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EUR Doc 039

EUROPEAN SEARCH AND RESCUE PLAN (EUR SAR Plan)

Sixth Edition - 2026

December 2025

Prepared by the ICAO European and North Atlantic Office on behalf of the European Aviation System Planning Group (EASPG)

This Plan was developed by the European Search and Rescue Task Force (EUR SAR/TF)

EUROPEAN AND NORTH ATLANTIC OFFICE OF ICAO

International Civil Aviation Organization (ICAO)
European and North Atlantic (EUR/NAT) Office
3 bis, Villa Emile Bergerat
92522, Neuilly-sur-Seine CEDEX
France

E-mail : icaoeurnat@icao.int
Tel : +33 1 46 41 85 85
Web : http://www. Icao.int/EURNAT

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RECORD OF AMENDMENTS

1st Edition, November 2017 is approved. EANPG59 RASG-EUR06 Conclusion/22 refers: a) Publish the EUR Search and Rescue Plan (EUR SAR Plan), version 1.0, as EUR Doc 039; and b) Invite States to continue providing data to populate the SAR Capability Matrix that indicates ICAO Annex 12 compliance not later than 31 March 2018 (Appendix D to the EUR SAR Plan refers)
2nd Edition, May 2019: a) Update to Section 4 "Abbreviations and Acronyms" b) Addition of a note in Appendix A, Chapter 11. c) Several Updates to Appendix D
3rd Edition, December 2021 a) Update to Section 5 "COSPAS-SARSAT System" b) Updates to Appendix D
4th Edition, January 2023 a) Update of references of "EANPG" to "EASPG" b) Updates to Appendix D - SAR Capability matrix table with replies to Letter EUR/NAT 22-0353.TEC (DJA/SAN) of 13/10/2022 from: Albania, Algeria, Armenia, Austria, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Cyprus, Estonia, Finland, France, Greece, Hungary, Israel, Kazakhstan, Kyrgyzstan, Lithuania, Netherlands, North Macedonia, Poland, Republic of Moldova, Romania, Serbia, Slovenia, Sweden, Switzerland, Tajikistan, Türkiye and Ukraine.
5th Edition. October 2023 a) Update to Section 4 "Abbreviations and Acronyms" b) Update to Section 5 "Background information", subsection "Recent ICAO SAR Initiatives" c) Update to Section 6 "Current situation" d) Update to Section 8 "Research and Future Development" by adding a new subsection "Planning for the future" e) Update to Appendix D – SAR Capability matrix table with replies from Croatia and Latvia. f) Addition of Appendix E: Flowchart of Actions following activation of an ADT Device.
6th Edition. December 2026

1. SCOPE OF THE PLAN

Plan Structure

1.1 The European (EUR) Search and Rescue (SAR) Plan (hereinafter referred to as the 'Plan') references different levels. At the higher level are global requirements established by the ICAO Annex 12 to the ICAO Convention on International Civil Aviation (ICAO Doc 7300). Global guidance material is provided by the International Maritime Organization (IMO) and ICAO's joint publication, the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual. Beneath this is regional planning guidance primarily provided by this Plan and other regional guidance material, in order to enable States to define the goals and means of meeting objectives for State planning towards improving EUR States SAR System capability, such as European Air Navigation Plan (EUR ANP) objectives.

1.2 The global air navigation perspective is guided mainly by the *Global Air Navigation Plan* (GANP, Doc 9750), the *Global ATM Operational Concept* (Doc 9854) and the *Global Aviation Safety Plan* (GASP, Doc 10004).

1.3 The scope of the Plan is the identification of:

a) the current status of SAR preparedness of EUR Region States and State SAR arrangements;

b) recommendations for SAR planning and preparedness enhancements, in terms of compliance with Convention on International Civil Aviation, Annex 12, IAMSAR Manual guidance, and accepted best international practice; and

c) recommendations to IMO for harmonised and interoperable delivery of both aeronautical and maritime SAR services

1.4 References in the Plan to 'States' are intended to include Special Administrative Regions and territories.

Plan Review

1.5 As an iterative process, the Plan requires regular updating to keep current with changes in ICAO Annexes and guidance material, the IAMSAR Manual, regional aviation activity, developments in the Air Traffic Management (ATM) system, new technology, political considerations, human performance and lessons learned from actual SAR responses. Plan updates should also focus on the SAR system being an important component of an integrated regional and global air navigation system. It is intended that EASPG and its contributory bodies conduct a complete review every three years from 2019 (or a shorter period determined by EASPG) of the Plan to align with the review cycle of the GANP and the IAMSAR Manual. The review should be guided by a consultative process involving States and relevant International Organisations such as the ICAO and IMO.

2. OBJECTIVES

Introduction

2.1 European States who are signatories to the Chicago Convention accept the responsibility for the provision of SAR services per the requirements of its Annex 12 - Search and Rescue. Increases in aviation traffic throughout the EUR Region places additional importance on the ability for States to be adequately prepared for potentially increased demand for aeronautical SAR services.

2.2 The world's citizens, who frequently fly over EUR region, expect a timely and adequate SAR response to be provided should it be required. States in the region need to be adequately prepared for the provision of efficient and effective SAR services to their responsible SRRs. To assist in achieving this, it is essential for States to cooperate, collaborate and in some cases assist with resources to neighbouring and sub-regional RCCs after request from the appropriate RCC.

2.3 The ICAO Regional Office maintains a record, as reported to ICAO by the States themselves, of the status of individual State SAR compliance against Annex 12 requirements. There are significant variations in the level of State SAR capability across the region with significant gaps requiring urgent action, especially in high seas areas. A number of States have not reported their status at all to ICAO. The ICAO Universal Safety Oversight Audit Programme – Continuous Monitoring Approach (USOAP-CMA) also provides a useful tool to States to self-assess their individual SAR system status.

2.4 There is a high risk of negative consequences to a State which does not provide an adequate SAR response to an aircraft or vessel in distress in their area of responsibility. The primary concern is the higher probability for loss of lives which may have been saved. The ability for news to spread rapidly in today's technologically connected world also provides the opportunity to States to improve the response to quickly reach a global audience resulting in damage to that State's reputation internationally and potential economic loss to sensitive State industries such as tourism and transport. However, the benefits of an effective and reliable SAR service to States offers many advantages. Besides reduction of loss of life and human suffering, other advantages include the following aspects:

a) Safer and more secure environment for aviation related industries, commerce, recreation and travel. Increased safety may promote use and enjoyment of aviation environment, tourism and economic development. This is especially true when the SAR system is associated with programmes aimed at preventing or reducing the effects of mishaps, sometimes referred to as "Preventative SAR."

b) Availability of SAR resources often provides the initial response and relief capabilities critical to saving lives in the early stages of natural and man-made disasters. SAR services offer an integral part of local, national and regional emergency management systems.

c) Well performed SAR operations can provide positive publicity about situations which may otherwise be viewed negatively. This can lead to improved public confidence in that State's reputation and commitment to providing a safe environment, leading to increased confidence to conduct activities beneficial to that State's economy.

d) As SAR is a relatively non-controversial and humanitarian mission, it provides an excellent opportunity to enhance cooperation and communication in general between States and organisations, not only for SAR. It can also foster better working relationships between States and organisations at the local, national and international levels, including civil/military cooperation.

2.5 In 2014 Malaysia Airlines flight MH370, a Boeing 777 with 239 persons on board, disappeared when flying from Kuala Lumpur, Malaysia to Beijing, China, and Air Asia QZ8501 was lost on a flight from Surabaya to Singapore. The MH370 event resulted in probably the largest and most expensive search response for a missing aircraft in human history. Together with Air France flight AF447, which crashed into the Atlantic Ocean in 2009, these tragedies have highlighted vulnerabilities in the current air navigation system, including the SAR system, which have hampered timely identification and localisation of aircraft in distress, hindering effective response efforts. ICAO is taking measures to assist with addressing these vulnerabilities through the Global Aeronautical Distress and Safety System (GADSS); however, this also requires improvements in global SAR capability.

2.6 The Plan is designed to address both civil and military SAR authorities and has been developed in consultation with EUR States, SAR administrations and other technical bodies. States should consult with stakeholders nationally, regionally and internationally as appropriate and determine actions in order to commit to achieving the objectives of this Plan in order to meet the minimum SAR service requirements in accordance with ICAO Annex 12. It is noted that where a State is unable to meet minimum SAR Standards and Recommended Practices (SARPs) of ICAO Annex 12, Article 38 to the ICAO Convention requires notification to ICAO of the differences between its own practice and that established by the international standards.

2.7 States should aim to meet their obligations progressively in a strategically structured and planned manner with improvement goals set for short term, medium term and long term implementation. It may be more productive to make gains in small steps commencing with measures that are more easily achievable in the short term and have a minimal cost, progressing to measures which will take longer to implement over the medium to long term. Short term measures that may be implemented relatively easily include the establishment of a national SAR Committee and ensuring SAR Agreements[1] (**APPENDIX** refers) are in place with neighbouring States allowing for seamless cross-border transit of search assets engaged in SAR activity. A SAR agreement can be in the form of 'Letter of Agreement' (LOA) or a Memorandum of Understanding (MoU) or other acceptable term indicating a lower form of arrangement for operational matters between SAR service providers (such as RCCs and/or RSCs) or a more formal agreement for arrangements between governments concerned, according to the national legislation of every State.

2.8 A regional approach can reduce cost and improve distribution of distress alerts, coverage and services. For example, it is usually less operationally complex, and more economical and effective, for States within a region to share the use and support of long-range terrestrial and satellite communications facilities and communications registration databases to support SAR. States can sometimes support each other with SRUs to reduce the total number of units needed for adequate coverage and readiness. Training and other types of resources can be shared to everyone's benefit. Nevertheless, participation in a regional system may not be the best approach for every State.

2.9 Each SRR is associated with an RCC. Search and rescue regions should, in so far as practicable, be coincident with corresponding flight information regions and, with respect to those areas over the high seas, maritime search and rescue regions. The purpose of having an SRR is to clearly define who has primary responsibility for co-ordinating responses to distress situations in

[1] *The EUR SAT Task Force, in its second meeting, agreed to use the SAR Agreement template, presented at IAMSAR Manual, Appendix I, Edition 2016,* **APPENDIX** *of this Plan refers.*

every area of the world and to enable rapid distribution of distress alerts to the proper RCC. For this reason, SRRs shall not overlap, and neighbouring regions shall be contiguous. Aeronautical SRRs often are aligned with FIRs for specific reasons but experience shows that in most areas there are operational advantages in harmonizing aeronautical and maritime SRRs.

2.10 Also, a regional SAR plan is a way to provide a framework to guide national SAR authorities towards attaining this co-operation. Once a regional SAR plan is developed, high-level commitment between States can be reached by means of written agreement or through a multilateral MOU.

2.11 All States are encouraged to use the guidance provided within this Plan as a way forward, thus ensuring a timely, well-coordinated response to any aviation SAR incident within their area of responsibility, or during cooperative responses involving more than one Search and Rescue Region (SRR) and under coordination of the appropriate RCC.

Plan Objective

2.12 The objective of this SAR Plan is to provide a framework to assist EUR States to meet their SAR needs and obligations accepted under the Convention on International Civil Aviation and to improve the cooperation between aeronautical and maritime SAR services, within their area of responsibility and across other ICAO regional boundaries, where applicable.

2.13 The Plan is to be consistent with the SARPs of ICAO Annex 12 - Search and Rescue, and aligned where appropriate with the SAR technical and operational standards and guidance of the IAMSAR Manual.

2.14 The Plan recognizes that ICAO serves as the forum for the implementation of practical and achievable measures to improve SAR services for international civil aviation.

