

#### International Civil Aviation Organization

# AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP SIXTEENTH MEETING (APIRG/16)

(Kigali, Rwanda 19-23 November 2007)

Agenda Item 4: AFI Regional Air Navigation Planning and implementation Issues

4.3.: Air Traffic Management (ATS, AIS and SAR)

Review of the Report of the Ninth Meeting of the ATS/AIS/SAR Sub-Group (ATS/AIS/SAR/SG/9)

(Presented by the Secretariat)

#### **SUMMARY**

The First part of the paper presents the report of the Ninth Meetings of the ATS/AIS/SAR Sub-Group (ATS/AIS/SAR/9), the Fourth meeting of AIS/MAP Task Force (AIS/MAP/TF/4) and the Thirteenth meeting of the RVSM/RNAV/RNP Task Force (RRVSM/RNAV/RNP/13). The Sub-Group reviewed its terms of reference (**Appendix E**), work programme and applicable procedure. It also reviewed the air navigation plan requirements in the fields of Air Traffic Services, AIS/MAP and Search and Rescue aimed at meeting the current and future aircraft operations. The Sub- Group reviewed and adopted the report of the RVSM/RNAV/RNP/TF/12 meeting. The Sub- Group also considered the report of the AIS/MAP/TF/4 meeting In carrying out the review the Sub-Group identified specific air navigation planning and implementation problems and made recommendations for appropriate remedial actions.

The Second part of the paper addresses the report of the RVSM/RNAV/RNP/TF/13 meeting and the report of the second meeting of the AFI-CAD Study Group (AFI-CAD Study Group/2) created by APIRG under Conclusion 15/43.

Action by APIRG is at paragraph 3

#### **References:**

ATS/AIS/SAR/SG/9 - Report

APIRG/15 - Report

AFI/7 RAN Meeting Report (Doc 9702)

RVSM/RNAV/RNP Task Force – Reports (ICAO website, ESAF RVSM)

AIS/MAP/TF/4 – Report.(ICAO website.)

The Reports the AFI-CAD/Study Group/1. (ICAO we site)

The Report the AFI-CAD/Study Group/2 (ICAO we site)

#### 1. Introduction

1.1 The Ninth meeting of the ATS/AIS/SAR Sub-Group (ATS/AIS/SAR/SG/9) was held at the WACAF Office, Dakar from 25 to 27 April 2007. Copies of the report were distributed to

members of the Sub-Group as well as to AFI provider and user States. It can be obtained from the ICAO website: <a href="www.icao.int">www.icao.int</a>. The meeting was attended by **86** participants and experts from **28** AFI Member States and 5 international Organizations, namely, ARMA, ASECNA, IATA, IFALPA and ROBERTS FIR

1.2 The Sub-Group recorded its action in the form of draft Conclusions. Apart from endorsement of the report, the action required from APIRG is related to **20** draft conclusions which are submitted for consideration in **Appendix A** to this paper.

# 2 Review of outstanding Conclusions and Decisions of APIRG, Decisions of the ATS/AIS/SAR/SG and its future work programme

- 2.1 The Sub-Group reviewed outstanding APIRG <u>Conclusions</u> and its outstanding Decisions in the light of developments in order to keep them current and limit their number to a minimum consistent with the progress achieved in their implementation. The Sub-Group validated and amended the conclusions that were still in force. The meeting thus endorsed draft conclusions 9/1 which contains those Conclusions/Decisions of APIRG that are still in force. Furthermore, the Subgroup concluded that draft Conclusions 9/1,9/2,9/11,9/15, 9/17,9/19 and 9/20,should be brought to the attention of APIRG.
- 2.2 The Sub-Group reviewed its terms of reference and future work programme and accorded priority for implementation of the tasks.

### 3. Review of the report of the Reports of the RVSM/RNAV/RNP Task Force

- 3.1 Under this item, the Sub-Group reviewed the report of the Twelfth meeting of RVSM/RNAV/RNP Task Force meeting which was held in Dakar from 23 to 24 April 2007 and endorsed report and amended/adopted 20 Conclusions of the meeting.
- Furthermore, the meeting will wish to note that at the thirteen RVSM Task Force which was held in Nairobi from 12 to 14 in September 2007 reviewed those conclusions of the ATS Sub Group relating to the RVSM and amended/adopted and noted that conclusions 13/7,13/12,13/13,13/14 and 13/15 (reproduced below) would require consideration by APIRG.

Conclusion 13/	/7: Pre-l	Implementation Safety Case (PISC)
		after submission of the PISC to the Task Force for review, it will be submitted to the for review and approval by <b>31 March 2008</b> .

Conclusion 13/12:	AFI RVSM Implementation – Funding				
	That IATA member airlines continue to finance within the available funds to support specific projects relating to the RVSM implementation effort in order to improve safety and economy of Air Traffic in AFI Region and keep the Task Force informed accordingly.				
Conclusion 13/13:	AFI RVSM Strategy/Action Plan				
	That the updated AFI RVSM Strategy/Action Plan at <b>Appendix B</b> be circulated to States for quality assurance.				
Conclusion 13/14:	Alternative approach for the achievement of the TLS				
	That the TF noted the proposed alternative approach for the achievement of the TLS and that certain elements of this proposal would be of interest to APIRG to consider.				

Conclusion 13/15:	Target date for A	FI RVSM Implementation
	That:	
	The Task Force, h	naving taken account of:
	a)	The completion of the activities in the AFI RVSM Strategy/Action Plan;
	b)	The approval by ICAO ANC of AFI RVSM Regional SUPP's (Doc.7030/4) relating to RVSM in June 2007; and
	c)	Conclusion 13/14 proposing alternative approach for the achievement of the TLS; and
	d)	After the consideration of the results of the second CRA submitted by the NLR, which indicated progressive improvement on the TLS (from 63x10 <sup>-9</sup> to 15x10 <sup>-9</sup> and eventually to 5x10 <sup>-9</sup> ) and consequently the PISC,recommended the target date for implementation of RVSM in the AFI Region will be 25 September 2008.

# 4. Review of the Report of the Fourth Meeting of the AIS/MAP Task Force (AIS/MAP/TF/4) and the second meeting of the AFI-CAD Study Group (AFI-CAD Study Group/2)

- Under this Agenda Item, the Sub-Group reviewed the report of the Fourth meeting of the AFI AIS/MAP Task Force which was held in Dakar, Senegal from 18-19 April 2007. The meeting also noted that the development of the centralized AFI Region AIS Database (AFI-CAD) Program will implement and initiate the operation of a reference database of quality assured aeronautical information from the AFI Region for the benefit of the whole aviation community. The meeting thus endorsed draft conclusions 9/9 to 9/14. The Sub-Group considered that conclusions 9/11,9/12 and 9/14 would be of interest to APIRG.
- 4.2 In addition to the processing of NOTAMS and of Static data, the Centralized AFI AIS Database (AFI-CAD) will be used to produce Aeronautical Information Publications (AIPs) AIP Amendments, Supplements, AICs and Charts according to data/information stored in a document management system (PAMS) allowing retrieved, viewing and downloading of documents.
- 4.3 The meeting noted with appreciation, the work of the First Meeting of the AFI Region Study Group on the Establishment of a Centralized AFI Region AIS Database (AFI-CAD/STUDY GROUP/1), reaffirmed the validity of the APIRG/Conclusion 15/43 by which the Study Group was established and endorsed the Framework and Guidance material for the establishment of AFI-CAD at **Appendix E** to this Report.
- Furthermore, the meeting may wish to note that pursuant to Conclusion 15/43 of the APIRG/15<sup>th</sup> meeting, ICAO organized the first meeting of the AFI-CAD Study Group in Johannesburg, South Africa from 8-10 November 2006. The Study Group then acted on Conclusion 15/43 of the APIRG/15<sup>th</sup> meeting and developed the framework and guidance material for the establishment of AFI-CAD as per Conclusion 9/11 of the ATS/AIS/SAR SG/9 which calls for its adoption by the APIRG/16<sup>th</sup> meeting.

