INTERNATIONAL CIVIL AVIATION ORGANIZATION EASTERN AND SOUTHERN AFRICAN OFFICE



REPORT OF THE SEVENTH MEETING OF THE ATS/AIS/SAR SUB-GROUP (ATS/AIS/SAR/SG/7)

(Nairobi 14 – 18 October 2002)

The ATS/AIS/SAR Sub-Group is a Sub-Group of the AFI Planning and Implementation Regional Group (APIRG). Its Reports are therefore submitted to APIRG for review and action.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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PART I - HISTORY OF THE MEETING

1. Duration

1.1 The seventh meeting of the ATS/AIS/SAR Sub-Group was convened by the International Civil Aviation Organization at the ICAO ESAF Office, Nairobi from 14 – 18 October 2002.

2. Officers and Secretariat

- 2.1 The meeting re-elected Mr. E. ONASANYA of Nigeria as its Chairman and Mr. BANNEKHAL ABDELKADER of Algeria as its Vice-Chairman.
- 2.2 Mr. A. Kharuga, the Secretary of the Sub-Group and Regional Officer, Air Traffic Management (RO/ATM) of the ICAO ESAF Office, acted as the Secretary of the meeting. He was assisted by Mr. Marcel Munyakazi, Regional Officer, Air Traffic Management (RO/ATM) of ICAO ESAF Office, Messrs. George Baldeh, Regional Officer, Air Traffic Management and Sidy Fall, Regional Officer, AIS, of ICAO WACAF Office, Dakar.
- 2.3 The meeting was opened by Mr. Lot Mollel, the Regional Director of the ICAO Eastern and Southern African Office. He emphasized the need for the meeting to address those deficiencies that constitute major obstacles to the provision of efficient air traffic services and recommend specific measures to eliminate them. He also emphasized the need to consider issues relating to human factors in accordance with the Terms of Reference of the Sub-group as they contribute to the enhancement of air safety. He recalled that the ANC/Council had recommended that States should rather concentrate their effort on elimination of deficiencies. He also pointed out that the provisions of search and rescue services and AIS/MAP services were of major concern in the Region and urged the Sub-Group to explore ways and means of improving these services.

3. Attendance

3.1 The meeting was attended by **53** experts from **14** Member States, **4** non-Member States, and **4** Member Organizations, namely, IATA, ASECNA, IFATCA and IFALPA and **1** non-Member Organization namely, AFCAC. The list of participants is given at **Appendix A** to this report.

4. Working Languages

4.1 Simultaneous interpretation services were provided in English and French and the meeting documentation was provided in these two languages.

5. Agenda

5.1 The meeting adopted the following Agenda:

Agenda Item 1: Election of the Chairman and Vice- Chairman.

Agenda item 2: Review of the ATS route network.

Agenda Item 3: Review of the implementation of Area Control Service.

Agenda Item 4: Review of the implementation of ATS Direct Speech (ATS/DS) circuits.

Agenda item 5: Review of the Report of the first meeting of the RVSM/RNAV/RNP Task Force.

Agenda Item 6: Review of the Report of the second meeting of the Airspace Management Task Force.

Agenda item 7: Review of the Report of the second meeting of the AIS Automation Task Force.

Agenda Item 8: Review of the implementation of ICAO requirements for NOTAM, WGS-84 coordinates and mandatory charts.

Agenda Item 9: Review of the implementation of ICAO requirements in the Search and Rescue (SAR) Services field.

Agenda Item 10: Consideration of the operational implications of the introduction of ICAO CNS/ATM System in the AFI Region.

Agenda Item 11: Consideration of specific air navigation planning and implementation problems and the review of air navigation field deficiencies.

Agenda Item 12: Review of outstanding Conclusions and Decisions of APIRG, Decisions of the ATS/AIS/SAR/SG and its future work programme.

Agenda Item 13: Any other business.

6. Draft Conclusions and Decision

6.1 The Sub-Group records its action in the form of draft Conclusions and Decisions with the following significance:

Conclusions

6.2 Conclusions when approved by APIRG or on which further action will be initiated by ICAO in accordance with established procedures deal with matters which, in accordance with the APIRG terms of reference, merit directly the attention of States.

Decisions

6.3 Decisions when approved by APIRG deal with matters of concern only to the APIRG and its contributory bodies (i.e. Sub-Groups).

ATS/AIS/SAR/SG Decisions

Decisions dealing with matters of concern only to the ATS/AIS/SAR/SG.