2.15 Both ICAO and IMO share the same goal of ensuring that SAR services are available globally wherever people sail or fly. The SAR services that ICAO and IMO promote are complementary and offer tangible opportunities to derive mutually beneficial efficiencies for both the aviation and maritime transportation SAR systems globally, regionally and nationally. For this reason ICAO and IMO jointly developed IAMSAR Manual and working together under ICAO/IMO Joint Working Group on SAR (ICAO/IMO JWG) to assist State authorities to economically establish effective SAR services, to promote harmonization of aeronautical and maritime SAR services, and to ensure that persons in distress will be assisted without regard to their locations, nationality, or circumstances. State authorities are encouraged to promote, where possible, harmonization of aeronautical and maritime SAR services.

2.16 The objective of this Plan includes encouraging States to take advantage of such efficiencies. States should, where practicable, align their SAR systems with the guidance provided by the IAMSAR Manual, which also provides the benefit for standardised SAR coordination between RCCs and across SRR lines of delineation.

2.17 State SAR plans describe how SAR services will be provided, organized and supported in order for States to meet their obligations under the relevant Conventions. Search and Rescue Coordinators (SC) and SAR managers oversee and implement these plans. National SAR plans should be signed by all Government agencies which can provide or support SAR services. These agencies should all be represented on the State’s Search and Rescue Coordinating Committee (SCC), which oversees these plans.

Note: The SC should not be confused with the operational nature of the SAR Mission Coordinator (SMC). The primary purpose of the national SC is to enable a whole-of-government approach to make efficient and effective use of a State's capabilities for SAR.

Plan Development

2.18 The Plan was developed as part of a suite of EUR Air Navigation Plan. In addition, the Plan should consider the European ATM Master Plan, the Air Traffic Flow Management (ATFM) Framework and the Regional Contingency Arrangements, so the Plan should not be considered in isolation.

2.19 The Plan is expected to provide guidelines and recommendations for EUR States to consider for the enhancement and improvement of national, sub-regional and regional SAR capability including:

a) compliance with ICAO Annex 12 SARPs;

b) identification and addressing of deficiencies in SAR capability;

c) continuous and coherent development of SAR capability;

d) harmonisation of aeronautical and maritime SAR services;

e) civil/military cooperation and coordination (including SAR response, information sharing and use of airspace);

f) remote high seas SAR response capability (including provision for Mass Rescue Operations (MRO);

g) establishment and review of arrangements between neighbouring States to expeditiously facilitate SAR coordination, operations and cooperation across regional boundaries including contingency procedures;

h) facilitation of the implementation of SAR systems and services including the establishment of JRCCs where suitable and practicable;

i) supporting the sharing of SAR information, data and expertise;

j) integration with ATM systems and future ATS developments, where appropriate;

k) monitoring of outcomes from EASPG Sub-Groups, other ICAO Region SAR groups, ICAO/IMO Joint Working Group on Harmonisation of Aeronautical and Maritime SAR (JWG) and related forums for issues that may affect the Plan;

l) facilitation of a continuous reporting mechanism of State SAR capability, ICAO Annex 12 compliance and SAR performance data to the EUR/NAT Regional Office through appropriated contributory groups (APPENDIX refers);

m) implementation of a SAR System Improvement and Assessment measures, including Safety Management System, Quality Assurance programme and risk assessment;

n) coordinating the introduction of new technology affecting the regional SAR system;

o) sharing future research and development concepts;

p) seeking efficiencies, through the coordination and facilitation of concurrent regional SAR meetings, seminars, workshops and exercises, including joint ICAO and IMO, and sub-regional forums where practicable; and

q) conducting efficient SAR Exercises (SAREXs) that identify improvements and latent problems.

2.20 The Plan elements should be periodically reviewed by the EUR SAR TF, EASPG PCG and EASPG to ensure that they remain relevant to the SAR system, particularly for new technology developments and alignment with other relevant global SAR plans.

3. EXECUTIVE SUMMARY

3.1 ICAO reported the following statistics regarding global international civil aviation in 2024:

a) Flights: 37.09 million (8.98 million EUR region),

b) Passengers: 4.528 billion,

c) Accidents: 95,

d) Fatal accidents: 10,

e) Fatalities: 296,

f) Global accident rate: 2.56 accidents per million flight departures.

3.2 According to ICAO Big Data, the global passenger traffic continued to grow in 2024 with around 4.528 billion passengers transported worldwide, up from 4.17 billion passengers in 2023 and surpassed the pre-pandemic (2019) level of 4.5 billion passengers. The passenger traffic in 2024 increased 8.6 per cent from 2023. The number of flight departures for scheduled commercial operations also increased by 5.2 per cent with over 37 million departures in 2024, compared to over 35 million in 2023, though slightly lower than the pre-pandemic (2019) level. In the ICAO EUR region, the number of flight departures also increased by 5.7 percent with 8.98 million departures in 2024, compared to 8.5 million in 2023.

3.3 EUR States who are signatories to the Chicago Convention accept the responsibility for the provision of SAR services to their area of responsibility per the requirements of Annex 12 - Search and Rescue. Increases in aviation traffic throughout the EUR region places additional importance on the ability for States to be adequately prepared for potentially increased demand for aeronautical SAR services.

3.4 Considering that some EUR States have the challenging responsibility for providing a SAR service over vast and remote areas, the importance for States with high seas to cooperate, collaborate and share resources with their neighbouring and regional/sub-regional RCCs is essential.

3.5 High-level support might be necessary from regional bodies that can effectively support the Plan’s implementation, such as the:

a) Cospas-Sarsat Programme,

b) Galileo Search and Rescue (SAR) Service,

c) Search and rescue Europe – Annual Summit, and

d) Regional SAR Committee (Steering Board).

SAR System Funding

3.6 The level of funding provided for effective SAR systems is a matter of concern for all senior decision-makers. The resources should be sufficient to develop and/or maintain the required SAR service per their obligations as signatories to the relevant aeronautical SAR conventions. This may require the development of business cases to governments outlining where additional funding is required.

3.7 Such business cases should include consideration of amendments to existing State SAR arrangements which may provide more efficient delivery of the SAR service by better utilisation of existing resources (for example by establishing Joint RCCs (JRCCs), or additional funding sources where required (for example charging a levy to aircraft operators for providing the SAR service or seeking company sponsorship for SRUs).

Note: States should be aware that in accordance with EUROCONTROL document "PRINCIPLES FOR ESTABLISHING THE COST-BASE FOR EN ROUTE CHARGES AND THE CALCULATION OF THE UNIT RATES" costs of SAR service provided to civil aviation could be allocated to a cost base for en-route charges.

Joint Rescue Coordination Centres (JRCCs)

3.8 Where practicable, States are encouraged to examine the potential benefits that may be derived by the establishment of JRCCs to incorporate the aeronautical and maritime SAR activities and/or facilities of ARCCs/ARSCs and MRCC/MRSCs. JRCCs have the potential to not only provide a more effective SAR service to both the aeronautical and maritime industries, but also offer potential financial efficiencies by releasing funds for improvements in other SAR areas.

Note: Where JRCCs are not practicable, development of facilities and procedures which provide and/or enhance effective SAR coordination and collaboration between the ARCCs and MRCCs in support of each other, to provide an efficient and integrated State SAR system for both aeronautical and maritime SAR incident response.

4. ABBREVIATIONS AND ACRONYMS

ACO	aircraft co-ordinator
ADS-B	Automatic Dependent Surveillance-Broadcast
ADS-C	Automatic Dependent Surveillance-Contract
ADT	Autonomous Distress Tracking
ANP	(Regional) Air Navigation Plan
ANSP	Air Navigation Service Provider
ARCC	Aeronautical Rescue Coordination Centre
ARSC	Aeronautical Rescue Sub-Centre
A/SMC	Assistant SMC
ASPOCS	Administrative Single Point of Contact for SAR
ATC	Air Traffic Control
ATS	Air Traffic Services
ATFM	Air Traffic Flow Management
ATM	Air Traffic Management
ATSU	Air Traffic Service Unit
BEIDOU	Global navigation satellite system operated by the People's Republic of China
CAD	Civil Aviation Directorate of the Republic of Serbia
CONOPS	Concept of Operations
COSPAS-SARSAT	International Satellite System for Search and Rescue Système international de satellites pour les recherches et le sauvetage Международная Спутниковая Система Поиска и Спасания
EANPG	European Air Navigation Planning Group (former PIRG)
EASPG	European Aviation System Planning Group
EASPG PCG	EASPG Programme Coordination Group
EI	Effective Implementation
ELT	Emergency Locator Transmitters
ELT (DT)	Emergency Locator Transmitter (Distress Tracking)
EUR SAR TF	European Search and rescue task Force
EPIRB	Emergency Position Indicating Radio Beacon
FIR	Flight Information Region
GADSS	Global Aeronautical Distress and Safety System
GALILEO	Global navigation satellite system operated by the European Commission
GANP	Global Air Navigation Plan
GASP	Global Aviation Safety Plan
GEOSAR	Geostationary Earth Orbit Search and Rescue
GLONASS	Global Navigation Satellite System (operated by the Russian Federation)
GPS	Global Positioning System (operated by the United States of America)
GNSS	Global Navigation Satellite System
IAMSAR	International Aeronautical and Maritime Search and Rescue
IMO	International Maritime Organization
iSTARS	Integrated Safety Trend Analysis and Reporting System
JRCC	Joint (aeronautical and maritime) Rescue Coordination Centre
JWG-SAR	ICAO/IMO Joint Working Group on the Harmonisation of Aeronautical and Maritime Search and Rescue
LADR	Location of an Aircraft in Distress Repository
LEOSAR	Low-altitude Earth Orbit Search and Rescue
LKP	Last known position
LoA	Letter of Agreement
MCC	Mission Control Centres
MEL	Minimum Equipment List
MEOSAR	Medium-altitude Earth Orbit Search and Rescue
MoU	Memorendum of Understanding

MRCC	Maritime Rescue Coordination Centre
MRO	Mass Rescue Operations
MRSC	Maritime Rescue Sub-Centre
OJT	On-the-Job Training
OSC	on-scene co-ordinator
PIRG	ICAO – Planning and Implementation Regional Group
PLB	Personal Locator Beacon
PQs	Protocol Questions
PSCS	Preferred SAR Capability Specifications
RCC	Rescue Coordination Centre
RPK	Revenue Passenger Kilometres
RPAS	Remotely Piloted Aircraft Systems
RSC	Rescue Sub Center
SAR	Search and Rescue
SARPs	Standards and Recommended Practices
SAREX	SAR Exercises
SARSAT	Search and Rescue Satellite-Aided Tracking
SCC	Search and Rescue Coordinating Committee
SEND	Satellite Emergency Notification Device
SMC	Search and Rescue Mission Coordinator
SMS	Safety Management System
SOP	Standard Operating Procedure
SPOC	SAR Point of Contact
SRR	Search and Rescue Region
SRU	Search and Rescue Unit
SWIM	System Wide Information Management
USOAP-CMA	Universal Safety Oversight Audit Programme – Continuous Monitoring Approach
VSP	Variable Set Parameter

5. BACKGROUND INFORMATION

Improvement Drivers

5.1 The ICAO USOAP-CMA focuses on a State's capability in providing safety oversight by assessing whether the State has effectively and consistently implemented the critical elements of a safety oversight system and determining the State's level of implementation of ICAO's safety –related SARPs, including Annex 12 Search and Rescue, and associated procedures and guidance material.

5.2 The ICAO EUR/NAT Regional Office maintains an Air Navigation Deficiencies List. This list is based on the uniform methodology for identification, assessment and reporting of such deficiencies as described in Appendix A of the EASPG Handbook. By identifying and addressing specific deficiencies, EASPG and its Sub-groups facilitate the development and implementation of action plans by States to resolve identified deficiencies, where necessary.

5.3 The ANS Deficiency information had been populated into the ICAO *iSTARS* (Integrated Safety Trend Analysis and Reporting System) database and was accessible through the ICAO Secure Portal. The intention is to merge this data with the CMA Data, and manage the deficiencies using a single web-based process.

