Republic of India concerning the Association of the Republic of India with the Cospas-Sarsat Programme as a Provider of Geostationary Satellite Services for Search and Rescue (GEOSAR)
C/S P.009, 25 March 2007

List of States and Organizations Associated with the Cospas-Sarsat Programme
C/S P.010, December 2016

Cospas-Sarsat Programme Management Policy
C/S P.011, Issue 1 - Revision 9, December 2015

Table VII - Cospas-Sarsat Documents (December 2016) 3/5

C/S P.000 Series - Programme (Cont.)

Cospas-Sarsat Secretariat Management Guide
C/S P.012, Issue 1 - Revision 1, November 2005

Declaration of Intent for Co-operation on the Development and Evaluation of the Medium Earth Orbit Search and Rescue (MEOSAR) Satellite System between the Co-operating Agencies of the International Cospas-Sarsat Programme and the Galileo Joint Undertaking
C/S P.014, 14 December 2006

Cospas-Sarsat Quality Manual
C/S P.015, Issue 1 - Revision 2, October 2010

Cospas-Sarsat Strategic Plan
C/S P.016, Issue 1 - Revision 6, December 2016

C/S R.000 Series - Reports

Cospas-Sarsat Report on System Status and Operations
C/S R.007, No.32: January - December 2015

Summary Report of the 406 MHz Geostationary System Demonstration and Evaluation
C/S R.009, October 1999

Cospas-Sarsat Meteosat Second Generation (MSC) GEOSAR Performance Evaluation Plan
C/S R.011, Issue 1 - Revision 1, October 2003

Cospas-Sarsat 406 MHz MEOSAR Implementation Plan
C/S R.012, Issue 1 - Revision 12, December 2016

Cospas-Sarsat Meteosat Second Generation (MSG) GEOSAR Performance Evaluation Report
C/S R.013, Issue 1 - Revision 1, October 2006

Cospas-Sarsat INSAT GEOSAR Performance Evaluation Plan
C/S R.014, Issue 1, October 2009

Cospas-Sarsat INSAT GEOSAR Performance Evaluation Report
C/S R.015, Issue 1, October 2009

Cospas-Sarsat Electro GEOSAR Performance Evaluation Plan
C/S R.016, Issue 1 - Revision 1, October 2011

Second Generation 406 MHz Beacon Implementation Plan
C/S R.017, Issue 1 - Revision 6, December 2016

Cospas-Sarsat Demonstration and Evaluation Plan for the 406 MHz MEOSAR System
C/S R.018, Issue 2 - Revision 4, December 2016

Table VII - Cospas-Sarsat Documents (December 2016) 4/5

C/S R.000 Series - Reports (Cont.)

Cospas-Sarsat Electro GEOSAR Performance Evaluation Plan
C/S R.019, Issue 1, October 2012

Cospas-Sarsat Louch GEOSAR Performance Evaluation Plan
C/S R.020, Issue 1, October 2012

Cospas-Sarsat MEOSAR System Demonstration and Evaluation Phase I Report
C/S R.021, Issue 1, December 2015

C/S S.000 Series - Secretariat

Handbook of Beacon Regulations
C/S S.007, Issue 1 - Revision 9, July 2016

C/S T.000 Series - Technical

Specification for Cospas-Sarsat 406 MHz Distress Beacons
C/S T.001, Issue 4, December 2016

Cospas-Sarsat LEOLUT Performance Specification and Design Guidelines
C/S T.002, Issue 4 - Revision 2, October 2012

Description of the Payloads Used in the Cospas-Sarsat LEOSAR System
C/S T.003, Issue 4 - Revision 3, December 2016

Cospas-Sarsat LEOSAR Space Segment Commissioning Standard
C/S T.004, Issue 2 - Revision 4, December 2016

Cospas-Sarsat LEOLUT Commissioning Standard
C/S T.005, Issue 3 - Revision 1, October 2009

Cospas-Sarsat Orbitography Network Specification
C/S T.006, Issue 2 - Revision 3, October 2013

Cospas-Sarsat 406 MHz Distress Beacon Type Approval Standard
C/S T.007, Issue 4 - Revision 11, December 2016

Cospas-Sarsat Acceptance of 406 MHz Beacon Type Approval Test Facilities
C/S T.008, Issue 2 - Revision 1, December 2016

Cospas-Sarsat GEOLUT Performance Specification and Design Guidelines
C/S T.009, Issue 1 - Revision 9, October 2014

Cospas-Sarsat GEOLUT Commissioning Standard
C/S T.010, Issue 1 - Revision 7, October 2013

Table VII - Cospas-Sarsat Documents (December 2016) 5/5

C/S T.000 Series - Technical (Cont.)

Description of the 406 MHz Payloads Used in the Cospas-Sarsat GEOSAR System
C/S T.011, Issue 1 - Revision 9, October 2014

Cospas-Sarsat 406 MHz Frequency Management Plan
C/S T.012, Issue 1 - Revision 12, December 2016

Cospas-Sarsat GEOSAR Space Segment Commissioning Standard
C/S T.013, Issue 1- Revision 2, October 2013

Cospas-Sarsat Frequency Requirements and Coordination Procedures
C/S T.014, Issue 2 - Revision 1, October 2010

Cospas-Sarsat Specification and Type Approval Standard for 406 MHz Ship Security Alert (SSAS) Beacons
C/S T.015, Issue 1 - Revision 1, November 2007

Description of the 406 MHz Payloads Used in the Cospas-Sarsat MEOSAR System
C/S T.016, Issue 1 - Revision 2, December 2016