- The Second AFI-CAD Study Group meeting (AFI-CAD Study Group/2) was held in Nairobi, Kenya from 3-5 October 2007 pursuant to Draft Conclusion 4/9 of the AIS/MAP TF/4 meeting and Conclusion 9/12 of the ATS/AIS/SAR SG/9. The meeting then acted under the above Conclusions which calls the development of user requirements specifications (URS) for AFI-CAD and the development of a business model and financial model for the AFI-CAD. The meeting also developed the Recommendations relating to evaluation criteria of the AFI-CAD Operating Centres, the development of a Quality Management System within the AFI-CAD and the requirements for ICAO to synchronize the most suitable timelines for development and implementation of AFI-CAD based on the evolution of events. The meeting then specified that AFI-CAD through its cooperation with Group EAD, develops the required training modules for the member states and also develop the required sample service level agreement of the AFI-CAD and its members.
- 4.6 The meeting noted that Timeline schedule for setting up and implementing the AFI-CAD needs careful planning due to its complex legal organisation, technical and political nature. Roughly the the AFI-CAD Timeline covers about the next four years between 2008-2012 until the first Center /Area could move into operational use . (See Attachment on Addendum to WP/16 which gives an overview) APIRG/16 is therefore invited to inaugurate a permanent AFI-CAD Working Group (AFI-CAD WG) to pursue the development and implementation of AFI-CAD (See Attachment on Addendum to WP/16 which gives the 10 principle phases of development and implementation of AFI-CAD ).
- 4.7 The meeting then formulated the following draft conclusions/decisions for the consideration and adoption by APIRG/16:

# <u>Draft Conclusion XX(1)</u>- Evaluation criteria for the identification of the AFI-CAD Operating Centers:

- a. Geographical Location
- b. Communication Infrastructure
- c. Sustainability of Economy
- d. Political Stability
- e. Information Technology currently available and sustainable
- f. Provision of training Training ability / infrastructure
- g. Power supply:
- availability
- reliability
- sustainability
- h. Human Resource availability
  - i. AIM
  - ii. Management
  - iii. Project Management
  - iv. Information Technology
  - v. Training
- i. Financial availability / sustainability
- j. Previous experience Track record
- k. Common consensus
- l. Infrastructure Buildings
- m Evaluation to be conducted by an International Organization with a proven track record of successfully completing similar evaluations (e.g. ICAO/ United Nations/ EUROCONTROL, etc.)

<u>Draft Conclusion XX(2)</u>- Adoption of the EUROCONTTROL EAD URS for application in the AFI Region.

That APIRG Consider the adoption of the Eurocontrol EAD URS as the basis for the AFI-CAD URS taking into account the specific AFI Requirements.

<u>Draft Conclusion XX(3)</u>- Development of Business model anD Financial model for AFI-CAD

That ICAO appoints Business/Financial experts to formulate the required Business/Financial model based on the elements listed in Recommendation 10 of the adopted AFI-CAD Guidance material for a Business Plan and Financial Plan as follows:

#### a) Business Plan:

- i) Setup Capital: The business plan to be adopted must define the total set-up cost and where this capital will be obtained (e.g. loans, donations/aid, State contributions). Each States responsibility in this regard must be defined and be enforceable in any AFI-CAD membership agreement.
- ii) **Financial Sustainability**: The business plan to be adopted must also define how financial sustainability will be ensured e.g. by state contributions, fees to be charged for access by users, en-route charges, etc). This must also show how continuous improvement and safety monitoring systems will be maintained and funded.
- (iii) **Service Providers:** The resources that the service provider will bring to the project must be defined and enforced in the service provider's contract. It should not be the sole responsibility of the member states or the Agency to fund this project as it should base on the user/beneficiary principle.
- b) **Financial Plan**: The financial model for AFI CAD as discussed above also needs to address the following operational consideration.
  - (i) Continuous Operational Cost Recovery: Continuous operational list recovery must be endorsed as a minimum requirement. It this does not occur, AFI CAD will not be a viable concern.
  - (ii) Cost-Benefit Analysis: A cost benefit analysis reflecting the advantages and disadvantages of all business models discussed above needs to be performed before a particular model can be recommended and accepted by AFI CAD member States.
  - (iii) Future Cost Benefits: To AFI CAD (eg. Via provision of services additional to what is presently being provided will need to assess to ensure organizational structuring to take advantage of these future benefits.
- c) **Leasing**: That leasing rather than outright ownership would not be accepted as an alternative in the AFI-CAD system and service provisions in the financial model.

#### Draft Conclusion XX(4)- AFI-CAD Quality Management Systems

That each contracting AFI – CAD Member State shall take all necessary measures to introduce a properly organized QMS containing procedures, processes and resources necessary to

implement the quality management at each function stage. The execution of such quality management shall be in accordance with of Annex 15, Chapter 3 paragraph 3.2.1.

# <u>Draft Conclusion XX(5)</u>- Timelines for the development and implementation of the <u>AFI-CAD</u>

That ICAO would synchronize the most suitable timelines for the development and implementation of the AFI – CAD based on the evolution of events.

That AFI-CAD through the cooperation with Group EAD develop the required training modules for the member states and the required sample service level agreements of AFI-CAD and its member states.

## <u>Draft Decision XX(7)</u>- Re-validation of Conclusion 15/43 of the APIRG/15<sup>th</sup> meeting

That APIRG considers the establishment of the AFI-CAD Study Group as per Conclusion 15/43 of the APIRG/15<sup>th</sup> meeting as a permanent Working Group

## 5 Review of implementation of the Area Control Service

- 5.1 Under this Agenda item, the Sub-Group reviewed the requirements for implementation of the Area Control Service in the Region.
- 5.2 The Sub-Group recalled the Statement of the Basic Operational Requirements and Planning Criteria in AFI Region requiring that Area Control Service should be provided for all IFR flights along all ATS routes to be used by international aircraft operations, except where the type and density of traffic do not justify the provision of such service. Furthermore, the Statement requires that Approach Control Service should be provided at all aerodromes used for international aircraft operations and that control areas should be established so as to encompass at least the climb to cruising levels of departing

aircraft and the descent from cruising level of arriving aircraft. The AFI/7 RAN meeting in reviewing the status of implementation of the area control service in the region developed an implementation strategy which was the subject of its Recommendation 5/21.

- The Sub-Group noted with concern that the status of implementation of the area control service has been encouraging. It however, considered necessary to request the few States which have not done so implement the segments of ATS routes at **Appendix C** as soon as possible but not later than **14 February 2008.** Based on the foregoing, the Sub-Group formulated <u>draft</u> Conclusion 9/15.
- 6. Review of the implementation of the required CNS infrastructure to support the implementation of RVSM in the AFI Region.
- 6.1 Under this Agenda item, the Sub-Group recalled that in order for the implementation of ATC service it was necessary to have adequate and reliable CNS infrastructure at the disposal of the ATC personnel. Furthermore, ATC service is a pre-requisite for the implementation of RVSM. The Sub-Group thus formulated Draft **Conclusion 9/16**.