EUR SAR System Monitoring

5.4 Significant Annex 12 compliance weaknesses had been identified within the EUR region based upon information provided (and in many cases not provided) by States to the ICAO Regional Office. This regional information status of the SAR capability and SAR agreements was recorded in tables made available to EANPG (now EASPG), which was expected to be enhanced with the integration of SAR elements into the Seamless ATM on-line monitoring system.

ICAO Global Aeronautical Distress and Safety System

5.5 The tragedies of Air France flight AF447 in 2009 and Malaysia Airlines flight MH370 in 2014 had highlighted vulnerabilities in the current air navigation system which had hampered timely identification and location of aircraft in distress, particularly in remote oceanic areas. This had significantly hindered effective SAR efforts and recovery operations.

5.6 The four main functions of the GADSS are aircraft tracking, location of an aircraft in distress, Post Flight Localization (PFL) and flight recorder data recovery. These functions are enabled through GADSS information management [such as the ICAO OPS Control Directory and the Location of an Aircraft in Distress Repository (LADR)] which allows for the sharing of information and efficient communication between stakeholders.

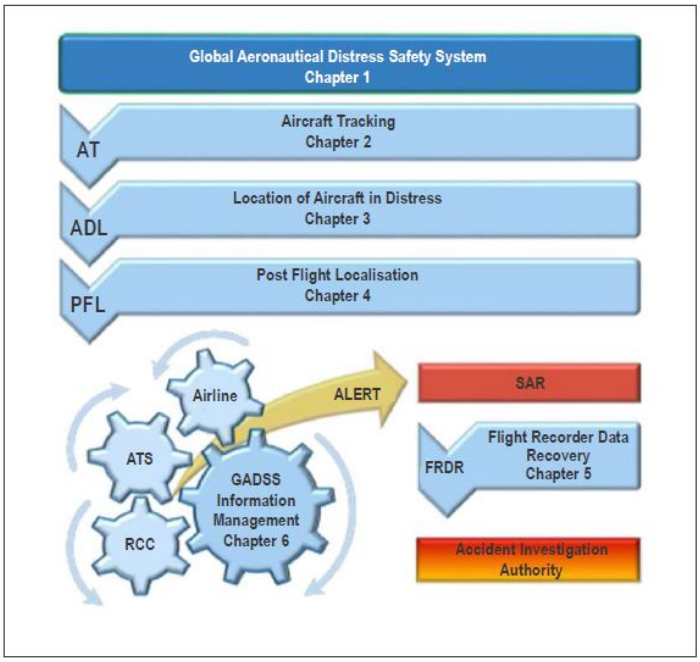


Figure 1. High-level overview of the GADSS

5.7 The aircraft tracking function provides an automated position report every 15 minutes or less, which can help reduce the time to resolve the status of an aircraft or, if necessary, help locate an aircraft.

5.8 The location of aircraft in distress function uses an Autonomous Distress Tracking (ADT) system which has the capability to automatically determine and transmit the position of an aircraft with an in-flight distress condition, at least every minute, in a manner which is resilient to failures of the aircraft's electrical power, navigation and communication systems. This function is expected to significantly improve the ability for SAR services to locate such aircraft in distress and rescue survivors.

5.9 Following an aircraft accident, PFL provides accurate aircraft position information by means of an ELT and/or homing signals. To assist with localization of wreckage, this function specifies a number of requirements for ELTs and Underwater Locating Devices (ULDs). To ensure accident investigation authorities obtain timely access to flight recorder information, new types of large aircraft will be equipped with a means to recover the flight recorder data in a timely manner.

5.10 RCCs need to implement updated SAR practices and procedures for the GADSS. RCCs need to be able to respond to ADT activations, including that the aircraft could remain in flight across multiple SAR regions. RCC staff also need to be provided with training to ensure understanding of the ADT system and processes. The GADSS relies on implementation by SAR services of:

a) accurate delimitation of SAR regions to ensure proper transfer of the SAR operation to the next responsible RCC;

b) effective and efficient coordination, and procedures between the ATS unit and responsible RCC; and

c) harmonized operations between aeronautical and maritime SAR services.

5.11 ICAO has not prescribed a specific technology for ADT. One ADT technology

solution now in operational use is a new Cospas-Sarsat 406 MHz beacon type, the Emergency Locator Transmitter for Distress Tracking, or ELT(DT). The Cospas-Sarsat System section below has further information on ELT(DT)s.

5.12 ADT notifications from the ELT(DT) will be delivered to RCCs by both the existing Cospas-Sarsat Data Distribution System and the ICAO LADR. RCCs and ATS units need to implement procedures that take these two delivery methods into account to ensure effective coordination aligned with ICAO Annexes 11 and 12 provisions on alerting and SAR services.

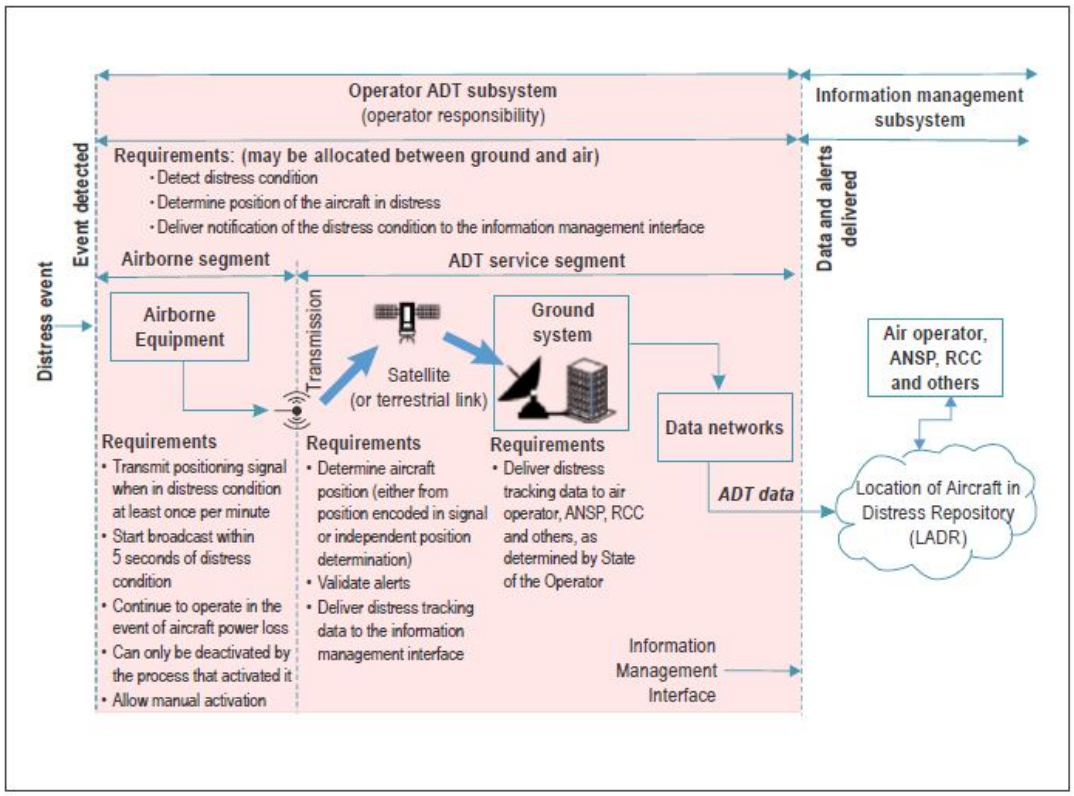


Figure 2. ADT end-to-end system

5.13 The IAMSAR Manual provides a comprehensive overview of ADT. The IAMSAR Manual Volume II Appendix V Autonomous distress tracking of aircraft in flight includes anticipated flow of events arising from an ADT device activation that serves as a flowchart of actions. Per the requirements of ICAO Annex 12, each RCC, and as appropriate, RSC is to:

a) maintain up-to-date contact details in the OPS Control Directory; and

b) subscribe and maintain access to the location of an aircraft in distress repository.

5.14 The Manual on Global Aeronautical Distress and Safety System (ICAO Doc 10165) provides guidance and information on the implementation and operation of the GADSS and is intended to facilitate the uniform application of SARPs in ICAO Annex 6 – Operation of Aircraft, Part I – International Commercial Air Transport – Aeroplanes and provisions in the Procedures for Air Navigation Services - Aircraft Operations (PANS-OPS, ICAO Doc 8168). Additional practical guidance is provided in the LADR and OPS Control User Manual developed by ICAO and EUROCONTROL which is available within the LADR application Help menu.

COSPAS-SARSAT System

5.15 COSPAS-SARSAT Programme has developed major enhancements to its distress-alerting System of value to all System users, including the aviation industry. One is the introduction of a new space-segment architecture based primarily on MEOSAR payloads aboard satellites of the People's Republic of China's BEIDOU system, the European Commission's Galileo system, the Russian Federation's GLONASS and the United States' GPS.

5.16 This architecture permits determination of a distress incident location (independent of any location data possibly transmitted in the beacon message if processed) beginning with the first burst from the distress beacon. This means near real-time and very frequent delivery of distress alerts.

5.17 The SAR/Galileo and SAR Glonass space segment, and SAR/Galileo ground segment provide a Return Link Service (RLS) that, among other possible uses, acknowledges back to the beacon to confirm that the distress message has been received and the location has been processed by the Cospas-Sarsat System. First type of RLS does not confirm that the distress message was well received by the SAR authorities or a SAR response has been undertaken. The 406 MHz beacon distress data distribution is illustrated in the figure below.

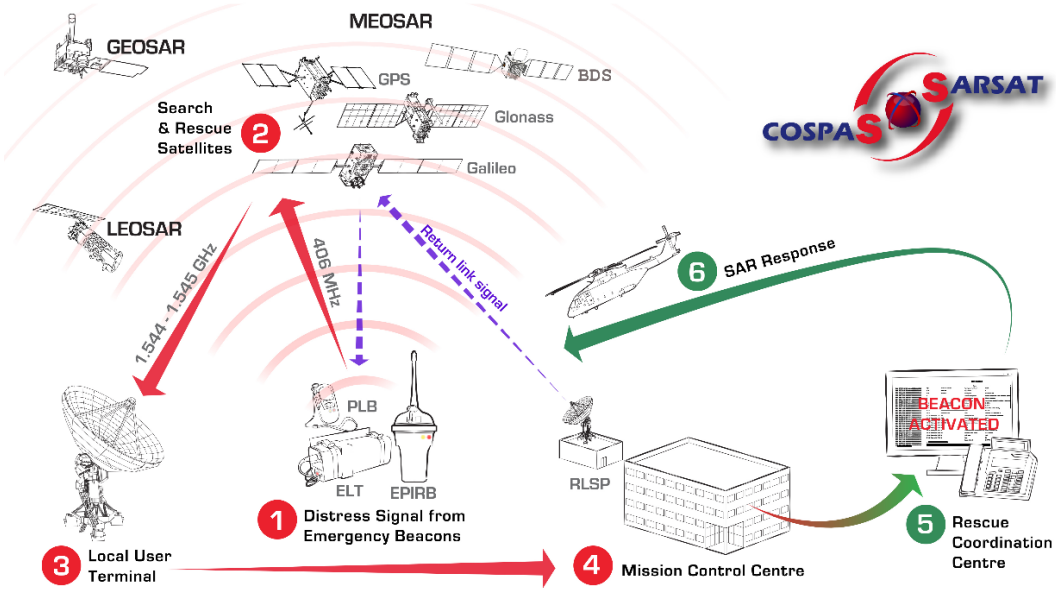


Figure 3. Cospas-Sarsat System Overview

5.18 A specific type of in-flight autonomously-triggered ELT (the ELT (DT)) designed to be activated prior to a crash by the aircraft avionics when certain flight parameters are exceeded and to function in compliance with the GADSS requirements for the location of an aeroplane in distress has operated since January 2023 for beacons designed on first-generation technology and from January 2024 for beacons designed on second-generation technology. Another major development was the completion of specifications for the second generation 406 MHz beacons (SGB), including ELTs and ELT(DT)s. This new generation of beacons should further improve speed and accuracy in locating an activated distress beacon. The period from beacon activation to first transmission was expected to be reduced from 50 seconds to three seconds. The Cospas-Sarsat ELT(DT) distress data distribution to the LADR, in addition to the normal distribution process, is illustrated in the figure below.