6.5 List of draft Conclusions and Decision

Number	Title	Page
	Agenda Item 2: Review of ATS Route Network	20
Draft Conclusion 7/1	Amendment to AFI ANP Table ATS – 1	
	That the ICAO AFI ANP Table ATS-1 be amended to include a requirement for ATS routes:	
	(i) Geneina -Port Sudan (RNAV).(ii) Cotonou – Malabo	
Draft Conclusion 7/2	Implementation of the non-implemented routes including RNAV routes	21
	That:	
	 a) the new target dates for the implementation of the non-implemented routes including RNAV routes at Appendix B should be the AIRAC date of 22 January 2004. 	
	b) States that have not yet done so, expedite the implementation of ATS routes in their FIR as shown in Appendix B to this report.	
Draft Conclusion 7/3	Update of notes in Table ATS – 1 of the AFI Air Navigation Plan	21
	That the notes on ATS routes in Table ATS – 1 of ICAO AFI Air Navigation Plan (Doc.7474) be updated as shown in Appendix C to this report.	
	Agenda Item 3: Review of the implementation of the Area Control Service	22
Draft Conclusion 7/4	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 in any case not later than 31 December 2003 in the spirit of AFI/7 Rec.5/21.	

Number	Title	Page
	Agenda Item 4: Review of the implementation of ATS Direct Speech (ATS/DS) circuits	23
Draft Conclusion 7/5	Amendment Proposal to the AFI ATS/DS Plan	
	That:	
	a) South Africa initiates an amendment proposal to the ICAO AFI ANP to include the new FIRs in South Africa.	
	b) In view of the restructured FIRs of South Africa, the State develop appropriate ATS/DS circuits required so that ICAO could develop an appropriate ATS/DS Plan.	
Draft Conclusion 7/6	Additional ATS D/S Circuits	23
	That the ATS D/S plan be amended so as to include the circuit Lagos-Niamey .	
	Agenda Item 5: Review of the report of the first meeting of RVSM/RNAV/RNP Task Force	24
Draft Conclusion 7/7	RVSM monitoring agency for AFI Region That:	
	a) The task of monitoring safety in conjunction with implementation of RVSM and RNAV/RNP in the AFI Region be assigned to the South Atlantic Monitoring Agency (SATMA) located at Canarias ACC.	
	b) The Terms of Reference of the monitoring agency be those at Appendix D	
Draft Conclusion 7/8	RVSM/RNP Safety Assessment	24
	That: a) the safety assessment comparative methodology contained in Manual of Airspace Planning Methodology for the Determination of Separation Minima (Doc.9689) be used for application in the implementation of RVSM and RNP in the AFI Region. b) ICAO in coordination with SATMA develop ways and	
Draft Conclusion 7/9	means of carrying safety assessment as soon as possible. Civil/military coordination	24
Zian Condition (1)	That in order to ensure the safe and coordinated implementation of RVSM in the AFI Region, States ensure that the military aviation authorities are fully involved in the planning and implementation process.	

Number	Title	Page
Draft Conclusion 7/10	Nomination of an RVSM programme manager	25
Draft Conclusion 7/11	 a) States/service providers nominate as soon as possible an RVSM Programme Manager who will be responsible for ensuring that the proper mechanism is put in place for the safe implementation of RVSM programme and will also act as the focal point of contact person. b) ICAO consolidate the list of the RVSM programme managers as soon as possible and circulate it to States and International Organizations. Reporting of data for monitoring and/or carrying out safety 	25
	assessment	
	That:	
	 a) All States institute procedures for reporting of data, incidents and conditions necessary or performing the collision risk calculations prerequisite for RVSM implementation to the AFI monitoring agency. The data will include, but not necessarily be limited to: i) Height deviations of 300 ft or more. ii) total number of IFR movements for each month. iii) the average time per movement spent in 	
	the level band FL 290 to FL 410. iv) ATC/ATC coordination failures v) turbulence; and vi) traffic data.	
	 b) The AFI monitoring agency shall ensure further processing and/or evaluation of this data within its Terms of Reference and identify or develop methodologies for assessing risk associated with traffic and conditions prevailing within the AFI Region. c) AFI monitoring agency should use the reporting format at 	
	Appendix E.	
Draft Conclusion 7/12	RVSM Monitoring requirements	25
	That operators having met the monitoring requirements for a given fleet/type of aircraft, in other Regions will be accepted as having satisfied the RVSM monitoring requirements for the AFI Region.	

Number	Title	Page
Draft Conclusion 7/13	Implementation of RVSM in the AFI Region	26
	a) RVSM will be implemented in the AFI Region in the airspaces that have met the criteria in the RVSM Manual (Doc.9574) between FL 350 and FL390 initially on the AIRAC date of 27 November 2003 and extension from FL 290 to 410 inclusive by the year 2005 .	
	b) Implementation of RVSM in the AFI Region be harmonized and coordinated with the implementation time frames of adjacent regions.	
Draft Conclusion 7/14	Training of all personnel involved with the implementation of RVSM in the AFI Region	26
	That: a) ICAO and IATA explore the possibility of assisting States of the AFI Region through a Special Implementation Project (SIP) for training of personnel involved with the implementation of RVSM/RNP in the AFI Region.	
	b) Seminars/Workshops be organized in the Region for training of air traffic services personnel in the RVSM/RNP field.	
	c) States be invited to approach training institutions for the development of a training module in the RVSM field representative of the AFI Region.	
	d) States having difficulties in complying with RVSM implementation programme, may either individually or in group explore the possibility of seeking outside expertise.	
Draft Conclusion 7/15	Guidance material for airworthiness and operational approval	26
	That States in the AFI Region be urged to include in their national legislation and publish the Airworthiness and Operational Approval process for aircraft and operators intending to operate within a designated RVSM airspace based on provisions of ICAO Annex 6 Part 1 Chapter 7 para. 7.2.3, and the guidance material contained in both FAA interim guidance 91-RVSM and JAA Temporary Guidance Leaflet (TGL) N° 6.	