#### 7.1 Review of the ATS route network

### {tc \11 "2.1 Review of the ATS route network}

- 7.1.1 Under this Agenda item, the Sub-Group considered in detail the overall status of implementation of the basic ATS route network including RNAV routes contained in the ICAO AFI Air Navigation Plan (Doc 7474/27) Table ATS 1, Charts ATS 2 and ATS 3 in order to:
  - a) identify additional route requirements;
  - b) identify route segments requiring realignment;
  - c) identify routes which can be deleted from the Air Navigation Plan (ANP);
  - d) identify the non implemented routes and establish target date(s) for their implementation.
- 7.1.2 The Sub-Group prepared an implementation tabulation for all the non-implemented routes and agreed that the States concerned be requested to implement those segments of routes at **Appendix C** not later than **14 February 2008**. (para. 6.1 above refers).

# 8. Review of the implementation of ICAO requirements in the field of Search and Rescue (SAR)

- 8.1 Under this agenda item the Sub-Group reviewed the status of implementation of the ICAO provisions relating to search and rescue services. It was noted with concern that some few of the provisions had remained unimplemented for decades and the meeting was of the view that States should now be sensitized on the need to take remedial action. Furthermore, the Sub-Group sustained that assistance should be provided by ICAO in order to improve the provision of search and rescue services in the Region.
- 8.2 It was pointed out that main deficiences still existed in the establishment of appropriate SAR Agreements and Legislation.
- 8.3 The Sub-Group also noted that AFCAC continued to assist States in the region in bringing improvement in their SAR services and emphasized on the need for States to support the AFCAC SAR initiative.
- 8.4 In view of the foregoing, the Sub-Group included in the draft conclusions 9/1 as being those still in force which APIRG needed to note.

# 9. Consideration of specific air navigation planning and implementation problems and the review of air navigation field deficiencies

9.1 The Sub-Group, using the approved methodology, updated the list of deficiencies in the ATS, SAR and AIS/MAP and formulated <u>draft</u> conlusion 9/19 and the updated list appear at Appendix D to this report.

#### 10. Action required

#### 10.1 APIRG is invited to:

- a) note the report of the Ninth meeting of the ATS/AIS/SAR Sub-Group;
- b) take action on the draft conclusions of the Ninth meeting of the Sub-Group, and the draft conclusions of the Second AFI-CAD meeting as contained in this paper;

- c) review the timeline for development and implementation of the AFI-CAD as per attachment on Addendum to WP/16.
- d) ask the States concerned to take the necessary actions on the deficiencies in the fields of ATS/AIS/SAR at **Appendix D**
- e) approve the future work programme of the ATS/AIS/SAR Sub-Group at **Appendix E**.

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# LIST OF CONCLUSIONS/DECISIONS OF THE ATS/AIS/SAR SUB-GROUP (ATSG-9) MEETING (DAKAR, 25 TO 27 APRIL 2007)

# **List of Conclusions and Decisions**

Number	Title
Conclusion 9/1:	Follow up on Previous APIRG Conclusions and Decisions
	That, noting that APIRG Conclusions 5/27,15/28, 15/29, 15/30, 15/31, 15/32,15/45,15/51,15/52,15/54, 15/55, 15/56, 15/57, 15/58, 15/59, 15/60,15/61,15/62,15/63,15/64 and 15/67, 15/71, 15/73,15/74 and 15/75 Decisions;15/23,15/53,15/65,15/66,15/68,15/69,15/70,15/72,15/76, 15/77,15/78,15/79, and 15/80 on ATS; Conclusions 15/48, 15/49 and 15/50 on SAR and AIS/MAP Conclusions 15/33, 15/34, 15/35, 15/36, 15/37, 15/38, 15/39, 15/40, 15/41, 15/42, 15/43 and 15/44 were still valid, ICAO undertake follow- up action with the States on the intent of these Conclusions and Decisions.
Conclusion 9/2:	FANS 1/A Operational Manual for application in the AFI Region
	That:
	a) the FANS 1/A Operational Manual at <b>Appendix B</b> be applied in the AFI
	Region; and b) South Africa manages the FANS 1/A Operational Manual for the AFI Region.
Conclusion 9/3:	Target date for AFI RVSM Implementation
	That:  a) The actual date/time of implementation of RVSM will be determined taking into account:  i) The completion of the activities in the AFI RVSM Strategy/Action Plan;
	ii) The development of an acceptable PISC which includes an acceptable CRA and its subsequent approval by the ANC; iii) The approval by ICAO ANC of AFI RVSM Regional SUPP's (Doc.7030/4) relating to RVSM; and
	b) The target date for implementation of RVSM in the AFI Region will be determined by the Task Force, after the second CRA, which is to be undertaken, and the completion of the other outstanding elements of the PISC.
Conclusion 9/4:	Completion and signing of National Safety Plans
	That States of Central African Republic, Comoros, Equatorial Guinea, Gabon Guinea Bissau, La Reunion (France), Mozambique, Sao Tome and Principe, South Africa, Swaziland, and Togo complete and sign their National Safety Plans (NSPs) and send them to ARPO as soon as possible but not later than 1 August, 2007.

Number	Title
Conclusion 9/5:	AFI RVSM Implementation – Funding
	That IATA member airlines continue to finance within the available funds specific projects relating to the RVSM implementation effort in order to improve safety and economy of Air Traffic in AFI Region and keep the Task Force informed accordingly.
Conclusion 9/6:	Amendment to the Regional Supplementary Procedures – Doc 7030/4
	That the revised proposed amendments to the Regional Supplementary Procedures – Doc.7030/4 at <b>Appendix C</b> be processed by the secretariat in accordance with the established practice.
Conclusion 9/7:	AFI RVSM Strategy/Action Plan
	That the updated AFI RVSM Strategy/Action Plan at <b>Appendix D</b> be circulated to States for action.
Conclusion 9/8:	Non-receipt of Flight Plans
	<ul> <li>a) the Project Management Team develop the format and contents of a survey to identify the reasons and causes for missing flight plans; and</li> <li>b) ICAO, using the methodology developed by the PMT and as early as possible but not later than 1 August 2007, send the survey relating to missing flight plans and propose remedial action.</li> </ul>
Conclusion 9/9:	Quality, Infrastructure and Status of AIS Personnel
	That:
	States take necessary action to ensure that:
	<ul> <li>a) AIS is accorded a status commensurate with the current technological developments requiring high calibre and skilled personnel;</li> <li>b) Personnel recruited for AIS receive adequate professional training;</li> <li>c) Such personnel are accorded same status as that of personnel of other air navigation services; and</li> <li>d) Adequate facilities and funds needed for the efficient performance of AIS duties and priorities are provided as contained in the AIS manual.</li> </ul>