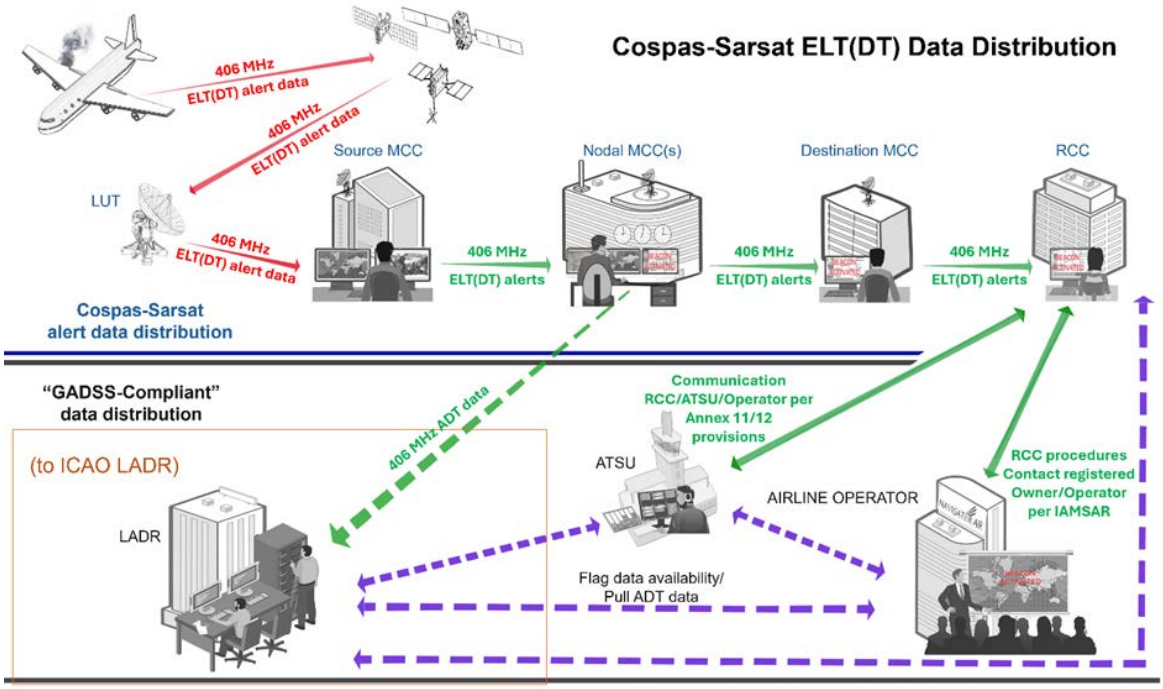


Figure 4. Cospas-Sarsat ELT (DT) Data Distribution to both RCCs and the LADR

5.19 States needed to continue to ensure that aviators were aware that 121.5 MHz beacons cannot be detected by the global COSPAS-SARSAT System and were only intended as a final homing signal for 406 MHz beacons for SAR units on scene.

5.20 States also need to ensure the critical requirement to provide for a suitable, clear and simple means for aircraft owners to register and keep updated their 406 MHz distress beacon details.

System Operation

5.21 From September 1982 to December 2024, the Cospas-Sarsat System provided assistance in rescuing at least 67,000 persons in 21,000 SAR events. Further details on the latest statistics are available on the COSPAS-SARSAT website at: https://www.cospas-sarsat.int/en/documents-pro/system-data

406-Mhz Beacons

5.22 Based on information received from manufacturers on beacon production and a standard assumption made about beacons removed from the market at the end of an assumed ten-year service life, there were approximately 2.1 million 406-MHz beacons in use worldwide at the end of 2024. Using a different method of estimation, based on registration rates reported by Administrations, the total population of beacons that potentially activate is over 3.4 million (up 8%), with over 500,000 ELTs.

Note: A summary of regulations regarding the carriage of 406 MHz beacons is in document C/S S.007 Handbook of Beacon Regulations. Information on national Beacon Registration Point of Contact and SAR Points of contact (SPOCs) are at:

https://www.cospas-sarsat.int/en/beacons-pro/beacon-regulations-pro/ibrd-user-information-for-professionals

https://www.cospas-sarsat.int/en/contacts-pro/contacts-details-all

Information on IBRD is at:

https://www.406registration.com/

5.23 Entries in the beacon register should be available to both aeronautical and maritime RCCs on a 24-hour basis (Annex 12 – *Search and Rescue* refers, although Annex 10 establishes the registration requirement). States should note that Annex 12 should be read in conjunction with elements of the following ICAO Annexes:

Annex 6 – *Operation of Aircraft*;

Annex 10 – *Aeronautical Telecommunications*;

Annex 11 – *Air Traffic Services;* and

Annex 14 – *Aerodromes*.

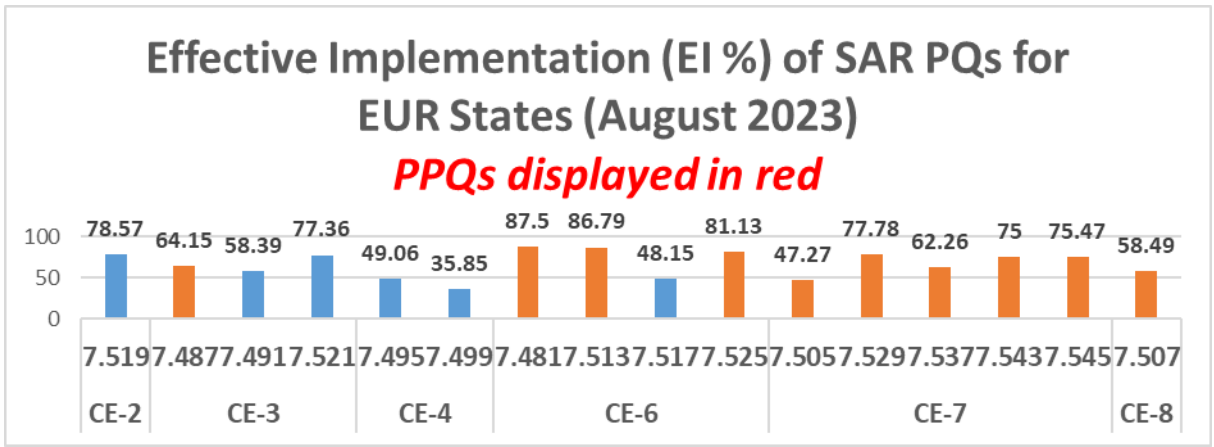
6. CURRENT SITUATION

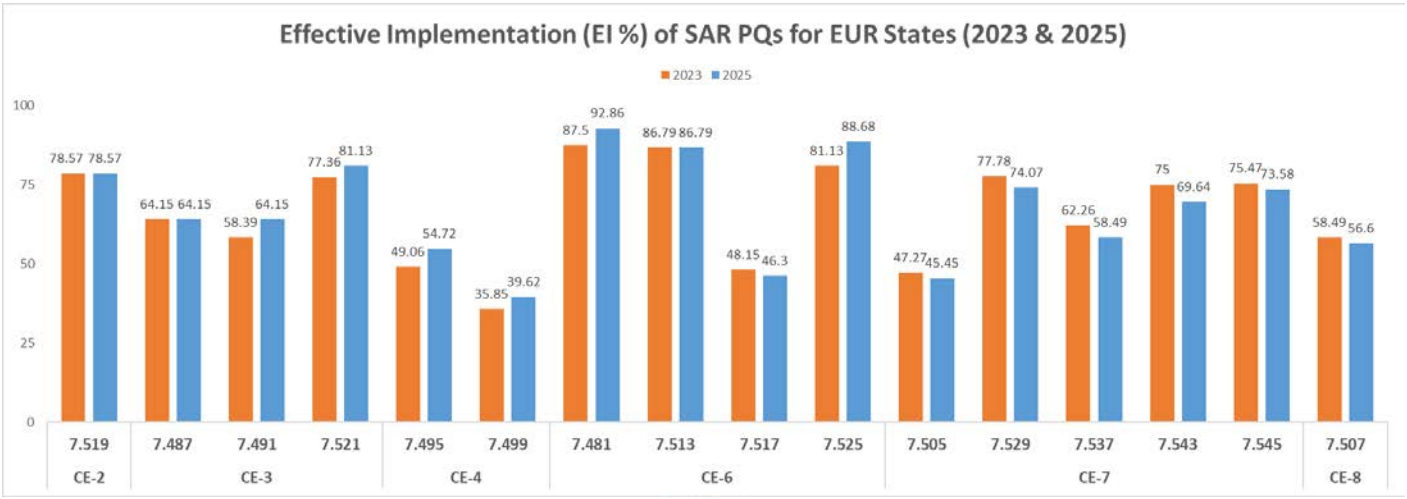
Global Situation

6.1 The latest (October 2025) ICAO USOAP data indicates the level of effective implementation of SAR provisions for EUR States is at 67.25%, representing a slight increase from 2023 (67%).:

EUR SAR Analysis

6.2 The graph below shows the EI level per each USOAP protocol question for EUR States.





6.3 From this analysis, it appeared that the major areas of weakness is in coordination with adjacent States and their appropriate RCCs, effective SAR oversight, and training of SAR staff that provide the SAR services in their area of responsibility. Therefore, a focus on the minimisation of barriers associated with the efficient cross-border coordination of SRU (such as pre-arranged approval) and other coordination mechanisms, including updates of SAR agreements was vital. Finally, there was a need for improved systemic approaches to training for both national SAR inspectors and personnel responsible for the provision of SAR services, including the regular organisation of effective SAR exercises that test systems and personnel.

6.4 The overall SAR capability matrix table of EUR/NAT States, ICAO Annex 12 compliance, is indicated in **APPENDIX** . The information presented in the table should be updated regularly by the States.

EUR SAR Coordination Forums

6.5 The EUR Region will benefit from the cooperation and coordination of States and International Civil Aviation Organization involved in the EUR SAR/TF. After the EUR SAR/TF completes its tasks, the establishment of permanent joint ICAO Regional SAR Forums to enable collaboration and cooperation on high seas, including adjacent ICAO regions should be considered, such as:

a) ICAO/IMO JWG;

b) Cospas-Sarsat Programme and regional meetings; and

c) Regional SAR Advisory Committee -RASARAC (CAD Serbia and EUROCONTROL initiative).

6.6 There were several regional initiatives for cooperative support and development already being undertaken in the EUR Region to assist with aeronautical SAR capability enhancement. For example the Regional SAR Advisory Committee.

6.7 Such improvement programs could result from a request by a State needing assistance, or from ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) Online Framework, or by the users of the SAR system itself (RCCs), that identifies weaknesses in the State's SAR capability. The programs can be conducted by a 'Go Team' that normally consists of external SAR experts from ICAO, or through a cooperative effort by several States or external agencies or international organisations/programme such as COSPAS-SARSAT.

Barriers

6.8 The following potential issues should be considered to ensure they do not become barriers to the achievement of the expected SAR capability:

a) absence of established appropriate legal framework designating, recognizing, supporting and giving authority to national SAR authorities, RCCs and SMCs;

b) inadequate funding and equipping of SAR authorities and in particular, resourcing of RCCs;

c) absence of an appropriate SAR organizational framework;

d) absence of a national SAR committee;

e) lack of clarity of responsibilities for each component of the SAR system;

f) absence of bilateral/multi-lateral/international SAR Agreements;

g) inadequate civil/military cooperation; and

h) complacency about, or lack of recognition of, the importance or priority given to SAR;

i) absence of alleviation for civil SAR aircraft from the 'rules of the air'.