Number	Title	Page
Draft Conclusion 7/16	Airworthiness and operational approval for RNP 5 and RNP 10 operation in the AFI Region	27
	That with a view to facilitate and harmonize the airworthiness and operational approval procedures for RNP5 and RNP10 in the Region:	
	(i) The European Joint Airworthiness Authority (JAA) temporary guidance leaflet N°.2, guidance material on airworthiness approval and operational criteria for the use of navigation systems in the European airspace designated for basic RNAV operations be endorsed as the official guidance material for airworthiness and operational approvals for RNP5 operations in the AFI Region.	
	(ii) The guidance material developed by the United States, FAA order 8400.12 be used by States for the development of RNP10 operational approval process.	
Draft Decision 7/17	Sample AIC on Implementation of RVSM and National Legislation	27
	That the RVSM/RNAV/RNP Task Force develop	
	a) a sample AIC that shall be promulgated by States when notifying their intent to implement RVSM in national airspaces;	
	b) a sample national legislation that shall be promulgated in States' AIPs on RVSM implementation.	
Draft Conclusion 7/18	Enforcement in national legislation	27
	That States take the appropriate measure in order to:	
	a) publish the AIC informing the users of their intention to implement RVSM between FL350 and FL390 on 27 November 2003 and;	
	b) include the necessary provisions in their national legislation (AIPs).	
	c) ICAO Regional Offices concerned circulate to States the Sample AIC and Sample National Legislation on RVSM.	

Number	Title	Page
Draft Conclusion 7/19	Amendment to ICAO Doc.7030	27
	That ICAO initiates as appropriate an amendment proposal to the AFI SUPPs to include relevant provisions for RVSM and RNP implementation in AFI Region.	
Draft Conclusion 7/20	Participation of representatives of States and international organizations involved in the implementation of RVSM approval process	28
	That Representatives of States and international organizations with experience in the RVSM approval process of aircraft and operators, be invited to attend the future meetings of the RVSM Task Force.	
Draft Conclusion 7/21	Funding of the RVSM implementation programme	28
	That National Governments, Regulatory bodies, operators, service providers and other stakeholders be granted budgetary allocations for acquisitions and other activities necessary for ensuring that all the requirements be met in a timely manner in order to safely implement RVSM in the AFI Region.	
Draft Conclusion 7/22	Guidance material for RVSM and RNAV/RNP	28
	That in order to enhance awareness campaign on RVSM and RNAV/RNP the documents at Appendix F to this report be circulated to States.	
Draft Conclusion 7/23	AFI RVSM/RNAV/RNP implementation plan	28
	That the material at Appendix G to this report be circulated to States for comments.	
Draft Conclusion 7/24	Future Work Programme of the RVSM/RNAV/RNP Task Force	28
	That, having noted the RVSM/RNAV/RNP Task Force terms of reference, the Sub-Group formed the opinion that the Task Force should continue its work as assigned to it.	
	Agenda Item 6: Review of the report of the second meeting of the Airspace Management Task Force	29
Draft Conclusion 7/25	Categorization of Terminal Areas and Aerodromes	
	That:	
	a) States which have not yet done so be reminded to provide the Secretariat with traffic data required for the categorization of TMAs and aerodromes;	

Number	Title	Page
	b) IATA and ASECNA should finalize the categorization of TMAs and aerodromes based on traffic data available and present it at the next CNS/ATM/IC -SG Meeting.	
	Implementation of RNAV Route UM114	29
Draft Conclusion 7/26	That:	
Dian Conclusion 7/20	a) Accra ATS authority implement and delegate to Kano/Lagos ATS authorities the portion of UM114	
	within its airspace. ICAO arrange at the earliest possible date, a coordination meeting between Accra, Kano and Niamey FIRs, preferably before the implementation of UM114.	
Draft Conclusion 7/27	Delineation of FIR Boundaries	30
	That ICAO convene a meeting between Algeria and Tunisia to harmonize the publication in their respective AIPs of the delineation of the FIR boundaries pursuant to AFI/7 Rec 5/1, Rec 5/9 and APIRG/13 Conc. 13/26.	
Draft Conclusion 7/28	Globalization of FIRs in the AFI Region	30
	That to achieve globalization of FIRs in the AFI Region pursuant to AFI/7 Rec.5/1 relative to a co-operative approach to airspace management, the concerned States explore the possibility of forming functional groups of FIRs such as: Ghana/Nigeria Namibia/Botswana South Africa/Lesotho/Swaziland Zambia/Zimbabwe Mozambique/Malawi Indian Ocean States (Madagascar, Mauritius, Seychelles) Kenya/Tanzania/Uganda	
	Ethiopia/Eritrea/Djibouti	
Draft Conclusion 7/29	Review of AFI ATS incidents That:	30
	a) Efforts to enhance Controller training, proficiency and work environment and ATS Staff Management continue throughout the Region.	
	b) Dakar Oceanic, Kano (Lagos), Khartoum, Kinshasa, Tripoli, Luanda and Niamey FIRs continue to improve Staff training.	
	c) For better assessment of the situation, joint ICAO/IATA	