Title
Training Guidelines for AIS personnel
<ul> <li>a) That ICAO expedite the publication of the revised Training Manual (Doc.7192), Part E-3 as recommended by the AIS/MAP Divisional Meeting in 1998 (Doc. 9733), so as to facilitate the introduction of the basic requirements for States to consider the licensing issue of their AIS personnel; and</li> <li>b) ICAO develop AIS training guidance material relating to the implementation of CNS/ATM system.</li> </ul>
Adoption of the framework and guidance material for the establishment of AFI-CAD
That the framework and guidance material at <b>Appendix E</b> be adopted for the AFI Region for the establishment of the centralized AFI Region AIS Database.
Development of AFI CAD Business Model and Financial Model
That the Study Group develops a business model and financial model for the AFI CAD.
Seminars/Workshops on the provision of Digital Electronic Terrain and Obstacle Data.
That ICAO organise Seminars/Workshops on the provision of Digital Electronic Terrain and Obstacle Data in accordance with the new provisions in Annex 15 not later than <b>31 December 2007</b> .
Membership of Roberts FIR and Senegal to the AFI AIS/MAP Task Force.
That the Roberts FIR and Senegal be admitted as members of the AFI AIS/MAP Task Force.
Implementation of ATC Service
That States which have not yet done so, implement ATC service along all ATS routes contained in Table ATS 1 of the AFI Plan (Doc.7474) as soon as possible, but not later than <b>20 November 2008</b> in the spirit of AFI/7 Rec.5/21.
Implementation of the required CNS infrastructure to support the implementation of RVSM in the AFI Region
That in view of the implementation of RVSM and provision of ATC service, States are urged to implement the required supportive CNS infrastructure namely: ATS DS circuits AMS and appropriate NAVAIDS as soon as possible, but not later <b>25 October 2007</b> .

Number	Title
Conclusion 9/17:	Implementation of the non-implemented routes including RNAV routes and ATC Service  That States concerned implement the ATS routes at Appendix F and provide ATC
	service (a prerequisite for RVSM implementation), as soon as possible, but not later than AIRAC date of <b>25 October 2007</b> .
Conclusion 9/18:	Consequential Amendment to AFI ANP Doc.7474 – Table ATS 1
	That the meeting Table ATS 1 – Doc.7474 be replaced with the Table ATS 1 at <b>Appendix G</b> to this report.
Conclusion 9/19:	Consideration of specific air navigation planning and implementation problems and the review of air navigation deficiencies in the Region
	That:
	Considering the negative impact of non implementation of the air navigation plan requirements and the persistence of serious cases of deficiencies in several parts of the AFI region;
	<ul> <li>States concerned should take as soon as possible concrete measures to eliminate all deficiencies at <b>Appendix H</b> to this report.</li> </ul>
	<ul><li>b) the matter be regularly followed up by the ICAO regional offices; and</li><li>c) results be brought to the attention of APIRG.</li></ul>
Conclusion 9/20:	Appellation of the current ATM Sub-Group to be reverted to the ATS/AIS/SAR Sub-Group:
	That the appellation of the current ATM Sub-Group be reverted to the ATS/AIS/SAR Sub-Group. Its revised Terms of Reference are at <b>Appendix I.</b>
Decision 9/1:	Alternative approach for the achievement of the TLS
	That the RVSM TF noted the proposed alternative approach for the achievement of the TLS and that certain elements of this proposal would be considered by the PMT in conjunction with the result of the PISC, incorporating the second CRA and subsequently report it to Task Force.
Decision 9/2:	Target for the implementation of RVSM
	That the Task Force, in light of APIRG Conclusion 15/51 give high priority to determine the target date for implementation of RVSM and report same to APIRG.

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# AFI RVSM STRATEGY/ACTION PLAN FOR IMPLEMENTATION OF REDUCED VERTICAL SEPARATION MINIMA IN THE AFRICA-INDIAN OCEAN REGION

# September 2007



AFI RVSM IMPLEMENTATION STRATEGY/ACTION PLAN								
ID	Description	Target Date	Status	Resources	Remarks			
	Program Management							
1	Agree on structure of TF to enable efficient handling of specialist technical tasks	21/11/03	Completed	Secretariat Support Team: ASECNA, SA, IATA, Kenya, Nigeria, Tunisia	Completed 21 Nov 2003			
2	RVSM SIP Report	21/11/03	Completed	RVSM/ITF2	Completed 21 Nov 2003			
3	RVSM/RNAV/RNP TF/2 Meeting	21/11/03	Completed	RVSM/ITF2	Completed 21 Nov 2003			
4	Identify resources for performing specialist technical tasks	21/11/03	Completed	RVSM/ITF2	Completed 21 Nov 2003			
5	Investigate methods of funding any outside assistance required	31/03/04	On going	ICAO/IATA	To address future funding as/when required			
6	Finalize the RVSM Implementation Strategy/ Action Plan	31/12/03	Completed	ICAO	Sent 05 Dec 2003			
7	Circulate RVSM Implementation Strategy/Action  Plan for comments from States	5/01/04	Completed	ICAO	Sent 05 Dec 2003			
8	<ul><li>a) Doc 7030 amendment Proposal</li><li>b) Circulate proposal to States</li><li>(c) ANC Approval</li></ul>	Submitted to ANC in March 2007	Completed Completed Completed	ICAO ICAO ICAO	Approved in June 2007			
9	States comments on RVSM implementation Strategy/Action Plan	31/-3/04	Completed					
10	Regional RVSM informational Website	31/03/04	Completed		www.icao.int/esaf/RVSM			
11	RVSM Seminar/RVSM ITF3	19-22/04/04	Completed					

	AFI RVSM IMPLEMENTATION STRATEGY/ACTION PLAN						
ID	Description	Target Date	Status	Resources	Remarks		
12	RVSM Seminar /RVSM/ITF/4	26-30/07/04	Completed				
13	Coordination and harmonization of procedures with adjacent Regions	O-going	On-going	ICAO and AFI RMA	Continuous contact		
14	States to send AIC to notify their intention to Implementation of RVSM	Oct 05	completed	ICAO/States	Continuous		
15	Determine target AIRAC implementation date (AIP Supplement to be published)	TBD		ICAO/States	Reviewed every TF meeting		
16	Regional RVSM implementation status reports	On-going	On -going	ICAO	Monthly Report to website		
17	State Readiness Assessment,	October 2006	On-going	ICAO	Reviewed every TF meeting		
18	RVSM/ARTF/5	15-16/11/04	Completed				
19	RVSM/ARTF/6	25-27/05/05	Completed				
20	RVSM/ARTF/7 ATS/AIS/SAR/SG/8	08-09/08/05 10-12/08/5	Completed Completed				
21	RVSM/ARTF/8 and RVSM Seminar	10 – 14 October 2005	Completed				
22	RVSM/ARTF/9 meeting	April 06	Completed				
23	RVSM TF/10 meeting and GO/Delay meeting	June 06	Completed				
24	Publish Trigger NOTAM	TBD	Pending	States	States to be advised of date		
25	Develop/Publish National SWOP	October 06	completed Progress	States	SWOP sent to States		
26	RVSM Task Force 11 Meeting	30/11- 1/12/06	Completed	All	Nairobi		