Global and Regional SAR Issues

6.9 States should monitor outcomes from global and regional ICAO SAR forums to ensure their State SAR authorities are updated on relevant SAR developments, otherwise State planning may not be synchronized with external international expectations, including users. Such forums may include EASPG and its Sub-Groups, other ICAO Region SAR groups, the ICAO/IMO JWG, ICAO High Level Safety Conferences, etc.

6.10 The provision of sufficient resources was critical in their area of responsibility (national responsibility), including:

a) Financial:

- funding for 24 hour RCC facility and staff;
- funding for use/hire of search and rescue units; and
- Provision of a suitable administrative process enabling financial support including the ability for SAR authorities to quickly authorise payments required for emergency response aircraft, vessels and supporting logistics such as fuel or other legal issues.

b) RCC personnel- a suitable number of trained and skilled staff, supplemented by a pool of trained RCC support staff where appropriate;

c) RCC facilities:

- appropriate RCC facility space;
- minimum RCC tools (such as current charts, plotting equipment, documentation, etc.);
- identify and task available SRUs;
- Aircraft and vessel tracking information, Automatic Identification System, etc.;
- reliable and rapid H24 communications, and a suitable means to-
  - receive and communicate distress alerts
  - communicate with ATS units, other RCCs/RSCs, Coast Radio Stations, COSPAS-SARSAT Mission Control Centres (MCCs), military units, medical services, meteorological offices, etc.;
- information technology:
  - RCC workstation computers;

- Software including basic databases, drift modelling, incident management, etc.;

d) Contingency- back-up RCC facility, or arrangement with another RCC or other national operation centre as a contingency against inability to operate from the primary RCC due to the need to evacuate or loss of systems, etc.;

e) Search and Rescue Units (SRUs):

- available and suitable SAR units (e.g. aircraft, helicopters, vessels, land units, medic teams etc.);
- funding arrangements/agreements for hiring/payment/sharing of SRUs to permit rapid deployment; and
- Available and suitable SAR survival equipment for delivery by aircraft to survivors and to assist SAR coordination efforts (e.g.: droppable life rafts and survival supplies, etc.);

f) Training support:

- SCs, SMCs and ONCs staff – basic and ongoing;
- Operational facilities which need training include:
  - aeronautical units
  - maritime units
  - land units
  - specialized units (para-rescue, paramedical, desert rescue, mountain rescue, urban SAR teams that deploy to disasters), divers, etc.
  - supply depots; and
- RCC support staff – basic and refresher.
- SAR inspectorate staff– basic and ongoing.

7. PERFORMANCE IMPROVEMENT PLAN

Preferred SAR Capability Specifications (PSCS)

*Note 1: PSCS are the **non-mandatory** expectations on all EUR Region States to enhance SAR systems in order to meet a minimum level of SAR capability, with a high degree of interoperability and harmonisation, and interoperability with other ATM components such as Air Navigation Service Providers (ANSPs), aerodrome operators and between aeronautical and maritime SAR services. PSCS were not expected to contravene existing Annex 12 standards.*

Note 2: EUR SAR Plan Version 1.0, approved in November 2015, included the expectation that all PSCS would be implemented by 29 November 2019. Noting that, at the time of publication of this sixth edition of the Plan, the implementation is several years in the past, and also noting that further changes to PSCS are expected to be incremental and relatively minor in scope, dates for future implementation are not included. All States should note that EASPG for non-implementation of 90% of the elements of this Plan will continue to be raised and maintained by the ICAO EUR-NAT Regional Office.

7.1 *Legal Framework and Structure Planning*: All States should develop statutes and related provisions that establish or enhance the legal foundation for a State SAR organization and its framework, resources, policies and procedures to, where appropriate to:

a) ensure that it is party to, and/or aligned with the following Conventions, Regional Agreements, Manuals as applicable:
   i. Convention on International Civil Aviation 1944 and its Annexes;
   ii. Regional Air Navigation Agreement approved by ICAO Council;
   iii. EUR SAR Regional Agreement approved by ICAO Council; and
   iv. IAMSAR Manual

b) unless delegated by written agreement between States, establish an entity that provides, on a 24-hour basis, aeronautical SAR services within its territories and designated area of responsibility/SRR;

c) when appropriate, establish a national SAR coordinating committees (SCCs) consisting of SAR system stakeholders to enable a whole-of-government approach;

d) empower SAR Mission Coordinators with the authority to adequately carry out their responsibilities;

e) establish an Administrative Single Point of Contact for SAR (ASPOCS) for non-urgent, administrative matters, such details to be submitted to the ICAO Regional Office;

f) conduct studies to check the feasibility for, and develop an implementation plan if practicable, the integration of aviation and maritime SAR activities, when applicable, and as far as practicable, civil and military activities, including joint training and familiarisation of staff and review of documentation to ensure harmonisation of procedures, and joint exercises;

g) conduct studies to align, as far as practicable, aeronautical and maritime Search and Rescue Regions (SRRs); and SRRs and Flight Information Regions (FIRs); and

h) wherever applicable establish a single State SAR Plan that:
   i. designates the responsible RCC(s), RSC(s) and 24-hour SPOC
   ii. designates the responsible RCC(s), RSC(s) and 24/7 Cospas-Sarsat SAR POC(s);
   iii. establish the MCC-SPOC agreement for Cospas-Sarsat data delivery;
   iv. describes the relevant aeronautical and maritime SRRs, including the

coordinates and geographical chart depiction of the aeronautical and maritime SRR and neighbouring aeronautical and maritime SRRs;

v. establishes an Administrative Single Point of Contact for SAR (ASPOCS) for non-urgent, administrative matters;

vi. details the National SAR Committee;

vii. details the governmental and non-governmental agencies with authority and responsibility for SAR coordination within its territories and designated area of responsibility;

viii. details required and available SAR facilities, personnel, and equipment;

ix. details the SAR manuals, plans and procedures for national and regional cooperative SAR response arrangements;

x. details the SAR personnel training and competency programme, qualification standards, SAR certification if applicable and SAR cooperation training;

xi. details the SAR agreements required;

xii. is electronic and accessible on the Internet, such details to be submitted to the ICAO EUR/NAT Regional Office; and

xiii. is monitored by quality assurance processes.

7.2 *SAR Plans and Procedures*: All States should take into consideration:

a) establish aerodrome emergency plans that provide for co-operation and co-ordination between the aerodrome operator and RCCs. The plans should include clear responsibilities for response to emergencies in proximity to, but outside, the aerodrome boundaries including adjacent waterways;

b) establish SAR arrangements with States having adjoining SRRs or FIRs, including trans-regional neighbours (the agreements should include clear responsibilities for overlapping or non-adjoining aeronautical and maritime SRRs);

c) provide up to date information on State SRU location and capability on those SRUs that may operate into other State SRRs;

d) establish pre-arranged procedures with neighbouring States for cross-border SAR responses to allow entry of another State's SRUs into their State territory (this should be included in bilateral SAR agreements);

e) provide up to date cross-border information on SAR capability in GEN. 3.6 of Aeronautical Information Publication. (pre-arrange procedures for cross-border SAR responses (this should be included in bilateral SAR agreements);

f) establish a program for regular SAREX, which may be a desktop communications exercise, a co-ordination exercise with simulated response to a crisis based on a series of scenarios, a full exercise (this expectation may be fulfilled by participating in a sub-regional SAREX that tests the State's SAR system; and

g) adjacent RCCs should periodically execute SAR exercises together to develop and maintain efficient co-operation and co-ordination between their services. These exercises need not always be on a large scale, but at least those SAR units which are likely to operate together should engage periodically in co-ordinating exercises. Much may be learned by exchanging information on training methods (e.g., programmes, literature, and films) and visits between staff of adjacent SRRs. It's essential that these exercises be coordinated from the appropriate RCC which is responsible for the SRR.

h) establish RCC plans for response to Mass Rescue Operations (MROs) integrated with national disaster plans;

i) establish SAR Operations Plans between the State's SAR authorities and Government, military and commercial operators, including those with a capability to assist with an air, maritime or land SAR capability, or other support capability (e.g. communications, meteorology, logistics, etc), including:

i. procedures for cooperation and deployment of foreign SRUs or other national services;

ii. provision for translators/liaison Officers/Embassy Officers for the daily tasking of the SRUs at the RCC;

iii. provision of information for logistic and administrative support (hotels, fuel, security passes, food, medicine, etc.);

iv. planning and arrangements that ensure the availability of State and other SRU assets, especially over-water rotary wing capability where applicable, to support a timely and effective SAR response;

v. instructions on communication (ops normal reports, sightings, etc.) for search planning, command and control to foreign SRUs; and

vi. daily end of day report by SRUs to the RCC (via mobile, email, fax, etc.)

a) establish SAR Alerting procedures which:

i. are tested and fully integrated with RCC procedures so that RCCs are rapidly notified of any SAR event 24 hours a day in their area of responsibility;

ii. include procedures for joint aeronautical and maritime distress alert notification, including reliable delivery and acknowledgement of COSPAS-SARSAT distress alerts, support and response to both aviation and maritime SAR incidents (for JRCC) or accordingly; and

iii. where applicable, include protocols for civil and military support and sharing of information.

b) establish arrangements for situations where RCCs need to conduct SAR operations (in accordance with ICAO Annex 12) at the same time as the accident investigation authority needs to conduct search and recovery operations (in accordance with ICAO Annex 13).

Note: a sample MoU between the SAR service and the accident investigation authority is provided in the IAMSAR Manual Volume I Appendix P.

SAR Facilities and Resources

7.3 *RCC Facility*: All States should ensure that RCCs are of sufficient size with adequate provision for operational positions designed in accordance with human factors principles (such as human machine interface) for a major search involving civil and military assets where applicable, and facilities such as:

a) Workstations, telephones (with international access for SMCs), plotting tables, wall notice/status boards, computer, and communications equipment and systems, briefing/debriefing areas room for storage including incident records and recorders, RCC staff break and rest facilities;

b) computer resources which may provide support to RCCs with incident management, plotting, search planning, mapping, contact databases, web-based information, etc.;

c) charts, electronic or paper, which:

i. apply to SAR (aeronautical, nautical, topographic and hydrographic);

ii. depict SRR, neighbouring SRRs, FIR(s), SAR resources and made available for

all relevant aeronautical and maritime RCCs, ATS units, aircraft operators; and

iii. provide a means of plotting;

d) ability to reliably receive and acknowledge distress alerts and notifications 24 hours a day;

e) ability to connect to the ICAO OPS Control Repository with up-to-date RCC contact details;

f) ability to connect to the ICAO/EUROCONTROL Location of an Aircraft in Distress Repository (LADR);

g) maritime broadcast facilities, if applicable;

h) a means of recording, playback and archiving of communications;

i) shipping/vessel communications and maritime broadcast facilities such as Coast Radio Stations, RCC radio and satellite communications, marine radio networks, if applicable;

j) aircraft communications – via ATS units, aircraft operators, satellite communications or direct between RCC and aircraft;

k) access to aircraft and ship tracking data, e.g., Automatic Identification System allowing rapid identification of potential aircraft and vessels that may divert to assist if applicable;

l) a means of obtaining meteorological information – forecast, present and historical data;

m) if applicable drift modelling software;

n) if applicable, ocean data including sea temperature, currents, winds, tides, etc.;

o) if applicable, SAR Datum Buoys, preferably with satellite tracking capability; and

p) RCC documentation and reference material such as plans of operation, procedures manuals, guidance material, ICAO and IMO references, SAR agreements; and

q) COSPAS-SARSAT equipment and reference material.