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	technical missions including other Organizations to the ATS units where the highest number of incidents have occurred be encouraged.	
	d) States and ATS providers (Angola, Democratic Rep. of the Congo, Libya, Sudan, ASECNA) expedite extension of VHF coverage to ATS routes in the upper airspace, and provision of ATC service in the region.	
	e) Action be taken by all States to fully implement/improve ATS/DS links, especially between N'Djamena -Tripoli, N'Djamena-Khartoum, Accra-Lagos and Niamey-Accra.	
	f) States establish and periodically update ATS Co-ordination procedures between all adjacent ATS units	
	g) States, which have not already done so, be urged by ICAO to implement procedures for the timely investigation of ATS incidents and notification of the results in accordance with AFI/7 Rec.5/26.	
	h) States, which have not already done so, implement voluntary non punitive ATS incident reporting procedures;	
Draft Conclusion 7/30	Amendments to the assignment of 5-letter name codes at crossing points of ATS Routes	31
	That States concerned assign 5 letter names codes at crossing points of ATS routes as shown in Appendix I.	
Draft Conclusion 7/31	Publication of the air to air communications channel on 123.45 MHz	31
	That States which have not yet done so, publish in their regulations and AIPs, the air to air VHF communication frequency 123.45MHz in accordance with ICAO Annex, 10 Vol.V paragraph 4.1.3.2 and the AFI VHF utilization Plan.	
Draft Conclusion 7/32	Application of flexible use of airspace (FUA) That:	31
	a) States adopt a flexible use of airspace approach in the establishment of prohibited, restricted or danger areas such that these areas are established on temporary basis taking into account the needs of civil aviation; and	
	b) States constantly review the existence of prohibited, restricted or danger areas pursuant to LIM/AFI (1988) Rec.2/21 as shown in Appendix J.	

Number	Title	Page
Draft Conclusion 7/33	Implementation of 10-minute longitudinal separation minimum	32
	That:	
	a) States that have not already done so, urgently implement the 10-minute longitudinal separation minimum taking into cognisance the relevant requirements in APIRG/13 Conc.13/43 and the provisions of ICAO PANS/ATM (Doc.4444/501) and AFI CNS/ATM System Plan (Doc.003).	
	b) Algeria and ASECNA implement a common 10-minute longitudinal separation minimum in selected airspaces so as to avoid confusion.	
	c) ICAO editorially amend Doc.7030 to harmonize with the provision in the PANS/ATM Manual Doc.4444/501.	
Draft Conclusion 7/34	Development of Chart ATM 1 (Part V-ATM of the AFI FASID)	32
	That the SSR Code Allotment Plan (Chart ATM 1 for Part V-ATM FASID) as contained in Appendix K be submitted to States for comments and subsequently be presented to the APIRG/14 meeting for consideration.	
Draft Conclusion 7/35	Application of SIDs and STARs	32
	That States implement the application of flexible use of airspace in establishing SIDs and STARs considering the following:	
	a) As the period immediately after take off is one of high cockpit workload, the first significant point of a standard instrument departure route which requires reference to a radio navigation facility should, if possible, be established at a distance of at least 2 nautical miles from the end of the runway.	

Number	Title	Page
	b) Level restrictions, if any, be expressed in terms of minimum and/or maximum levels at which significant points are to be crossed;	
	c) The designation of significant points as reporting points (compulsory or on request) be kept to a minimum;	
	d) Standard instrument departure (SIDs) and arrival routes (STARs) be established in consultation with the users and other parties concerned.	
Draft Conclusion 7/36	Implementation of SIDs and STARs coupled to RNAV Route structure	33
	That States implement SIDs and STARs coupled to RNAV Route structure where required, in order to relieve congestion on existing single routes.	
Draft Conclusion 7/37	Classification of airspaces:	33
	That:	
	a) ICAO expedites the revision of the current airspace classification taking into account the fact that there is no class for uncontrolled airspace which does not accept VFR;	
	b) In the meantime airspaces which do not accept VFR (Oceanic, above FL145) be classified A in order to comply with Annex 11 and Doc.7030.	
	c) In the meantime in case for one or another reason an airspace which does not accept VFR cannot be of class A, a NOTAM be published that the States concerned shall inform of the non acceptance of VFR in such an airspace.	
	Agenda Item 7: Review of the report of the second meeting of the AIS/MAP Automation Task Force	34
Draft Conclusion 7/38	Collection of Data for the Identification of National AIS Centers (NASCs) in AFI Region	
	That:	
	a) the data collected be used to determine future regional AIS Centres (RASCs);	
	b) States should concentrate their efforts in implementing their National AIS Centers (NASC) and those which have not completed the AIS questionnaire do so as soon as possible for submission of the replies to the relevant ICAO Regional Offices.	