	AFI RVSM IMPLEMENTATION STRATEGY/ACTION PLAN						
ID	Description	Target Date	Status	Resources	Remarks		
27	RVSM Task Force 12 meeting	23-24 April2007	Completed	All			
28	RVSM Task Force 13	September 2007	Completed	All			
29	RVSM Task Force 14	April 2008		States /ICAO			
30	RVSM Task Force 15	August 2008		States /ICAO			
	I	Aircraft Operation	s and Airworth	iness			
31	Regional OPS/Airworthiness RVSM Guidance	21/11/03	Completed				
32	Develop regional Pilot Training RVSM Guidance Material	30/04/04	Completed	IATA	Sent to Operators for action		
33	Provide pilot training RVSM guidance material to specific States	30 July 06	Completed		Sent to States		
34	Aircraft Operational approval process guidelines	31/05/04	Completed		Sent to States		
35	Aircraft RVSM Approval Survey	In progress	On -going	ICAO/States	Continuous and updated at every TF meeting		
36	Ensure aircraft/operator approval process	In progress	On-going	ICAO/ARMA	Updated at every TF meeting		
37	Ops/Airworthiness seminar	Nov 06	Completed Fraffic Manageme	ICAO	Seminar to be coordinated with ICAO		
38	National RVSM plan	31/03/04	On-going	States, ICAO	4 States had NOT signed by 31 October 2007.		
39	National Safety Plan Validation Panel	March 06	Completed	NSPVP	Future validations by ICAO/ARMA		
40	APIRG/15 Consideration of TF Reports	25-30-9-05	Completed				
41	Regional ATC OPS Manual	Apr 06	Completed	States	States to incorporate in National documentation		

	AFI RVSM	IMPLEMENTATI	ON STRATEGY	Y/ACTION PLAN	
ID	Description	Target Date	Status	Resources	Remarks
42	Determine the limits of RVSM airspace	30/06/04	Completed	States/ICAO	
43	Regional ATC Training Program & Guidance Material	July 06	Completed	ASECNA/ATNS	Training institutions to incorporate elements highlighted by PISC
44	Letters of Agreement/Procedure (LOA/LOP)	3 months before Time of switch over	On-going	States	States to incorporate RVSM procedures.
45	Civil/Military coordination	Continuous	On-going	States	In National RVSM Plan
46	National RVSM Regulatory Material	October 06	On-going	States	Included in the National Safety Plan and are in the LOAs/LOPs and AIPs.
47	Collect weather and turbulence data for analysis	On Going	On-going progress	ARMA ICAO/States	ARMA to Collate
		RVSM Saf	ety Assurance		
48	State review of implementation of CNS infrastructure to support provision of ATC Service in the AFI RVSM airspace	December 2007	On- going	All States	Reviewed at every TF meeting
49	Review of the provision of ATC Service in the AFI RVSM Airspace	December 2007	On -going	All States/ICAO	Reviewed at every TF meeting
50	Conduct data collection and compile readiness assessment	In progress	On-going	ARMA/States	States to continue supplying data as required by ARMA to support Safety

	AFI RVSM IMPLEMENTATION STRATEGY/ACTION PLAN							
ID	Description	Target Date	Status	Resources	Remarks			
					Assessments			
51	Develop AFI RVSM Safety Policy	30/06/04	Completed	States	States to ensure publication			
52	a) Submit final NSP's after validation comments have being taken into account	October 06	Completed	States	4 States NOT finalized their NSP by 31 October 2007.			
	b) Conduct NSP workshops facilitated by ATC experts	July 05	Completed					
	c) Once NSP's are implemented, DCA's to confirm State readiness data	Subject to State implementati on status	In progress	States	Reviewed at every TF meeting.			
	d) Update State readiness document	October 06	On going	ICAO	TF/13 to review progress			
53	RVSM Functional Hazard Assessment (FHA)	4-8/04/05	Completed					
54	Validate Functional Hazard Assessment	31/05/05	Completed					
55	RVSM Collision Risk Assessment II	Oct 06	completed	ARMA/ICAO//Co nsultants				
56	Validate Collision Risk Assessment	August 2007	completed	Approved by TF/13	Approved for submission to APIRG			
57	RVSM Collision Risk Assessment III	January 2008	In progress	ARMA/ICAO/Co nsultant				
58	AFI Pre-Implementation Safety Case	September 2007	Completed	ARMA/ICAO/Co nsultants	Reviewed by Task 13 and adopted for submission to APIRG/16.			
59	AFI Pre-Implementation Safety Case: ANC	February/Mar	Finalization		PISC to be sent to the ANC for			

	AFI RVSM	IMPLEMENTATI	ION STRATEGY	//ACTION PLAN	
ID	Description	Target Date	Status	Resources	Remarks
		ch 2008	of PISC doc 31 January 2008.		approval in February 2008.
60	RVSM Implementation date	25 September 2008	25 September 2008	States/ICAO	25 September 2008
61	Improved incident reporting and investigation to reduce incident rates to support positive CRA results	With Immediate Effect	On-going	States	States to provide record of incidents and remedial action for Safety Assessments
		Mo	nitoring Agency		
62	Evaluate options for setting up AFI RMA	21/11/03	Completed		
63	Identify an AFI RMA	21/11/03	Completed		
64	Establish an AFI RMA.	31/03/04	Completed		
65	Validate State readiness template	15/11/04	Completed		
		Post Implemen	ntation Safety Ca	ase (POSC)	
66	Data collection to continue for submission to ARMA	Monthly	On -going	States	Data Collection to Continue after implementation
67	Evaluate system safety after implementation	6, 12 and 24 months	ТВА	ARMA/ICAO	Compliance with AFI policy
68	Monitor system safety in adjacent Regions	Continuous	On -going	ARMA/ICAO	

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# ATS ROUTES IN THE ICAO AFI ANP (DOC. 7474) REQUIRING IMPLEMENTATION

Route Designator	Segment(s)	States	Observations/Remarks
UA618	Lumbumbashi Bukavu SAGBU Malatal	DRC Sudan	
UB525	Addis Ababa Luxor	Ethiopia Sudan	
UB527	Malakal Kenana	Sudan	Implemented at variance with AFI Plan via Kenana
UB607	Goma El Obeid New Valley El Dhaba	Sudan	
UL612	Goma El Dhaba	DR. Congo Sudan Egypt	Egypt can accept implementation via ATMUL New Valley/KATAB/DBA
UM220	Lodwar Abu Simbel	Sudan	RNAV
UM665	Addis Ababa Merowe	Sudan	
UR400	Abu Simbel Kassala	Sudan	

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# **English ATM Deficiencies**

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
<b>ATM</b>						11000			
ALGERIA									
	This State has no deficiency in								

### **ANGOLA**

This State has no deficiency in this field.

this field.

## **BENIN**

This State has no deficiency in this field.

#### **BOTSWANA**

This State has no deficiency in this field.

## **BURKINA FASO**

This State has no deficiency in this field.

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
BURUNDI						Action			
	This State has no deficiency in this field.								
CAMEROON									
	This State has no deficiency in this field.								
CAPE VERDE									
	This State has no deficiency in this field.								
CENTRAL AFRICAN REPUBLIC									
	This State has no deficiency in this field.								
CHAD									
	This State has no deficiency in this field.								
COMOROS									
	This State has no deficiency in this field.								