7.4 *Personnel and Training* All States should, where applicable to maintain a 24-hour service:

a) provide adequate ATC resources (either an ATS supervisor or other staff) that can provide relief within Area Control Centres (ACCs) to allow timely SAR alerts and information to RCCs;

b) provide sufficient RCC staffing;

c) provide a sufficient number of trained specialists RCC officers including SMCs and Assistant SMCs (A/SMCs);

d) develop SAR personnel position descriptions that detail responsibilities and eligibility criteria for recruitment of operational staff;

e) develop a comprehensive training programme that includes SAR training for:

i. RCC SAR Mission Coordinators (SMCs) based on a competency-based assessment approach to ensure technical and English language proficiency, cyclical (periodic) instruction that provides continuous training to ensure competency is maintained, and a system for maintaining training records; and

ii. SRU staff, including military personnel.

f) facilitate RCC staff to be proficient in the English language; and

g) facilitate a programme of regular liaison visits between relevant RCCs, ATC units, airline operating centres, and possibly supporting Cospas-Sarsat MCC, in order to

understand those organizations, facilities and capabilities (reference Annex 12, paragraph 3.1.9).

7.5 *Oceanic Capability*: Where applicable, States should establish additional oceanic SAR capability as far as practicable to ensure a timely and adequate SAR response is available to all oceanic areas of their SRRs. This may be met through cooperative arrangements with neighbouring States or other RCCs and such regions shall not overlap and shall be contiguous.

7.6 *Search and Rescue Units*: All States should establish capabilities enabling:

a) availability and deployment of suitably crewed, trained and equipped SRUs, public and/or private, civil and military, for rapid SAR response;

b) availability and deployment of SRU that may be in use for another primary purpose but made available to RCCs for SAR purposes on an as needed emergency basis (vessels, aircraft and land units);

c) protocols for civil SAR authorities to request the assistance of military assets, and similarly military SAR authorities to request civil assets;

d) a communication means and information protocols between the State's Aeronautical and Maritime SAR Authorities;

e) cooperative use and/or sharing of SAR assets with protocols incorporated within National SAR Plans and bilateral SAR Agreements;

f) pre-arranged government authority for funding of costs associated with hiring of SRUs, and payment for critical supporting logistics such as fuel, to avoid any delays in response availability, if needed;

g) aircraft with the ability and regulatory approval to safely conduct SAR missions.

Note: guidance material on SAR aircraft capability is found in the IAMSAR.

7.7 *Distress Beacons*: All States should:

a) where separate ARCCs and MRCCs exist with responsibility for coincident aviation and maritime SRRs, coordinate distress beacon alert procedures to ensure all RCCs are aware of any distress beacon activations within their areas to avoid duplication of response. For example, MRCCs should ensure their procedures alert ARCCs and ATS units to any EPIRB, PLB and ELT activations.

b) have a reliable distress beacon registration system that:

i. provides a readily-accessible mechanism (preferably one that is available by Internet as well as other conventional means) to enable distress beacon owners to fulfil their obligation to register ELTs, EPIRBs and PLBs, and update the registration data as information changes (e.g., change in ownership);

ii. is available to RCCs 24 hours a day and includes up-to-date registration details for all national civil and military ELTs, EPIRBs and PLBs;

c) take steps (including education) required to prepare for, and to implement changes related to, the introduction of new beacon's generation or capabilities (e.g.: update beacon registration systems to be compatible with new beacon hexadecimal identifications) and the transition to the MEOSAR satellite architecture (e.g.: use of information coming from updated local user terminals and mission control centres to properly receive and manage MEOSAR data), in accordance with COSPAS-SARSAT specification documents

(http://www.cospas-sarsat.int/en/documents-pro/system-documents); and

Note 1: Note: Information on beacon registry is in document C/S S.007 Handbook of Beacon Regulation. Information on national Beacon Registration Point of Contact and SAR Points of contact

(SPOCs) are at at:

https://www.cospas-sarsat.int/en/beacons-pro/beacon-regulations-pro/ibrd-user-information-for-professionals, and

https://www.cospas-sarsat.int/en/contacts-pro/contacts-details-all Information on IBRD is at:

https://www.406registration.com/

Note 2: *Incorrect disposal of distress beacons often causes the deployment of scarce and often expensive SAR resources only to have the beacon located as a non-distress event in a rubbish dump or similar location. This also creates the risk of SAR resources being diverted away from a real emergency should it arise at the time. Beacon batteries are hazardous items which should be disposed of in an environmentally friendly manner.*

7.8 *Contingency Facilities*: All States should ensure there are established contingency facilities, or when a SAR service is not able to be provided, procedures in place for the temporary delegation of the SAR responsibility to another appropriate national body or State. All States should test their contingency arrangements periodically, but not less than once every six months.

SAR Information

7.9 *Provision of Information*: All States should ensure the:

a) establishment of a centralised information source publishing all EUR State Aeronautical Information Publication (AIP) information as required by ICAO Annex 15 Appendix 1, page APP 1-8 including:

i. The agency responsible for providing SAR services;

ii. The area of SAR responsibility where SAR services are provided;

iii. The type of SAR services and facilities provided including indications where SAR aerial coverage is dependent upon significant deployment of aircraft;

iv. SAR agreements;

v. The conditions of SAR facility and service availability; and

vi. SAR procedures and signals used;

b) establishment of an Internet-based SAR information sharing system (with security protocols) to share SAR activity with States, National Authorities and key stakeholders participating in a SAR activity (the information sharing system should include a means of handling media and next of kin enquiries, and recognise the need to avoid premature media statements); and

c) maximum practicable cooperation between State entities in the provision of accurate and timely information when required, including from military sources except where national security could be adversely affected.

7.10 *SAR Facilities and Equipment Lists*: All States should maintain informed a current, comprehensive list of State SAR Facilities, SAR Equipment, and SAR Units (SRUs), including joint or shared facilities and equipment, and provide the info via AIP/SAR Section.

7.11 *SAR Library*: All States should:

a) establish a web-based SAR Library, or cooperate by contributing to an Internet-based EUR resource; and

b) ensure that each RCC and SAR Authority has ready access to a current copy (either electronic or hard copy) of the following reference documents at a minimum:

i. ICAO Annex 12;

ii. IAMSAR Manual Volumes I, II and III;

iii. International Convention on Maritime SAR (SAR Convention);

iv. EUR SAR Plan/electronic Air Navigation Plan; and

v. relevant regional, national and agency SAR documents.

SAR Improvement

7.12 *Search and Rescue Exercises (SAREX)*: A SAREX (SAR Exercise) provides unique Search and Rescue Training experience regarding the operational, technical and planning aspects. All States should conduct regular SAREX (at least once every two years) to test and evaluate existing coordination procedures, data and information sharing and aeronautical SAR response arrangements involving:

a) both aeronautical and maritime SAR authorities including both civil and military agencies as applicable, and related bodies such as Air Navigation Service Providers (ANSPs) and Airline Operations Centres (AOCs);

b) where appropriate, cross-aeronautical SRR coordination; and

c) SAREX effectiveness through a post-SAREX review and written report, completed to ensure that deficient areas or latent problems are identified and remedied.

The SAREX outcomes and lessons learned should be reported to the EASPG through the EASPG PCG.

Note 1: a SAREX template is provided in the IAMSAR Manual Volume I Appendix O Sample template for a joint SAREX.

Note 2: SAREX should test the SAR system, including unannounced alerts that allow an actual search (whether it is a desktop or a physical operation), to be conducted which will indicate weaknesses in the system, possibly including latest system implementation such as GADSS/GMDSS requirements.

Note 3. *SAREX should not be confused with, or take the form of, simulated crash fire exercises such as for Aerodrome Emergency Procedures that do not have a search component.*

Note 4: Real SAR incident responses which include an adequate post-response review and evaluation with lessons learned may replace the need for a SAREX.

7.13 *SAR Quality Assurance*: All States should implement SAR System Improvement and Assessment measures, including Safety Management and Quality Assurance systems accordingly with ICAO standards, that:

a) provide performance and safety indicators, including post-incident/accident lessons learned and management reviews (RCC and SAR System Continuous Improvement process), and feedback from RCC staff, SAR system users or SAR stakeholders;

b) identifies risk and corrective and preventive actions that prevent or minimise risk and the possibility of substandard SAR performance;

c) establishes an internal quality assurance programme, which includes regular internal audits of the RCC, SAR operations, SAR facilities and procedures that are conducted by trained auditors;

d) ensures the person or authority responsible for internal quality assurance within the entity responsible for SAR services has direct access to report to the Head of the entity responsible for SAR services on matters of quality assurance; and

e) where appropriate, provides submissions to the ICAO to share lessons learned and experiences with other global States for the continuous improvement of the worldwide SAR system.

Note 1: Resourcing of SAR system audit arrangements could be mitigated by States entering cooperative arrangements, including sub-regional regulation, between States for auditing of each other's SAR systems to share expertise and costs.

Note 2: Provisions of Annex 19 for a Safety Management System (SMS) may apply where a SAR service is provided under the authority of an ATS provider (Annex 19, Chapter 3, 3.1.3 e refers).

Note 3: Peer review, either external or internal, may provide a useful internal quality assurance tool.

7.14 *SAR Management Review*: All States should conduct an annual or more frequent analysis of their current State SAR system to identify specific gaps in capability against the minimum requirements of Annex 12 to:

a) enable the ICAO EUR SAR data to be updated to accurately reflect the State's capability;

b) identify SAR research and development programmes, especially those which could be conducted if possible in cooperation with other States;

c) establish a common set of basic SAR system statistics, which include:

i. number of aeronautical SAR incidents per year;

ii. number of lives at risk versus number of lives saved;

iii. type of aircraft in distress (light, heavy, glide, etc.);

iv. number of electronic alert (ELT and ELT(DT), EPIRB, PLB) have received / TRUE-FALSE;

v. Number versus Distribution in SRR;

vi. time from first alert to tasking the SRU;

vii. time from first alert to arrival on scene of first SRU; and

viii. time from first alert to rescue.

d) plan for any necessary improvements to gradually build and improve capability over time, which would be detailed in the State SAR Plan; and

e) regularly review and update SAR agreements as appropriate.

Note 1: The National Self-Assessment found in IAMSAR Manual Vol I Appendix H and the ICAO USOAP-CMA Protocol Questions for SAR may assist States with their reviews.

Note 2: The number of incidents should identify the type (e.g.: COSPAS-SARSAT alert, ATS alerts, etc.) and outcome of SAR incidents.

7.15 *SAR Promotion*: All States should conduct SAR promotional programs (e.g. Seminars, Workshops and public safety campaigns) to:

a) encourage higher SAR preparedness by persons that may require SAR services through public safety campaigns aimed at preventing persons getting into distress situations (i.e.: 'preventative SAR');

b) ensure the support of government decision-makers for SAR facilities and improvements, in particular adequate funding availability;

c) assist media to understand SAR operations in order to minimise the need for explanations during SAR responses;

d) recognise improvement in State SAR systems;

e) enhance cooperation between SAR services and:

i. civil, military, police and other agencies;

ii. ANSPs;

iii. aerodrome and port operators (hydroplanes);

iv. aircraft operators;

v. meteorological agencies;

vi. accident investigation agencies;

vii. government and non-government agencies affected by SAR operations, in particular large scale national and international responses involving whole of government agencies; and

viii. other States.

Note: Social media may be an effective means of SAR promotion that reduces the workload of SAR staff during major SAR responses.

8. RESEARCH AND FUTURE DEVELOPMENT

Planning for the Future

8.1 States should monitor developments such as improvements to existing and new technologies and other emerging matters which may impact on the SAR system of the future as part of State, regional and global aviation strategic direction and planning. This may include 8.2 matters such as:

a) the need to cater for increased growth or changes in air and maritime traffic through SAR regions which may increase the demand, or present changed capability requirements, for SAR services. This may include, for example, new air routes using longer range aircraft into more remote areas or increased numbers of, and/or larger, cruise ships; and

b) new technology such as:

- remotely Piloted Aircraft Systems (RPAS) and Advanced Air Mobility (AAM)
- UAS,
- autonomous vessels,
- commercial space vehicles carrying people,
- new distress alerting devices and systems (e.g., ELT(DT)s, Second Generation beacons (SGBs), SENDs),
- new tracking systems,
- new electronic search equipment (such as optical radar systems),
- online virtual conferencing platforms,
- smartphone apps,
- artificial intelligence,
- data driven decision making tools.

c) SAR intervention in and around offshore wind turbine farms.

