



THIRTEENTH AIR NAVIGATION CONFERENCE

Montréal, Canada, 9 to 19 October 2018

COMMITTEE A

Agenda Item 4: Implementing the global air navigation system and the role of planning and implementation regional groups (PIRGs)

4.4: Implementing search and rescue (SAR) processes and procedures

IMPLEMENTING SAR SERVICES IN AFRICA

(Presented by 54 Contracting States, Members of the African Civil Aviation Commission (AFCAC)²)

EXECUTIVE SUMMARY

This paper gives an overview of the initiatives underway in Africa, for a significant and diligent improvement in the provision of search and rescue (SAR) services. It emphasizes also the importance of regional cooperation in this area.

Action: The Conference is invited to:

- a) take note of the information contained in this paper;
- b) request ICAO, industry partners, donor States and international organisations to support AFCAC in the implementation of the SAR projects endorsed by the High-level Conference held in Lomé, Togo in 2017;
- c) request ICAO, when implementing the Global Aeronautical Distress and Safety System (GADSS), to initiate intensive awareness through training programmes, seminars/workshops for the improvement of SAR services in the regions; and
- d) support AFCAC initiatives by organizing a High-level Conference on SAR in the Africa-Indian Ocean (AFI) region, in coordination with ICAO, industry and international partners.

1. INTRODUCTION

1.1 In the AFI region, for many years, States have been facing serious difficulties to address the deficiencies identified by APIRG and ICAO audits, in the SAR field.

1.2 Resolution A38-12 (Appendix H) of ICAO Assembly, reiterated the need for States to implement effective Search and Rescue services (SARs), in application of the Standards and Recommended Practices (SRPs) contained in Annex 12 — *Search and Rescue* to the Chicago Convention, and recalled its importance in the framework of air navigation safety in the world. It also pointed out how, cooperation

¹ English and French versions provided by AFCAC.

² Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cap Verde, Central African Republic, Chad, Comoros, Congo, Cote D'Ivoire, Democratic Republic of The Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Republic of Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome And Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Togo, Tunisia, Uganda, United Republic Of Tanzania, Zambia, Zimbabwe.

between States, pooling of available resources and establishment of common SAR organizations, can facilitate resolution of deficiencies for SAR and has encouraged States in that regard.

1.3 Moreover, ICAO initiative "No Country Left Behind" launched since December 2014, urges States to engage in regional cooperation, to find solutions with regard to civil aviation safety in general, and for the implementation of effective SAR service.

1.4 In this context, a number of initiatives have been developed in the region by AFCAC and ICAO. The actions in this framework will assist African States to achieve significant improvement in the level of implementation of search and rescue services in Africa.

2. DISCUSSION

2.1 The majority of States in Africa, are facing serious challenges in the implementation of search and rescue services. Some of the critical ones are:

- a) The slow progress in the implementation of ICAO SARPs related to SAR as contained in Annex 12 to the Chicago Convention;
- b) Insufficient number of trained, qualified and competent technical personnel for effective implementation of SAR services;
- c) Inadequacy of financial resources to ensure effective functioning of SAR units and lack of adequate equipment to conduct their obligations;
- d) Inadequate legislation and national plans related to SAR;
- e) The insufficient bilateral and multilateral SAR agreements;
- f) The low participation by States in the COSPAS-SARSAT- program, and the lack of effective implementation by operators of the requirement for the mandatory carriage and operation of 406 MHz Emergency Locator Transmitters (ELT); and
- g) The absence of regular SAR exercises in accordance with the provisions of Annex 12 to the Chicago Convention and International Aeronautical and Maritime Search and Rescue Manuals, ICAO and the *International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual* (Doc 9731).

2.2 The various bodies at the regional level have always underscored the need to take urgent actions to increase the capacity of the States to provide effective SAR services.

2.3 With this in mind, the APIRG identified and approved a set of indicators and key performance objectives for ANS including SAR. Subsequently, the AFI Plan Steering Committee established in 2016 a SAR project to assist selected ESAF and WACAF States in the establishment of an effective and operational search and rescue organization, pursuant to APIRG/20 which adopted a set of AFI ANS key performance indicators and targets including the requirement to establish effective and operational SAR organization.