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
CONGO	LIM AFI Rec.10/38	SSR Provision of effective surveillance.	Need for SSR surveillance in extended TMA as expressed in the AFI CNS/ATM Plan.	1998	Traffic density/comple xity contributing to frequent ATS incidents	Implement SSR at Brazzaville	Congo	20/11/08	U
CÔTE D'IVOIRE									
	This State has no deficiency in this field.								
DEMOCRATIC REPUBLIC OF CONGO									
	AFI/7 Rec.5/21	FIR Kinshasa	Non-provision of ATC service.	-	-	-	-	31/12/07	U
	APIRG/13 Conc.13/43	FIR Kinshasa	Non-implementation of 10 minute longitudinal separation.	-	-	-	-	31/12/07	U
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	RNAV UL612	Goma-El Dhaba(Paleoh ora)	1995	Aircraft subjected to fly non- economical routes.	States concerned to coordinate common implementation dates.	Congo (DRC)- Egypt-Sudan	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	UB 527	Lubunbashi – Daras Salam	2001	Aircraft subjected to fly non- economical routes.	States concerned to coordinate a common implementatio n date.	D. R. Congo - Tanzania	31/12/07	
<b>DJIBOUTI</b>									
	This State has no deficiency in this field.								
<b>EGYPT</b>									
	This State has no deficiency in this field.								
EQUATORIAL GUINEA									
	This State has no deficiency in this field.								
<b>ERITREA</b>									
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474	Route UB525	Addis –Ababa ALEBA-Luxor	1996	Aircraft Subjected to fly non- economical routes.	States concerned to coordinate common implementatio n dates.	Eritrea	1/9/2005	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
ETHIOPIA									
	This State has no deficiency in this field.								
FRANCE (RÉUNION)									
	This State has no deficiency in this field.								
GABON									
	This State has no deficiency in this field.								
GAMBIA									
	This State has no deficiency in this field.								
<b>GHANA</b>									
	This State has no deficiency in this field.								
GUINEA									
	This State has no deficiency in this field.								

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
GUINEA BISSAU									
	This State has no deficiency in this field.								
KENYA									
	AFI/7 Rec.5/1 - Airspace management	P2, R10, D20	Prohibited area, restricted area, danger area.	1990	Non- availability of direct routing.	Withdraw these areas.	Kenya	31/12/07	A
LESOTHO									
	This State has no deficiency in this field.								
LIBERIA									
	This State has no deficiency in this field.								
LIBYA									
	This State has no deficiency in this field.								
MADA GASCAR									
	This State has no deficiency in this field.								

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
MALA WI						Action			
	This State has no deficiency in this field.								
MALI									
	This State has no deficiency in this field.								
<i>MAURITANIA</i>									
<i>MAURITIUS</i>	This State has no deficiency in this field.								
	This State has no deficiency in this field.								
MOROCCO									
	This State has no deficiency in this field.								
MOZAMBIQUE									
	This State has no deficiency in this field.								

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
<i>NAMIBIA</i>						11000			
	This State has no deficiency in this field.								
NIGER									
	This State has no deficiency in this field.								
<i>NIGERIA</i>									
	This State has no deficiency in this field.								
RWANDA									
	This State has no deficiency in this field.								
SAO TOME & PRINCIPE									
	This State has no deficiency in this field.								
SENEGAL									
	This State has no deficiency in this field.								

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
SEYCHELLES						Titalian .			
	This State has no deficiency in this field.								
SIERRA LEONE									
	This State has no deficiency in this field.								
SOMALIA									
	AFI/7 Rec.5/21	Provision of ATC 150 NM concept.	Non-provision of ATC service 150 NM of Mogadishu.	1994	Delayed descent for arrival and steep climb for departure.	No action due to the present situation	Somalia	31/12/07	U
SOUTH AFRICA									
SPAIN (CANARY IS.)	This State has no deficiency in this field.								
	This State has no deficiency in this field.								

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
SUDAN	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	Route UR400	A. Simbel- Kassala	1994	Aircraft subjected to fly non- economical routes.	Not acceptable now within Khartoum FIR.	Sudan	31/12/07	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	RNAV UM665	Addis Ababa- Merowe	1994	Aircraft subjected to fly non- economical routes.	Not acceptable in  Khartoum FIR due to military reasons.	Sudan	31/12/07	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	RNAV UM220	Lodwar- A.Simbel	1994	Aircraft subjected to fly non	States concerned to coordinate common implementatio n dates.	Sudan	31/12/07	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	RNAV UL612	Goma-El Dhaba	1994	Aircraft subjected to fly non	Overlaps UB607 need to review alignment at appropriate forum.	Sudan	31/12/07	A
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	Route UB607	Goma-El Obeid-New Valley-El Dabha	1994	Aircraft subjected to fly non	States concerned to coordinate common implementatio n dates.	Sudan	31/12/07	A

State Name	Requirements  AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	Facilities or Services Route UB525	Description of Deficiency  Addis Ababa- Luxor	Date first reported 1994	Comments on Deficiency  Aircraft subjected to fly non	Description of Corrective Action Not acceptable now in Khartoum FIR.	Executing Body Sudan	Target date for Implementation 31/12/07	Priority A
SWAZILAND	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474.	Provision of ATS	Area control service not provided to most ATS routes in the upper airspace.	1998	Aircraft subjected to fly non	State to expedite implementation process.	Sudan	31/12/07	A
SWAZILAND	AFI/7 Rec.5/1	P4 - Airspace	Prohibited area	1990	Non-availability of direct routings.	Withdraw this area - P4.	Swaziland	31/12/07	A
TANZANIA	This State has no deficiency in this field.	Management							

*TOGO* 

This State has no deficiency in this field.

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
TUNISIA									
	This State has no deficiency in this field.								
UGANDA									
	This State has no deficiency in this field.								
ZAMBIA									
	This State has no deficiency in this field.								
ZIMBABWE									
	This State has no deficiency in this field.								

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# **English SAR Deficiencies**

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
SAR									
ALGERIA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Algeria and adjacent States	31/12/07	Α
ANGOLA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Angola and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Angola	31/12/07	Α
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Angola	31/12/07	A
BENIN									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Benins and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Benin	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Benin	31/12/07	A
BOTSWANA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Botswana and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Botswana	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Botswana	31/12/07	Α
BURKINA FASO									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Burkin Faso and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Burkino Faso	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Burkino Faso	31/12/07	Α
BURUNDI									
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR	Establish SAR legislation	Burundi	31/12/07	A
	Annex 12, 2.4, Annex 12, 3.2.4: AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Coordinate with States concerned.	Burundi and Adjacent States.		
CAMEROON									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Cameroon and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Cameroon	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Cameroon	31/12/07	A
CAPE VERDE									

This State has no deficiency in this field.

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
CENTRAL AFRICAN REPUBLIC									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	CAR and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	CAR	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	CAR	31/12/07	A
CHAD									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Chad and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Chad	31/12/07	Α
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Chad	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
COMOROS									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Comoros and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Comoros	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Comoros	31/12/07	Α
CONGO									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Congoand adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Congo	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Congo	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
CÔTE D'IVOIRE									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Cote d'Ivoire and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Cote d'Ivoire	31/12/07	А
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Cote d'Ivoire	31/12/07	A
DEMOCRATIC REPUPBLIC OF CONGO									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	DRC and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	DRC	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	DRC	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
<b>DJIBOUTI</b>									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Djibouti and adjacent States	31/12/07	Α
	Annex 12, 2.4, Annex 12, 3.2.4, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	(i) Provide SPOC to ICAO: ii) Implement 406 MHz	Djibouti	31/12/07	Α
	Annex 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	acft. Establish SAR legislation	Djibouti	31/12/07	Α
EGYPT									
	This State has no deficiency in this field.								
EQUATORIAL GUINEA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Equatorial Guinea and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Equatorial Guinea	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Equatorial Guinea	31/12/07	A
<b>ERITREA</b>									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	Establish SAR agreements	1995	Delay to conduct SAR OPS	Coordination with States concerned	Eritrea and adjacent States	31/12/07	Α
	Annex 12, 3.1.6, 3.1.7	SAR Legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR	Establish SAR Agreements	Eritrea	31/12/07	A
ETHIOPIA									
FRANCE	ANNEX 12, 3.1.5, AFI/7 CONC.6/3.	SAR Agreements	-	1995	Delay to conduct SAR/OPS	Coordinate with States concerned.	Ethiopia and adjacent States	31/12/07	Α
(RÉUNION)									
	This State has no deficiency in this field.								
GABON									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Gabon and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Gabon	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Gabon	31/12/07	Α
GAMBIA			·		•				
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Gambia and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Gambia	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Gambia	31/12/07	A
GHANA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Ghana and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Ghana	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Ghana	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
GUINEA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Guinea and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Guinea	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Guinea	31/12/07	A
GUINEA BISSAU									
	This State has no deficiency in this field.								
KENYA									
	Annex 12, 2.4, Annex 12, 3.2.4, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	406 MHz and 121.5 Mhz not implemented	1993	Delay to conduct SAR OPS	121.5 Mhz implemented. 406 MHz not Implemented.	Kenya	31/12/07	A
	Annex 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency.	Development of draft legislation is on going	Kenya	31/12/07	A
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	- ´	1996	Delay to conduct SAR OPS	Signed with EAC States only. To coordinate with other neighbouring States concerned outside EAC.	Kenya and adjacent States	31/12/07	Α