Note: IAMSAR Manual Volume II provides further guidance on wind farms.

d) impacts of climate change; and

e) planning for SAR response to shipping involving alternative fuel hazards and other hazardous cargo types on board.

Research and Development

8.3 To develop the tools and systems required to meet foreseeable long-term requirements, there is a need for States to undertake planning and co-operation on SAR matters. This includes major efforts to define concepts, to extend knowledge and invent new solutions to future SAR challenges so these new concepts are selected and applied in an appropriate timely manner. Such efforts could be forged through collaborative partnerships between, States, ANSPs, International Organizations, institutes of higher learning and specialised technical agencies. This concept is consistent with ICAO Strategic Objectives (Air Navigation Capacity and Efficiency) and the EUR/NAT Work Programme, and may manifest itself in joint projects such as:

a) ICAO and/or IMO Regional SAR training opportunities where provided to assist States that are unable to provide their own SAR training;

b) Joint Sub-regional RCCs;

c) Development of Training Centre of excellence that brings together civil and military SAR experts and provides a single SAR facility, cost-effective and has a level of resources and facilities that would be difficult for all States to maintain by themselves; and

d) Regional online eLearning packages.

With the end goal of a globally interoperable SAR system in mind, the region will have to consider planning for a long term supporting concept and infrastructure. The following are possible areas that should be considered for future SAR research and development, in order to promote the maximum possible harmonisation and interoperability of SAR systems:

a) data sharing such as aircraft and ship tracking information;

b) automated data link communication to RCCs when an aircraft exceeds a Variable Set Parameter (VSP) in terms of its operating envelope, or activation of an emergency status (could be displayed as a symbol, and the data could include certain operating parameters such as acceleration and altitude for an aircraft) – note the ICAO GADSS includes this concept;

c) regional Remotely Piloted Aircraft Systems (RPAS) SAR capability;

d) inclusion of the SAR system and RCC access as a component of the new ICAO SWIM concept of operation and implementation;

e) on-going development of standardised SAR training objectives and advanced training systems, including the use of high fidelity simulators; and

f) enhanced technology oriented systems to improve SAR system effectiveness.

9. MILESTONES, TIMELINES, PRIORITIES AND ACTIONS

Milestones

9.1 Section 7 (*Performance Improvement Plan*) provides a scheme for the implementation of a collective set of enhancements for a number of elements in the PSCS,.

9.2 States should implement the various PSCS elements of this Plan without delay, and should include consideration of issues such as::

- safety/operational analysis and assessment;
- cost-effectiveness;
- budgetary issues;
- development of operational procedures; and
- training.

9.3 Section 8 (*Research and Future Development*) provides, subject to future agreement by concerned parties, possible SAR improvements over the next 10 years.

Priorities

9.4 It is a matter for each State to determine priorities in accordance with its own economic, environmental, safety and administrative drivers.

Actions

9.5 This Plan necessitates a number of implementation actions. It is expected that each EUR State report progress on each applicable element to EASPG through the EUR SAR TF. All States should note the importance of SAR status monitoring, and are required to submit their implementation status pertaining to the EUR SAR Plan to the ICAO EUR/NAT Regional Office, by March 31 of each year

9.6 Section 6 (*Current Situation*) provides analysis and major concerns in the region, which should be considered in the formulation of specific State plans.

9.7 SAR Coordination Forums, which are likely to be based on sub-regional development, as the Regional Advisory SAR Committee, need to be promoted, established and supported to ensure the on-going implementation work and future review of SAR expectations linked to this Plan are conducted.

APPENDIX A: BENEFITS TO THE SAR SYSTEM OF STATES ASSISTING OTHER STATES

1. EUR States Face Demanding SAR Responsibilities with Few Resources.

1.1. Many EUR States have the challenging responsibility of providing SAR services over vast and remote land and also in oceanic areas and several have few resources available to meet Annex 12 requirements.

2. Taking a Regional Approach Improves Effectiveness and Efficiency

2.1. To provide an effective and efficient SAR service in the region it is important that States focus not only on meeting their own national obligations, but also take the broader view that their State SAR system is only one part of the wider regional SAR system. States therefore need to cooperate, collaborate and share resources and technical expertise with their neighbouring and regional RCCs, with the more developed SAR States in particular looking for opportunities to assist their lesser developed State neighbours.

3. When Developed SAR States Support Less Developed Neighbours, Everyone Wins

3.1 Sometimes simple measures can reduce the incidence of SAR operations in a State's Area of Responsibility.

3.2 After the Regional Search and Rescue Conference, a joint initiative of EUROCONTROL and the Civil Aviation Directorate of Serbia, the CAD of Serbia was invited to take the initiative for the establishment of a working group to examine the possible methods for the regulation of search and rescue cross-border cooperation at regional level and propose the optimal solution. For that reason, the Regional Advisory SAR Committee was created.

3.3 States who aren't compliant with Annex 12 SARP's and who are unable to meet the minimum SAR service requirements could consult and seek assistance from 'champion' States who are compliant and have well developed SAR systems in place.

3.4 Examples of assistance that could be provided by States, International Organisations (such as IMO/ICAO) or multi-lateral initiatives include:

a) conduct of a SAR Gap Analysis;

b) advice on the establishment of a SAR organisational framework;

c) advice for the establishment of a National SAR Committee;

d) technical assistance in the development of a National SAR Plan;

e) providing copies of relevant SAR documents to be used as templates;

f) technical assistance on the establishment of SAR agreements;

g) technical assistance in the development of RCC position descriptions;

h) training of SAR personnel;

i) provision of SRU where appropriate and training of SRU crews;

j) provision/sharing of computerised SAR tools including incident management systems, databases, maritime drift modelling software, etc.;

k) establishing data and information sharing agreements between RCCs;

l) the provision of operational search plan data;

m) provide advice on how to conduct a SAREX and post-SAREX analysis; and

n) set up of SAR system publicity and safety awareness campaigns.

APPENDIX B: ICAO DOC 9731, IAMSAR Manual, Vol 1, Appendix I –SAR Agreements

(Paragraph 2.7 refers)

SAR agreements

Notes regarding SAR agreements and the sample agreement that begins on the following page:

Parties may be organizations within a State, maritime and/or aeronautical SAR authorities of two or more different States (particularly with neighbouring search and rescue regions), or higher authorities of two or more States, i.e. the sample agreement can be adapted for local, national, or international use.

Each section of the sample agreement may be optionally used or adapted as the Parties agree, bearing in mind consistency with the principles of international law, and the goals of IMO, ICAO and the States and organizations concerned.

It is generally advisable to include specific information, such as phone numbers or addresses, in appendices or other documents separate from the basic signed agreement.

When SRRs are addressed in the agreements, normally only the lines separating the SRRs of the Parties are described, since other delimitation of the SRRs would normally involve States other than the Parties.

Agreements between national organizations may or may not need to address geographic areas of responsibility.

It should be recognized among the Parties that the establishment of SRRs is mainly for ensuring the availability of SAR services, and to facilitate proper distribution of distress alerts to RCCs; SRRs should not be viewed as affecting political boundaries, and do not need to align with political boundaries if the Parties so agree for the sake of improving or simplifying SAR operations. SRR delimitation over international waters is not intended to obstruct the provision of SAR services in any way. Furthermore, the provision of SAR services within an SRR shall be without regard to the nationality or circumstances of the persons in distress.

If agreements discuss territorial entry for SAR, provisions should account for a balance of concerns for sovereignty and concerns for saving lives.

The concept of “territory” is understood to include territorial land, territorial sea and the airspace above them.

It is advisable that SAR agreements address sensitive issues to the degree necessary for practical SAR cooperation between or among the Parties, while emphasizing the humanitarian nature of SAR, and avoiding topics which are unrelated to SAR, or which are both politically sensitive and unnecessary.

IMO and ICAO use the term “agreement” but many States view this as a type of legal instrument. Different terms may be used for the title of a legal instrument, such as “Agreement”, “Memorandum of Understanding”, “Arrangement” and other related terms. The type of instrument can be decided by the States involved as long as the document meets the intent of the international conventions to serve as the basis for cooperation and the provision of expeditious and effective SAR services.

In some cases, the term “Search and Rescue Point of Contact (SPOC)” can be used in lieu of Rescue Coordination Centre (RCC). The definition of SPOC includes the RCC and some national SAR authorities that may not have an internationally designated RCC.

This template serves as guidance for States to draft a SAR Agreement (which may take the form of an MOU or Arrangement or other) and the text to be included in this document is for the Parties to decide.

Bilateral or Regional SAR Agreement

Agreement FOR COOPERATION BETWEEN THE *[name of national agency/State]*
AND *[name of national agency/State]*

Note: The term agreement is used in order to be consistent with ICAO Annex 12 and the International Convention on Maritime Search and Rescue. State may elect to use a different term such and "Memorandum of Understanding", "Letter of understanding", "Arrangement" or others as appropriate.

This template serves as guidance for States to draft a SAR Agreement (which may take the form of an MOU or SAR Arrangement or other instrument title) and the text to be included in this document is for the Parties involved to decide.

Concerning Aeronautical [and/or] Maritime Search and Rescue

1. Introduction

1.1. The *[name of national agency/State]* and *[name of national agency/State]* (hereinafter referred to as the "Parties" in this Agreement, recognize the benefits enjoyed from previous close cooperation with regard to search and rescue SAR operations and training, and further recognize that additional benefits may be enjoyed from the cooperative arrangements detailed herein; and

1.2. The Parties have been recognized by their respective governments as having primary responsibility for coordinating and providing aeronautical and maritime SAR services in their respective aeronautical and maritime SAR regions.

1.3. The Parties recognize the great importance of cooperation in aeronautical and maritime SAR, and in the provision of expeditious and effective SAR services to save lives and reduce suffering and have assumed their respective responsibilities for SAR within the framework of the International Convention on Maritime Search and Rescue, 1979, the Convention on International Civil Aviation, 1944, and the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual.

1.4. The Parties have accordingly reached the following understanding.

2. Objectives and Scope

2.1. This agreement establishes a framework for cooperation among the Parties in carrying out activities related to SAR within the aeronautical and/or maritime environment and sets out their various responsibilities.

2.2. The Parties should ensure close coordination with their respective national aeronautical and maritime SAR authorities to help promote common and effective SAR services under this agreement.

3. Responsibilities

3.1. *[name of national agency]* and *[name of national agency]* are each responsible for the maintenance of safety of life and within their respective aeronautical and maritime SAR regions, under their respective Rescue Coordination Centre (RCC).

3.2. Each Party, on receiving information of an incident where any person is in distress within its SAR region, should take urgent measures to provide the most appropriate assistance regardless of the nationality or status of such a person, or the circumstances in which that incident occurred or is detected.

3.3. SAR operations should normally be carried out in accordance with the relevant SAR manuals and recommendations of International Civil Aviation Organization (ICAO) and the International Maritime Organization IMO, including the IAMSAR Manual (as amended from time to time), taking into account SAR procedures established by national legislation.

3.4. The Parties should make every effort to retrieve persons in distress, provide for their initial medical or other needs and deliver them to a place of safety; additionally, when it does not involve excessive risk or cost to the units involved in SAR operations, the Parties may attempt to rescue the craft or vessel on which the persons in danger are aboard.

3.5. To ensure that SAR operations are conducted in an efficient and coordinated manner, the Parties should consult and cooperate with each other as necessary and appropriate, lending mutual assistance as their capabilities allow.