Number	Title	Page
Draft Conclusion 7/39	Production of the AIP in the ICAO format	34
	That ICAO initiate a Special Implementation Project (SIP) to assist those States which have no AIP or have not published the AIP in the new format.	
Draft Conclusion 7/40	Dissemination of AIS data	34
	That in the spirit of APIRG Conclusion 13/48, States which have not done so, establish a civil aviation website and ensure that AIS data are posted in the relevant website taking into account integrity and security of the information.	
Draft Conclusion 7/41	Publication of AIS Checklist and Summaries	34
	a) That NOTAM checklist for each month be published on the first day of the following month and that current NOTAMs should be listed by serial number and date to facilitate identification.	
	b) That NOTAM checklist refer to the latest AIP Amendments, AIP Supplements and the internationally distributed AICs.	
	c)That the printed plain-language summary of NOTAMs in force, including references to the latest AIP Amendments, checklists of AIP Supplements and AICs issued be prepared every month and forwarded by the most expeditious means to all recipients of the Integrated Aeronautical Information Package.	
Draft Conclusion 7/42	Aerodrome AIS Units Implementation	35
	That States ensure that the AIS Aerodrome units at Appendices L and M to this report are established and manned by qualified AIS personnel.	
Draft Conclusion 7/43	Quality and Status of AIS Personnel	35
	That States take the necessary action to ensure that:	
	 a) AIS is accorded a status commensurate with the current technological developments requiring high calibre and skilled personnel; 	
	b) Personnel recruited for AIS receive adequate professional training;	
	c) Such personnel are accorded a status comparable to that of personnel of other air navigation services;	
	d) Adequate facilities and funds needed for the efficient performance of AIS duties and priorities are provided.	

Number	Title	Page
Draft Conclusion 7/44	Training Guidelines for AIS Personnel 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.	35
Draft Conclusion 7/45	Membership of the AIS/MAP Automation Task Force That Kenya, Nigeria, South Africa, Tanzania and Zimbabwe be included in the list of the AIS/MAP Automation Task Force members.	35
Draft Conclusion 7/46	Continuity of AIS/MAP Task Force That the AIS/MAP Automation Task Force continue its work programme in order to address uncompleted tasks as assigned by APIRG.	35
	Agenda Item 8:Review of the implementation of ICAO requirements for NOTAM, WGS-84 coordinates and mandatory charts	36
Draft Conclusion 7/47	Conversion of en-route geographical coordinates That: a)States which have not done so, complete the required conversion to WGS-84 of their en-route and FIR boundary reporting points coordinates; b)ICAO assist States concerned as necessary, in respect of a) above.	

Number	Title	Page
	Publication of WGS-84 Information on Charts	36
Draft Conclusion 7/48	That States give high priority to the promulgation of WGS-84 coordinates on the following mandatory charts:	
	a)Instrument Approach Chart – ICAO;	
	b)Aerodrome Obstacle Chart – ICAO Type A;	
	c)Aerodrome Chart – ICAO;	
	d)Precision Approach Terrain Chart – ICAO for Categories II and III, where applicable.	
Draft Conclusion 7/49	Responsibility for the Production of the World Aeronautical Chart – ICAO 1:1 000 000	37
	a)That awareness of States concerned be brought to the fact that those States which had the responsibility for the production of the following sheets of the world aeronautical chart - ICAO 1: 1 000 000 are no longer in a position to continue their production: 2344-45, 2420-21, 2422, 2451, 2454-55, 2536-37, 2423, 2454-55, 2536-37, 2570, 2574, 2658, 2659-60, 2660, 2662, 2663, 2664, 2691, 2692, 2693, 2694, 2695, 2696-97, 2697, 2780-81, 2781-82, 2784-85, 2785-86, 2812-13, 2813-14, 2814-15, 2816-17, 2817-18, 2905, 2906-07, 2935, 2936, 3052, 3155-56, 3173-74, 3278, 3297. b)That States covered by the above-mentioned WAC sheets and	
	which are unable to produce their sheet initiate consultations with other States having the capability to produce charts 1:1000 000 for assistance in this respect.	
	Agenda Item 9:Review of the implementation of ICAO requirements in the Search and Rescue (SAR) Services field	38
Draft Conclusion 7/50	SAR Cooperation Agreements between States	
	That in order to promote a more effective and economic utilization of SAR facilities, States should enter into precise agreements with other States in order to pool their resources and provide mutual assistance in SAR operations, using the specimen agreement in the IAMSAR Manual (Doc.9731), Volume One, Appendix I.	