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
<i>LESOTHO</i>									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Lesotho and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Lesotho	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Lesotho	31/12/07	A
LIBERIA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Liberia and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Liberia	31/12/07	Α
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Liberia	31/12/07	A
LIBYA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Libya and adjacent States	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Libya	31/12/07	Α
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Libya	31/12/07	A
MADAGASCAR									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Madagascar adjacent States	31/12/07	Α
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Madagascar	31/12/07	A
MALAWI									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Malawi and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Malawi	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Malawi	31/12/07	Α

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
MALI									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Mali and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Mali	31/12/07	А
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Mali	31/12/07	A
MAURITANIA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Mauritania and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Mauritania	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Mauritania	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
<i>MAURITIUS</i>									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Mauritius and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Mauritius	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Mauritius	31/12/07	A
MOROCCO									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Morocco and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Morocco	31/12/07	Α
<i>MOZAMBIQUE</i>	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Morocco	31/12/07	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Mozambique and adjacent States	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Mozambique	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Mozambique	31/12/07	Α
NAMIBIA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Namibia and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Namibia	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Namibia	31/12/07	A
NIGER									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Niger and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Niger	31/12/07	Α
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Niger	31/12/07	Α

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
<i>NIGERIA</i>									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Nigeria and adjacent States	31/12/07	Α
RWANDA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Rwanda and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Rwanda	31/12/07	Α
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Rwanda	31/12/07	A
SAO TOME & PRINCIPE									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Sao Tome &Principe and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Sao Tome &Pricipe	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Sao Tome &Principe	31/12/07	Α

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
SENEGAL									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Senegal and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Senegal	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Senegal	31/12/07	A
SEYCHELLES									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Seychelles and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Seychelles	31/12/07	A
SIERRA LEONE	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Seychelles	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
SOMALIA	AFI/7 Rec.5/21	Route UG207	Mogadishu- Karachi	1990	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Somalia	31/12/07	A
	AFI/7 Rec.5/21	Provision of ATC 150 NM concept	Non-provision of ATC service 150 NM of Mogadishu	1994	Delayed descent for arrival and steep climb for departure	No action due to the present situation	Somalia	31/12/07	U
SOUTH AFRICA									
	This State has no deficiency in this field.								
SPAIN (CANARY IS.)									
	This State has no deficiency in this field.								
SUDAN									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Sudan and adjacent States	31/12/07	A
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Sudan	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Sudan	31/12/07	A

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
SWAZILAND									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Swaziland and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Swaziland	31/12/07	A
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Swaziland	31/12/07	A
<b>TANZANIA</b>									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Tanzania and adjacent States	31/12/07	Α
TOGO									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Togo and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Togo	31/12/07	A
TUNISIA	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Togo	31/12/07	Α
IUNISIA									

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State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
<b>UGANDA</b>									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Uganda and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Uganda	31/12/07	Α
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Uganda	31/12/07	A
ZAMBIA									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Zambia adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Zambia	31/12/07	Α
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Zambia	31/12/07	A
<b>ZIMBABWE</b>									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Zimbabwe and adjacent States	31/12/07	Α
	Annexe 12, 2.4, Annexe 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz	1993	Delay to conduct SAR OPS	Implement 406 MHz in acft. – Provide SPOC to ICAO	Zimbabwe	31/12/07	Α
	Annexe 12, 3.1.6, 3.1.7	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation	Zimbabwe	31/12/07	Α

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### **English AIS Deficiencies**

State Name	Requirements	Facilities or	Description of	Date first	Comments on	<b>Description</b>	Executing	Target date for	<b>Priority</b>
		<b>Services</b>	<b>Deficiency</b>	<i>reported</i>	<b>Deficiency</b>	of Corrective	<b>Body</b>	<b>Implementation</b>	
						Action			

### AIS ALGERIA

This State has no deficiency in this field.

#### **ANGOLA**

This State has no deficiency in this field.

#### **BENIN**

This State has no deficiency in this field.

#### **BOTSWANA**

State Name Description of Date first Target date for **Requirements** Facilities or Comments on **Description Executing Priority Deficiency** of Corrective **Implementation Services reported Deficiency Body** Action

#### **BURKINA FASO**

This State has no deficiency in this field.

#### **BURUNDI**

This State has no deficiency in this field.

#### **CAMEROON**

This State has no deficiency in this field.

#### CAPE VERDE

This State has no deficiency in this field.

#### CENTRAL AFRICAN REPUBLIC

This State has no deficiency in this field.

#### **CHAD**

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	<b>Priority</b>
COMOROS									
	This State has no deficiency in this field.								
CONGO									
	This State has no deficiency in this field.								
CÔTE D'IVOIRE									
	This State has no deficiency in this field.								
DEMOCRATIC REPUBLIC OF CONGO									
	Annex 4, 13.2 and AFI/7, Rec.12/31	ICAO Mandatory Charts	Aerodrome Charts outdated	1990	Non-updated charts affects safety	Publish new charts. IAC and VAC charts published.	Congo (DRC)	31/12/07	U
<b>DJIBOUTI</b>									

**Priority** 

#### APIRG/16 Appendix D3 to WP/16

State Name Facilities or Description of Date first Target date for **Requirements** Comments on **Description Executing Deficiency Implementation Services** reported **Deficiency** of Corrective **Body** Action **EGYPT** This State has no deficiency in this field. **EQUATORIAL GUINEA** This State has no deficiency in this field. **ERITREA** This State has no deficiency in this field.

#### **ETHIOPIA**

This State has no deficiency in this field.

# FRANCE (RÉUNION)

This State has no deficiency in this field.

#### **GABON**

State Name Facilities or Description of Date first Target date for **Requirements** Comments on **Description Executing Priority Services Deficiency Implementation** reported **Deficiency** of Corrective **Body** Action

#### **GHANA**

This State has no deficiency in this field.

#### **GAMBIA**

This State has no deficiency in this field.

#### **GUINEA**

This State has no deficiency in this field.

#### **GUINEA BISSAU**

This State has no deficiency in this field.

#### **KENYA**

This State has no deficiency in this field.