3.6. Either Party may conduct SAR operations within the SAR region of the other Party under the coordination of that other Party's RCC.

3.7. Entry of the SAR units of one Party into or over the territory of the other Party for the purpose of conducting SAR operations should be expeditiously arranged to the best of each Party's ability and via the appropriate RCCs.

3.8. Solely for the purpose of searching for the site of an accident, rescuing survivors of such accidents, rendering emergency rescue assistance to persons, vessels, or aircraft in danger or distress and when the location is reasonably well known, permission to enter its territory shall be granted by a State to another State's search and rescue unit(s), provided that a request has been transmitted to the rescue coordination centre of the concerned State or to such other authority as has been designated by the State.

3.9. The RCC of the State requesting assistance or the use of suitable SAR facilities of another State ("the requesting RCC" and "the assisting State" respectively), shall provide all pertinent details on the scope of the assistance or facilities required. The requesting RCC should provide a full briefing, directly or indirectly, to the SAR Units that have been made available by the assisting State, on the scope of the mission before the SAR units enter the SRR of the requesting RCC. If it is necessary for the SAR Units of an assisting State to land at an airfield or to make use of the facilities of the requesting RCC in the course of performing an assigned SAR task, the RCC concerned should make all necessary arrangements to facilitate the taking of such measures or actions.

3.10. To facilitate the coordination referred to in this section, the Parties should, to the best of their ability, keep each other fully and promptly informed of all relevant SAR operations. The Parties should develop appropriate procedures in accordance with the IAMSAR Manual to provide for the most effective and efficient means of communication.

4. SAR Regions

4.1. The aeronautical and maritime SAR regions of [State] and [State] are separated geographically by a continuous line as follows:

[Provide the geographic coordinates of the lines of delimitation between both States' SAR regions only. Add additional States' lines of delimitation for regional SAR Agreement.]

4.2. The establishment of SAR regions is intended only to provide an understanding concerning the regions within which a Party accepts primary responsibility for coordinating SAR operations.

4.3. The delimitation of SAR regions is not related to and does not prejudice or have any bearing on the delimitation of any boundary between States.

5. Rescue Coordination Centres (RCCs)

5.1. The primary operational points of contact under this Agreement are the internationally recognized aeronautical and maritime RCCs of the Parties.

5.1.1. [Identify national RCC]

5.1.2. [Identify national RCC]

5.2. The Parties, to the best of their ability, should provide to each other any information which might be useful in order to expedite and improve coordination.

5.3. Identification of the operational points of contact, as referred to in this Section, is not intended to preclude appropriate direct coordination between any SAR facility or organizational unit of the Parties, especially when time is of the essence in the saving of lives.

5.4. Transfer of SAR mission coordination responsibilities between the RCCs, if deemed necessary, should be conducted by consultation between RCCs.

6. Cooperation

6.1. The subordinate elements of the Parties may provide for further coordination and cooperation by the establishment of appropriate operational arrangements and procedures consistent with this Agreement.

6.2. In addition to information related to specific SAR cases, the Parties may exchange any other information that may serve to improve the effectiveness of SAR operations. This information may include, but not be limited to:

6.2.1. communication details;

6.2.2. information about SAR facilities;

6.2.3. descriptions of available airfields;

6.2.4. knowledge of fueling and medical facilities; and

6.2.5. information useful for training SAR personnel.

6.3. The Parties will endeavour to promote mutual SAR cooperation by giving due consideration to collaboration including, but not limited to:

6.3.1. exchange visits between SAR personnel;

6.3.2. joint SAR exercises and training;

6.3.3. the use of ship reporting systems for SAR purposes;

6.3.4. sharing of information systems, SAR procedures, techniques, equipment, and facilities;

6.3.5. provision of services in support of SAR operations;

6.3.6. coordination of national positions on international SAR issues of mutual interest;

6.3.7. supporting and conducting joint research and development initiatives aimed at reducing search time, improving rescue effectiveness, and minimizing risk to SAR personnel; and

6.3.8. conducting regular communications checks and exercises, including the use of alternative means of communications that would be used to handle communication overloads during major SAR operations.

7. Finances

7.1. Unless otherwise agreed by the Parties, each Party is to fund its own expenses for activities pertinent to this Agreement.

7.2. The provisions of the Agreement are contingent upon the availability of SAR personnel, facilities and funding.

7.3. SAR services provided by the Parties to persons in danger or distress are to be without subsequent cost recovery from the person(s) assisted.

8. Application of this Agreement

8.1. Nothing in this Agreement is intended to affect in any way rights and duties based on international agreements or other arrangements between the Parties or their respective governments.

8.2. All activities conducted under this Agreement should be in conformity with national legislation of the Parties, as well as with the relevant international conventions in force.

8.3. No provision of this Agreement should be construed as an obstacle to prompt and effective action by any Party to relieve distress whenever and wherever found.

8.4. Any dispute regarding the interpretation or implementation of this Agreement is to be resolved by consultation between the Parties and is not to be referred to any international body, court or third party for settlement.

9. Modification

9.1. This Agreement may be modified in writing by the Parties.

10. Duration, Withdrawal and Discontinuation

10.1. Cooperation under this Agreement may commence from the date of signature and may continue indefinitely.

10.2. Either Party may withdraw from this Agreement at any time, upon giving not less than six (6) months' notice in writing to the other Party.

10.3. Cooperation under this Agreement may be discontinued mutually by the Parties in writing, or by any superseding arrangement.

10.4. The Parties should ensure that such discontinuation does not adversely impact any SAR operations or other cooperation in progress at the time that such discontinuation takes effect and should consult each other closely for this purpose.

Signed in duplicate at *[City, State]*, this _____ day of _____, 2016.

For the *[national agency]*: _____

Signature of Authorized Signatory

Name: _____

Designation: _____

Organization: _____

Signed in duplicate at *[City, State]*, this _____ day of _____, 2016.

For the *[national agency]*: _____

Signature of Authorized Signatory

Name: _____

Designation: _____

Organization: _____

APPENDIX C: SAR CAPABILITY MATRIX TABLE

(Paragraph 6.4 refers)

Last update: December 2025

	Training	Alerting	Legislative	SAR Committee	SAR Agreements	Relationships	Communications	Quality Control	Civil Military	Resources	SAREX	Library	Computerization	SAR Programme	Supply Dropping	Special Equipment	SAR Aircraft	Navigation	ELTs and ELT(DT)s	COSPAS-SARSAT Alerts	LADR Notification
Albania																					
Algeria																					
Andorra																					
Armenia																					
Austria																					
Azerbaijan																					
Belarus																					
Belgium																					
Bosnia and Herzegovina																					
Bulgaria																					
Croatia																					
Cyprus																					
Czech Republic																					
Denmark																					
Estonia																					
Finland																					
France																					
Georgia																					
Germany																					
Greece																					

Hungary																					
Iceland																					
Ireland																					
Israel																					
Italy																					
Kazakhstan																					
Kyrgyzstan																					
Latvia																					
Lithuania																					
Luxembourg																					
Malta																					
Monaco																					
Montenegro																					
Morocco																					
Netherlands																					
North Macedonia																					
Norway																					
Poland																					
Portugal																					
Republic of Moldova																					
Romania																					
Russian Federation																					
San Marino																					
Serbia																					
Slovakia																					
Slovenia																					
Spain																					
Sweden																					
Switzerland																					
Tajikistan																					
Tunisia																					
Türkiye																					
Turkmenistan																					

Ukraine																					
United Kingdom																					
Uzbekistan																					

Legend:

A = Not implemented

B = Initial implementation

C = Meets ICAO Annex 12 requirements in some areas

D = Meets ICAO Annex 12 requirements in most areas

E = Fully meets ICAO Annex 12 requirements

Blank = No response

* The UK does not translate international conventions into domestic legislation. If the UK signs a convention it is then delivered in accordance with the convention requirements

ATTACHMENT D – 41 SAR Performance Indicators

REGIONAL SAR PLAN MONITORING AND REPORTING FORM **SAR PERFORMANCE INDICATORS**		
Following is a bank of indicators based on the EUR SAR Plan's performance improvement section (which should be read in conjunction with these questions), that can be used to assess whether an administration is either compliant or not and to internally evaluate their implementation status of the EUR SAR Plan. Using the cells (Status) for each of the 41 elements, please indicate implementation status with either 0 (not implemented), or 0.5 (50% implemented - note - other partial implementation may be indicated such as 0.1 = 10%) or 1 (fully implemented)		
#	**Performance indicators elements**	**Status**
1	Enacted legislation that incorporates or is aligned to applicable international Conventions	
2	Unless delegated, established an entity that provides H24, SAR services within its area of responsibility/SRR	
3	Established a national SAR committee	
4	Empowered SAR Mission Coordinators with the authority to adequately carry out their responsibilities	
5	Established an Administrative Single Point of Contact for SAR (ASPOCS) for non-urgent, administrative matters	
6	Conducted studies to integrate aviation and maritime SAR, and as far as practicable, civil and military activities	
7	Conducted studies to align, as far as practicable, aeronautical and maritime SRRs, and SRRs and FIRs	
8	Established a single State SAR Plan	
9	Established aerodrome emergency plans that provide for co-operation and co-ordination with RCCs	
10	Established SAR agreements with States having adjoining SRRS or FIRs	
11	Provided up to date cross-border information on SAR capability to adjoining States	
12	Pre-arranged procedures for cross-border SAR responses	
13	Established RCC plans for response to Mass Rescue Operations (MROs) integrated with national disaster plans	
14	Established operational plans and procedures for SRUs, provision of support, communication and reporting	

15	Established SAR Alerting procedures which are tested, integrated and include civil/military protocols	
16	Provided a fully equipped RCC of sufficient size with adequate provision for operational positions and human factors	
17	Provided adequate supervisory ATC resources to allow timely SAR alerts and information to RCCs	
18	Provided sufficient RCC staffing	
19	Provided a sufficient number of trained specialist RCC officers including SMCs and A/SMCs	
20	Availability of a pool of RCC support staff who are familiar with RCC operations, but not trained as coordinators	
21	Developed SAR personnel position descriptions detailing responsibilities and eligibility criteria	
22	Developed a comprehensive training programme that includes SAR training for SAR Coordinators and SRU staff	
23	Facilitated RCC staff to be proficient in the English language	
24	Facilitated a programme of regular liaison visits between relevant RCCs, ATC units and airline operating centres	
25	Established additional oceanic SAR capability as far as practicable to ensure a timely and adequate SAR response	
26	Established sufficient SRU capabilities (crews, availability, military assets, communications, authority, etc.)	
27	Established procedures and necessary infrastructure to coordinate distress beacon alert responses	
28	Established a reliable distress beacon registration system	
29	Planned and prepared for the implemention of next generation beacons	
30	Established an appropriate nationwide means of disposal for old distress beacons	
31	Established contingency facilities, or procedures for the temporary delegation of SAR to another body or State	
32	Established a centralised information source publishing all AIP information required on SAR	
33	Established an Internet-based SAR information sharing system	
34	Established systems for the maximum practicable cooperation between State entities for information when required	

35	Developed and maintained a current, comprehensive electronic list of State SAR Facilities, SAR Equipment, and SRUs	
36	Established an Internet-based SAR Library, or cooperate by contributing to an Internet-based EUR resource	
37	Provided each RCC and SAR Authority with ready access to a current copy of SAR reference documents	
38	Conducted regular SAREX to test and evaluate coordination procedures, data and information sharing and SAR responses	
39	Implemented SAR System Improvement and Assessment measures, including Safety Management and QA systems	
40	Conducted an annual or more frequent analysis of their current State SAR system to identify specific gaps in capability	
41	Conducted SAR promotional programs	
42	Establishment of arrangements to conduct SAR operations (in accordance with ICAO Annex 12) at the same time as the accident investigation authority needs to conduct search & recovery operations (in accordance to Annex 13)	

- END -