Cospas-Sarsat MEOSAR Space Segment Commissioning Standard
C/S T.017, Issue 1 - Revision 3, December 2016

Specifications for Second-Generation Cospas-Sarsat 406 MHz Distress Beacons
C/S T.018, Issue 1, December 2016

Cospas-Sarsat MEOLUT Performance Specification and Design Guidelines
C/S T.019, Issue 1 - Revision 1, December 2016

Cospas-Sarsat MEOLUT Commissioning Standard
C/S T.020, Issue 1 - Revision 1, December 2016

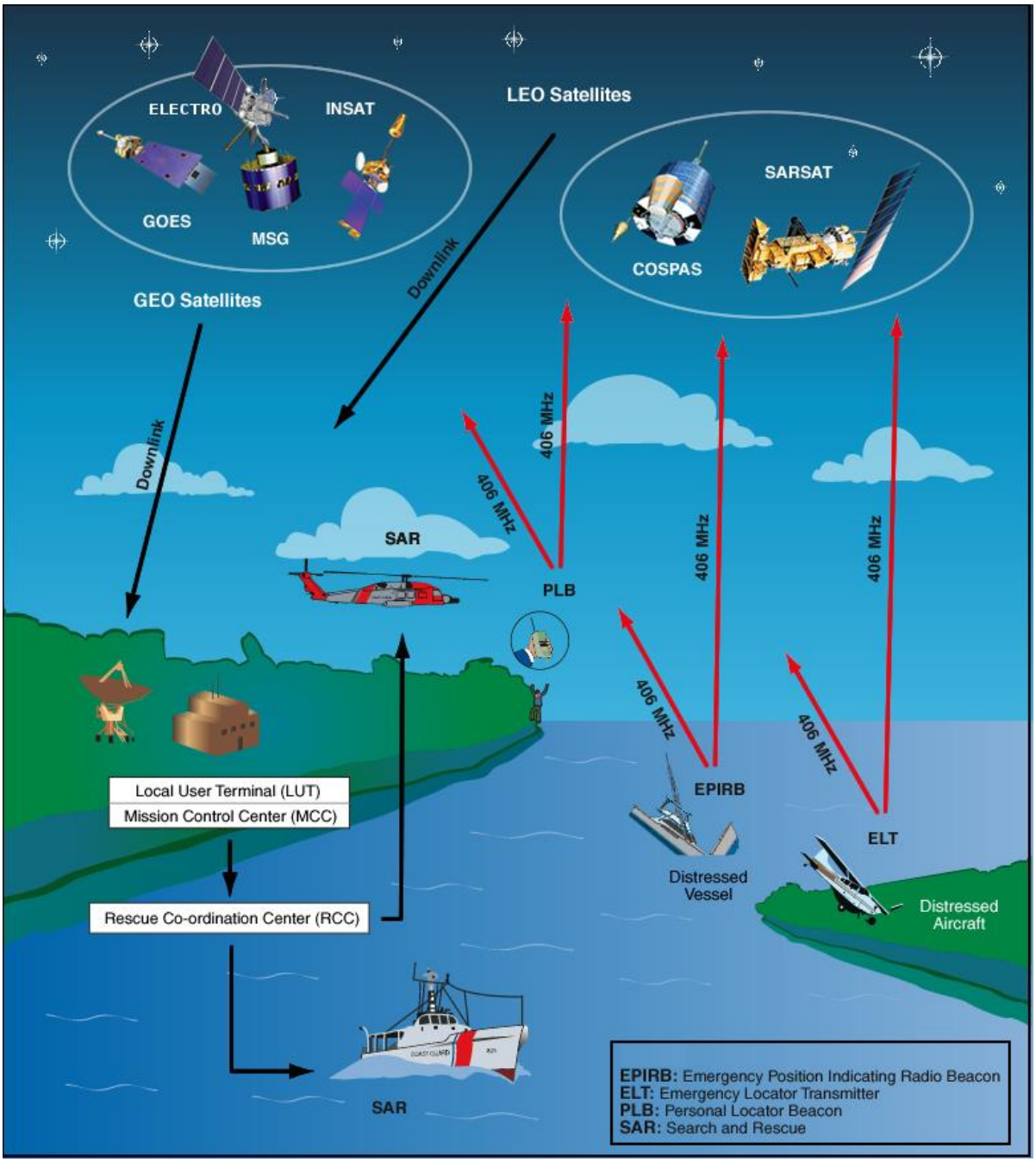
Cospas-Sarsat MEOSAR Reference Beacon Specification and Design Guidelines
C/S T.022, Preliminary Issue A, December 2016

C/S IP Series - Interim Procedures

Interim Procedure for the Determination of Compliance of 406 MHz Beacons Equipped with a TCXO with Cospas-Sarsat Type Approval Requirements
C/S IP (TCXO), Revision 5, October 2013

Interim Procedure for Type Approval of 406 MHz Beacons Equipped with Li-Ion Rechargeable Batteries
C/S IP (LIRB), Revision 4, October 2014

Figure 8: Basic Concept of the Cospas-Sarsat System



Notes:
COSPAS: Space system for the search of vessels in distress (Russia).

LEOSAR: Low Earth Orbit satellite system for SAR.
GEOSAR: Geostationary satellite system for SAR.
GOES: Geostationary operational environmental satellite (USA).
MSG: Meteosat second generation satellite (EUMETSAT).

SARSAT: Search and rescue satellite-aided tracking system (Canada, France and USA).
LEOLUT: Local user terminal in a LEOSAR system.
GEOLUT: Local user terminal in a GEOSAR system.
INSAT: Indian geostationary satellite.

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