2.4 The sixth meeting of Directors General of CAAs in Africa held in Brazaville in November 2016 appointed Lead Champions in various areas of ANS to coordinate Air Navigation Capacity and Efficiency including the responsibility for States to establish effective and operational SAR organization by:

- a) developing SAR National Plan; and
- b) concluding SAR Agreements/MoUs.

2.5 The African Union Commission (AUC), Specialized Technical Committee (STC) meeting on Infrastructure, Transport, Tourism and Energy, held in Lomé, Togo from 13 to 17 March 2017, recommended AFCAC to take necessary measures, in conjunction with ICAO for the revision of the Abuja Safety Targets. This meeting further recommended that the revision should take into account new challenges emerging in aviation safety in certain areas e.g. provision of Air Navigation Services (ANS) including Search and Rescue Services in Africa.

2.6 A very successful high-level SAR conference was jointly organized with AFCAC and the African Union Commission in Lomé, Togo from 10 to 12 April 2017. The ministerial conference on SAR was attended by the President of the ICAO Council.

3. THE AFI PLAN SAR PROJECT

3.1 The AFI Plan SAR project is aimed at assisting States establish an effective and operational Search and Rescue organization. Following the launching of the project, to which about thirty States have now adhered, a workshop was conducted in Nairobi for the beneficiary States. The workshop has successfully provided the participants with essential information and knowledge on the objective and scope of the project.

3.2 A SAR survey was conducted with a high response rate from States, on the basis of which, the gap analysis, on the status of SAR implementation in region has been completed. In a broader context of SAR in Africa and without limiting to the project scope, the Regional Offices established a Technical Experts Team.

3.3 Templates and samples of relevant SAR documentation in English and French which were developed by the SAR TET working collaboratively with the ICAO Regional Offices have been sent to States. Assistance missions have been conducted to States to help them in the implementation process.

3.4 In addition to that, the project served as framework for the development and the conclusion of several SAR agreements.

4. THE HIGH-LEVEL CONFERENCE ON THE IMPROVEMENT OF THE PROVISION OF SEARCH AND RESCUE (SAR) SERVICES IN AFRICA

4.1 It is to be recalled that in reflection for the resolution of SAR deficiencies in the AFI region, it was noted the need for increased awareness for the high level authorities on the importance of the SAR in the strengthening of air navigation safety and its inclusion in national development plans.

4.2 For that purpose, AFCAC organised, in collaboration with the African Union Commission (AUC) and the ICAO, a high-level Conference on the improvement of the provision of service of search and rescue (SAR) in Africa, for Member States, in Lomé, Togo from 10 to 12 April 2017, the principal goal being to sensitize decision makers in African States on the need, among other things, to implement or maintain effective SAR services.

4.3 The Conference particularly highlighted the benefits of bilateral, regional and international cooperation in the SAR area, and encouraged States to enter into multilateral agreements, or even to create wider common SAR organizations.

4.4 To close the event, the Ministerial Conference held in April 2017 adopted the Lomé Declaration whereby African Ministers in charge of Civil Aviation undertook to:

- a) Meet States' obligations under the Aeronautical and Maritime Conventions related to the implementation of SAR services;
- b) Implement policies on enhancement of capacity building of SAR Experts' competency in Africa;
- c) Facilitate negotiations and signing of SAR Memoranda of Cooperation, SAR Letters of Agreement among States;
- d) Support the establishment of regional and sub-regional SAR Joint Rescue and Coordination Centres (JRCC) and the pooling of resources (i.e. human resources, assets and funding);
- e) Ensure that SAR is given its due consideration in States' National Development Plans
- f) Support the provision of sustainable funding and resources for SAR Units; and
- g) Support the Project established by AFCAC for the improvement of the provision of SAR services in Africa.

Decided to:

- Ensure commitment at the national, regional and continental level for the improvement of SAR services in Africa and making available adequate funds for sustainable SAR Services;
- Increase the necessary coordination and cooperation between civil and military organizations involved in SAR operations; and
- Ensure the signing and implementation of SAR agreements with neighboring States to strengthen SAR cooperation and coordination; and
- Adopt the Action Plan on the improvement of the provision of search and rescue services in Africa as appended to this note.

4.5 As per request from APIRG 20 and following the support expressed by the Ministerial Conference, AFCAC has developed a SAR AFI project as a follow up to the AFI Plan SAR project to provide assistance to States in the implementation of the commitments and decisions made by the high-level Conference. AFCAC is currently taking the actions to find the funding for this project.