Number	Title	Page
Draft conclusion 7/51	Implementation of SAR Legislation	39
	That, as a matter of priority, States undertake to:	
	a) enact the SAR legislation that will make SAR operations legal and empower the SAR mission coordinator to request external assistance when the available facilities and personnel are found not to be coping with an emergency or are viewed impaired or insufficient to cope with a distress situation.	
	b) make sure that the request referred to in a) is not subjected to any approval by high level authorities, but that a notification should be sufficient.	
Draft Conclusion 7/52	AFCAC Project on Search and Rescue	39
	That, considering the long-time problems which have continued to prevent the implementation of the ICAO provisions in the field of search and rescue, States be urged to express support to the AFCAC project aimed at expediting implementation of the ICAO SAR provisions, with particular emphasis to SAR legislation, organization and agreements.	
	Agenda Item 10:Consideration of the operational implications of the introduction of ICAO CNS/ATM System in the AFI Region	40
Draft Conclusion 7/53	Implementation of CNS/ATM Systems in Routing areas AR1 and AR6	
	That, the implementation of CNS/ATM systems within areas of routing AR1 and AR6 be coordinated by the SAT Informal Group.	
Draft Conclusion 7/54	Coordination between SAT Group and the AEFMP Group	40
	(Algeria, France, Spain, Morocco and Portugal)	
	That,	
	a)in the implementation of CNS/ATM systems, close coordination be maintained between the SAT group and the AEFMP group; and	
	b)attendance at each other's meetings be encouraged and whenever possible reports from each other's group meeting be exchanged.	

Number	Title	Page
Draft Conclusion 7/55	Review of areas of routing in the AFI Region	40
	That a review be conducted by the CNS/ATM/IC/SG in order to determine whether the 10 areas of routing adequately respond to the present traffic flows.	
Draft Conclusion 7/56	CNS/ATM Planning Target Dates	40
	That the CNS/ATM Sub-Group develop CNS/ATM planning targets dates for the period 2005 onwards.	
	Agenda Item 11: Consideration of specific air navigation planning and implementation problems and the review of air navigation deficiencies in the Region	41
Draft Conclusion 7/57	List of deficiencies in the ATM, SAR and AIS fields	
	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:	
	a) States concerned should take as soon as possible concrete measures to eliminate all deficiencies at Appendix N to this report.	
	b) the matter be regularly followed up by the ICAO regional offices; and	
	c) results be brought to the attention of APIRG.	
	Agenda Item 12: Review of outstanding conclusions and decisions of APIRG, Decisions of the ATS/SG/7 and its future work programme	42
Draft Conclusion 7/58	Carriage and Operation of Airborne Collision Avoidance System (ACAS) and Pressure-Altitude Reporting Transponders	
	That States which have not done so, expedite the implementation of mandatory carriage and operation of ACAS II and carriage and operation of pressure-altitude reporting transponders by aircraft in the spirit of ICAO Annex 6, Part I paragraph 6.18 and Annex 10 Vol. IV and Doc. 8168 Annex 6, Part I paragraph 6.19, Annex 6, Part II paragraph 6.13.1, Annex 10 Vol. IV, Doc. 8168 Volume I, Part VIII and PANS/ATM, Doc.4444 Chapter 8, paragraph 8.5.	

Number	Title	Page
	Agenda Item 13: Any Other Business	43
Draft Conclusion 7/59	Membership to the ATS/AIS/SAR Sub-Group	
	That Ghana and Zimbabwe be considered as additional members of the ATS/AIS/SAR Sub-Group.	
Draft Conclusion 7/60	ATS Contingency Planning	43
	That the non-availability of ATS contingency plans in States be included in the APIRG list of deficiencies in the ATM field.	
Draft Conclusion 7/61	Reporting and analysis of ATS incidents	43
	That in compliance with Assembly resolution A31-10, the provisions in the ICAO Annex 13, paragraph 7.3 and the AFI/7 Recommendation 5/26 States establish reporting systems which should be non-punitive and educational in order to capture the maximum number of incident reports.	
Draft Conclusion 7/62	ATS Operational Auditing and Proficiency Maintenance	43
	That, in the spirit of AFI/7 conclusion 5/27, the lack of standard auditing and proficiency maintenance procedures in ATS units of States be included in the APIRG list of deficiencies relating to the ATM field.	