#### **LESOTHO**

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
LIBYA						Action			
	This State has no deficiency in this field.								
MADAGASCAR									
	This State has no deficiency in this field.								
MALA WI									
	This State has no deficiency in this field.								
MALI									
	This State has no deficiency in this field.								
<i>MAURITANIA</i>									
	This State has no deficiency in this field.								
<i>MAURITIUS</i>									
	This State has no deficiency in this field.								
MOROCCO									
	This State has no deficiency in this field.								

State Name Facilities or Description of Date first Target date for **Requirements** Comments on **Description Executing Priority Deficiency Implementation Services reported Deficiency** of Corrective **Body** Action

MOZAMBIQUE

This State has no deficiency in this field.

**NAMIBIA** 

This State has no deficiency in this field.

**NIGER** 

This State has no deficiency in this field.

**NIGERIA** 

This State has no deficiency in this field.

**RWANDA** 

This State has no deficiency in this field.

SAO TOME & PRINCIPE

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective Action	Executing Body	Target date for Implementation	Priority
SENEGAL	This State has no deficiency in this field.					110001			
<b>SEYCHELLES</b>									
	This State has no deficiency in this field.								
SIERRA LEONE									
	This State has no deficiency in this field.								
SOMALIA									
	Annex 4, 3.2, 11.2 and 13.2, AFI/7 Rec.12/31	ICAO Aerodrome Chart and the ICAO Aerodrome Obstacle Chart - Type A.	Non-availability of ICAO Aerodrome Chart, ICAO Aerodrome Obstacle Chart type A and ICAO Instrument Approach Chart for Hargeisa, Kismayu, Mogadishu.	1990	Lack of these charts affects safety.	Publish the three Charts as required	Somalia	31/12/07	U
	Annex 15, 3.6.4	Coordinates WGS84	Accuracy of coordinates to be established in accordance with Annexes 11 and 14.	01/01/98	Delay in introduction of GNSS	Implementation of WGS-84 coordinates	Somalia	31/12/07	U

#### **SOUTH AFRICA**

State Name Description of Date first **Requirements** Facilities or Comments on **Description Executing** Target date for **Priority Deficiency Implementation Services reported Deficiency** of Corrective **Body** Action

## SPAIN (CANARY IS.)

This State has no deficiency in this field.

#### **SUDAN**

This State has no deficiency in this field.

#### **SWAZILAND**

This State has no deficiency in this field.

#### **TANZANIA**

This State has no deficiency in this field.

#### **TOGO**

This State has no deficiency in this field.

#### **TUNISIA**

State Name Requirements Facilities or Description of Date first **Description** Target date for **Priority** Comments on **Executing Deficiency Deficiency** of Corrective **Implementation Services** reported **Body** Action

#### **UGANDA**

This State has no deficiency in this field.

#### WESTERN SAHARA

This State has no deficiency in this field.

#### **ZAMBIA**

This State has no deficiency in this field.

#### **ZIMBABWE**

This State has no deficiency in this field.

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#### TERMS OF REFERENCE, WORK PROGRAMME AND COMPOSITION OF THE ATS/AIS/SAR SUB/GROUP

#### 1. **Terms of Reference**

- a) To identify State by State, those specific shortcomings and problems that constitute major obstacles to the provision of efficient Air Traffic Management, Aeronautical Information Services and Search and Rescue Services and recommend specific measures to eliminate them.
- b) To keep under review, the adequacy of requirements in the Air Traffic Management, Aeronautical Information Services and Search and Rescue fields, taking into account, inter alia changes to aircraft operations and new operational requirements or technological developments.

#### **Work Programme** 2.

No.	Task Description	Priority	Target Date
1	Analyse the operational implications of the introduction of ICAO CNS/ATM Systems in the fields of ATS, SAR, AIS/MAP and MET matters and propose any required actions with a view to ensuring their smooth integration in the operational environment.	A	APIRG/ 16
2	Taking into account Human Factors, study problems and make specific recommendations related to ATS and AIS personnel, with a view to ensure the best services to users. (AFI/7 Rec 14/7)	В	APIRG/16
3	Study the requirements for civil/military coordination procedures including the promotion of the implementation of the concepts of joint use of airspace, free flight, flexible tracks etc. and in addition consider reducing and/or eliminating prohibited, restricted and danger areas. (AFI/7 Rec 5/3)	A	APIRG/16
*4	Determine the framework within which air traffic data collection statistical analysis and forecasting should be carried out.	С	APIRG/16
5	Review the requirements and monitor the programme of implementation of area control service. (AFI/7 Rec 5/21)	A	APIRG/16
6	Review the existing ATS route network (including RNAV routes) on a systematic basis with a view to achieving an optimum flow of air traffic while keeping flight distances of individual flights to a minimum. (AFI/7 Rec 5/8)	A	APIRG/16
7	Consider problems and make specific recommendations relating to ATS interface routes with other regions.	A	Continuing
8	Monitor achievements and progress in the implementation of RNAV/RNP, RSP and RTSP in the AFI Region and provide recommendations in the light of acquired experience	A	APIRG/16
9	Monitor developments in SSR planning criteria and review the allocation of SSR codes in the region to ensure there is no duplication with adjacent regions. (AFI/7 Rec 5/20)	A	Continuing

No.	Task Description	Priority	Target Date
10	Review the ATS requirements for navigation. (AFI/7 Rec 10/4)	A	APIRG/16
11	Review of ATS requirements for communication including extension of VHF coverage. (AFI/7 Rec 5/13, Rec 5/12 and LIM AFI Rec 10/36)	A	APIRG/16
12	Identify the ATS requirements for Surveillance (RADAR, ADS, Voice etc.) (AFI/7 Rec 11/1)	A	APIRG/16
13	Carry out studies and develop recommendations aimed at facilitating in an effective way the existing Contingency plans ,reduce air traffic incidents, implementation of ACAS, ATIS, pressure-altitude reporting transponders, Digital Flight Information Service (D-FIS) RVSM, MSAW/CFIT, COSPAS/SARSAT and safety oversight programs in the AFI Region.	A	Continuing
14	Develop standard auditing and proficiency maintenance procedures to be used by States to assess the capability/competence of any ATS unit as well as monitor the implementation of uniform proficiency assessment for ATS personnel. (AFI/7 Conc 5/27)	В	Continuing
15	Review the requirements and monitor the implementation of Search and Rescue Services.	В	Continuing
16	Review the requirements and monitor the implementation of AIS and MAP services	В	Continuing
17	Analyse, review and monitor shortcomings and deficiencies in the fields of ATS, AIS/MAP and SAR	A	Continuing
18	Develop FANS 1/A Operational Manual for application in the AFI Region taking into account Manuals from other Regions	A	APIRG 16

#### Priority:

- A High priority tasks, on which work should be speeded up;
- B Medium priority tasks, on which work should be undertaken as soon as possible, but without detriment to priority A tasks;
- C Lesser priority tasks, on which work should be undertaken as time and resources permit, but without detriment to priority A and B tasks.
- \* This task will be a subject of coordination with the Traffic Forecasting Task Force.

#### 3. Composition:

Algeria, Angola, Burkina Faso, Cameroon, Congo, Congo (DRC), Côte d'Ivoire, Egypt, Ethiopia, France, Gabon, Ghana, Guinea, Kenya, Madagascar, Malawi, Mauritania, Morocco, Niger, Nigeria, Senegal, Spain, South Africa, Sudan, Uganda, Tanzania, Togo, Tunisia, Zambia, Zimbabwe, ASECNA, IATA, IFALPA and IFATCA.