5. GADSS CONCEPT OF OPERATIONS

5.1 In supplementing and furthering existing ICAO documents, the GADSS concept identifies current issues under four headings: Aircraft Systems, Air Traffic Services (ATS), the Search and Rescue (SAR) system and Information Management (IM).

5.2 To address these issues, the GADSS entails the following main components:

- a) aircraft tracking system;
- b) Autonomous Distress Tracking (ADT) System; and
- c) flight data recovery.

5.3 The implementation of GADSS will contribute to enhancing the capacity of SAR services to timely determine that an aircraft is in distress, locate it and rescue survivors in the event of an accident. Moreover, the capacity of GADSS to determine a reduced search area means a reduction in the scope of SAR operations, and therefore improved efficiency and reduced risk for SAR operations crew members.

5.4 With regard to SAR services in Africa, in addition to operational improvements expected with the implementation of GADSS, the AFI Region will benefit from the publication and dissemination of GADSS provisions which can be used to sensitize the high level authorities and various SAR stakeholders.

5.5 In consequence, ICAO should assist States by organizing in Africa as well as in other regions SAR seminar/workshops to facilitate the implementation of the GADSS in support of the improvement of SAR services.

6. CONCLUSION

6.1 Based on the ministerial declaration and action plan developed during the high-level conference organised by AFCAC in Lome, Togo in April 2017, African States are urged to accelerate implementation of the SAR services.

6.2 In the AFI region, regional bodies have launched strong high level initiatives to solve the longstanding deficiencies in the SAR domain; these initiatives are based mainly on regional cooperation and collaboration.

6.3 ICAO, industry partners donor States and international organisations are called upon to support these initiatives and assist in the implementation of effective SAR services in the region.

— — — — —

APPENDIX

HIGH-LEVEL MEASURES TO BE UNDERTAKEN FOR THE IMPROVEMENT OF THE PROVISION OF SEARCH AND RESCUE (SAR) SERVICES IN AFRICA

TITLE	ACTIONS	Target date
1. FUNDING	States shall ensure that a legal framework is established for a sustainable and adequate funding mechanism of SAR systems and services.	<i>December 2018</i>
2. ESTABLISHMENT OF A PROJECT TO IMPROVE SAR SERVICES IN AFRICA	AFCAC is requested to establish a Project to support the improvement of SAR Services in Africa.	May 2017
3. BILATERAL/MULTILATERAL SAR AGREEMENTS	States shall ensure that the necessary Bilateral/Multilateral SAR Agreements as required in Annex12 to the Chicago Convention are negotiated, signed and implemented with all neighbouring and adjacent Search and Rescue Regions (SRR) and Flight Information Regions.	December 2018
4. MULTILATERAL AGREEMENTS BETWEEN STATES	Considering Conclusion 6/22 (Establishment of sub regional search and rescue (SAR) arrangements) of the AFI/RAN 08 in 2008 in Durban, South Africa States shall endeavour to negotiate, sign and implement Multilateral Agreements with as many Partner States and organizations that can combine efficient Search and Rescue Operations pooling resources and skills. States shall encourage the signing of internal agreements with entities that can support SAR services.	<i>December 2018</i>
5. SAR EXERCISES	States shall organise multi agencies, multi States and combined Regional SAR exercises to test SAR systems in place involving as many SAR units as practicable.	<i>December 2019</i>
6. REGIONAL ECONOMIC Communities /SUB REGIONAL ARRANGEMENTS	States should take advantage of Regional Economic Communities platform such as ECOWAS, UEMOA, CEMAC, EAC, ECCAS, SADC, COMESA, UMA or other sub-regional arrangements to establish Sub-regional, harmonized SAR arrangements.	<i>December 2019</i>
7. CAPACITY BUILDING IN SAR	States should develop and implement training programmes and plans for capacity building of search and rescue personnel, including those involved in the oversight of SAR	<i>December 2018</i>
8. ESTABLISHMENT OF JRCC	States should establish a Joint Rescue Coordination Centre (JRCC) to coordinate aeronautical and maritime SAR operations where is practicable, and pooling resources (human, assets, funding, etc.)	<i>December 2019</i>