PART 2 - REPORT ON AGENDA ITEMS

Report on Agenda Item I

Election of the Chairman and Vice- Chairman

1.1 The meeting re-elected Mr. E. ONASANYA of Nigeria as its Chairman and Mr. BANNEKHAL ABDELKADER of Algeria as its Vice-Chairman.

Report on Agenda Item 2: Review of the ATS Route Network

- 2.1.1 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 ANP (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 ANP;
 - d) update "Notes" in the Table ATS 1;
 - e) identify the non implemented routes and establish target date(s) for their implementation.
- 2.1.2 The Sub-Group identified the requirement for two new ATS routes, namely:
 - a) Geneina Port Sudan (RNAV) and;
 - b) Cotonou Malabo
- 2.1.3 The meeting noted that no route required realignment or deletion.
- 2.1.4 The Sub-Group prepared an implementation tabulation for all the non-implemented routes. The Sub-Group agreed that States be requested to implement the non-implemented routes not later than **22 January 2004.**
- 2.1.5 The Sub-Group accordingly updated the notes on ATS routes in Table ATS 1 of the ICAO Air Navigation Plan. In view of the foregoing, the following draft conclusions were formulated:

Draft Conclusion 7/1 - Amendment to AFI ANP Table ATS – 1

That the ICAO AFI ANP Table ATS-1 be amended to include a requirement for the following new ATS routes:

- (i) Geneina -Port Sudan (RNAV).
- (ii) Cotonou Malabo

Draft Conclusion 7/2 - Implementation of the non-implemented routes including RNAV routes

That:

- a) the new target dates for the implementation of the non-implemented routes including RNAV routes at Appendix B should be the AIRAC date of 22 January 2004.
- b) States that have not done so, expedite the implementation of ATS routes in their FIRs as shown in Appendix B to this report.

Draft Conclusion 7/3 - Update of notes in Table ATS – 1 of the AFI Air Navigation Plan

That the notes on ATS routes in Table ATS – 1 of ICAO AFI Air Navigation Plan (Doc.7474) be updated as shown in Appendix C to this report.

Report on Agenda Item 3: Review of the Implementation of the Area Control Service

- 3.1 Under this Agenda item, the Sub-Group reviewed the requirements for the implementation of Area Control Service in the Region.
- 3.2 The Sub-Group recalled the statement of Basic Operational Requirements and Planning Criteria- AFI Region requiring that the 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.
- 3.3 The Sub-Group noted with concern that the status of implementation of the area control service has been very slow and it accordingly considered necessary to extend the implementation target date to **31 December 2003**. Based on the foregoing the Sub-Group formulated the following draft conclusion:

Draft Conclusion 7/4 - **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 in any case not later than 31 December 2003 in the spirit of AFI/7 Rec.5/21.

Report on Agenda Item 4 : Review of the implementation of ATS Direct Speech (ATS/DS) Circuits

- 4.1 The Sub-Group recalled that South Africa had restructured its airspace reducing the existing number of FIRs. It noted therefore that South Africa should submit an amendment proposal to respond to these changes including in particular the ATS D/S circuits.
- 4.2 The Sub-Group also identified the requirement for an ATS D/S circuit between Lagos and Niamey. It was hence concluded:

Draft Conclusion 7/5 - Amendment Proposal to the AFI ATS/DS Plan

That:

- a) South Africa initiate an amendment proposal to the ICAO AFI ANP to include the new FIRs in South Africa.
- b) In view of the restructured FIRs of South Africa, the State develop appropriate ATS/DS circuits required so that ICAO could develop an appropriate ATS/DS Plan.

Draft Conclusion 7/6- Additional ATS D/S Circuits

That the ATS D/S plan be amended so as to include the circuit Lagos-Niamey.

Report on Agenda Item 5: Review of the report of the first meeting of RVSM/RNAV/RNP Task Force

- 5.1 Under this Agenda Item, the Sub-Group reviewed the report of the RVSM/RNAV/RNP Task Force Meeting which was held in Dakar, Senegal from 17-18 June 2002 pursuant to AFI/7 meeting recommendations 5/7, 5/17 and APIRG/13 Decision 13/58. The Sub-group reviewed the report of the first meeting of the Task Force under its terms of reference as well as the agenda that covered among others, development of guidance material for RVSM/RNAV/RNP implementation, development of an implementation plan for RVSM, development of time scales for the implementation plan of the RVSM/RNAV/RNP and development of the future work programme to complete other remaining tasks.
- 5.2 The Sub-Group noted that, due to the limited time available, it was not possible for the Task Force to develop a sample AIC as well as a sample national legislation that would be promulgated by States ready to participate in the programme of implementation of RVSM. In view of the foregoing the Sub-Group endorsed the following draft conclusions and draft decision.

Draft Conclusion 7/7- RVSM monitoring agency for AFI Region

That:

- a) The task of monitoring safety in conjunction with implementation of RVSM and RNAV/RNP in the AFI Region be assigned to the South Atlantic Monitoring Agency (SATMA) located at Canarias ACC.
- b) The Terms of Reference of the monitoring agency be those at Appendix D.

Draft Conclusion 7/8- RVSM/RNP Safety Assessment

That:

- a) the safety assessment comparative methodology contained in Manual of Airspace Planning Methodology for the determination of separation minima (Doc.9689) be used for application in the implementation of RVSM and RNP in the AFI Region.
- b) ICAO in coordination with SATMA develop ways and means of carrying safety assessment as soon as possible.

Draft Conclusion 7/9 - Civil/military coordination

That in order to ensure the safe and coordinated implementation of RVSM in the AFI Region, States ensure that the military aviation authorities are fully involved in the planning and implementation process.

Draft Conclusion 7/10 - Nomination of an RVSM programme manager

That:

- a) States/service providers nominate as soon as possible an RVSM Programme Manager who will be responsible for ensuring that the proper mechanism is put in place for the safe implementation of RVSM programme and will also act as the focal point of contact person.
- b) ICAO consolidate the list of the RVSM programme managers as soon as possible and circulate it to States and International Organizations.

Draft Conclusion 7/11 - Reporting of data for monitoring and/or carrying out safety assessment

That:

- a) All States institute procedures for reporting of data, incidents and conditions necessary or performing the collision risk calculations prerequisite for RVSM implementation to the AFI monitoring agency. The data will include, but not necessarily be limited to:
 - i) Height deviations of 300 ft or more.
 - ii) total number of IFR movements for each month.
 - iii) the average time per movement spent in the level band FL 290 to FL 410
 - iv) ATC/ATC coordination failures
 - v) turbulence; and
 - vi) traffic data.
- b) The AFI monitoring agency shall ensure further processing and/or evaluation of this data within its Terms of Reference and identify or develop methodologies for assessing risk associated with traffic and conditions prevailing within the AFI Region.
- c) AFI monitoring agency should use the reporting format at Appendix E.

Draft Conclusion 7/12 - RVSM Monitoring requirements

That operators having met the monitoring requirements for a given fleet/type of aircraft, in other Regions will be accepted as having satisfied the RVSM monitoring requirements for the AFI Region.

Draft Conclusion 7/13 - Implementation of RVSM in the AFI Region

That:

- a) RVSM will be implemented in the AFI Region in the airspaces that have met the criteria in the RVSM Manual (Doc.9574) between FL 350 and FL390 initially on the AIRAC date of 27 November 2003 and extension from FL 290 to 410 inclusive by the year 2005.
- b) Implementation of RVSM in the AFI Region be harmonized and coordinated with the implementation time frames of adjacent regions.

Draft Conclusion 7/14 - Training of all personnel involved with the implementation of RVSM in the AFI Region

That:

- a) ICAO and IATA explore the possibility of assisting States of the AFI Region through a Special Implementation Project (SIP) for training of personnel involved with the implementation of RVSM/RNP in the AFI Region.
- b) Seminars/Workshops be organized in the Region for training of air traffic services personnel in the RVSM/RNP field.
- c) States be invited to approach training institutions for the development of a training module in the RVSM field representative of the AFI Region.
- d) States having difficulties in complying with RVSM implementation programme, may either individually or in group explore the possibility of seeking outside expertise.

Draft Conclusion 7/15 - Guidance material for airworthiness and operational approval

That States in the AFI Region be urged to include in their national legislation and publish the Airworthiness and Operational Approval process for aircraft and operators intending to operate within a designated RVSM airspace based on provisions of ICAO Annex 6 Part 1 Chapter 7 para. 7.2.3, and the guidance material contained in both FAA interim guidance 91-RVSM and JAA Temporary Guidance Leaflet (TGL) N° 6.

Draft Conclusion 7/16

Airworthiness and operational approval for RNP 5 and RNP 10 operation in the AFI Region

That with a view to facilitate and harmonize the airworthiness and operational approval procedures for RNP5 and RNP10 in the Region:

- (i) The European Joint Airworthiness Authority (JAA) temporary guidance leaflet N°.2, guidance material on airworthiness approval and operational criteria for the use of navigation systems in the European airspace designated for basic RNAV operations be endorsed as the official guidance material for airworthiness and operational approvals for RNP5 operations in the AFI Region.
- (ii) The guidance material developed by the United States, FAA order 8400.12 be used by States for the development of RNP10 operational approval process.

Draft Decision 7/17 - Sample AIC on Implementation of RVSM and

National Legislation on RVSM Implementation

That the RVSM/RNAV/RNP Task Force develop

- a) a sample AIC that shall be promulgated by States when notifying their intent to implement RVSM in national airspaces;
- b) a sample national legislation that shall be promulgated in States' AIPs on RVSM implementation.

Draft Conclusion 7/18 - Enforcement in national legislation

That States take the appropriate measure in order to:

- a) publish the AIC informing the users of their intention to implement RVSM between FL350 and FL390 on 27 November 2003 and;
- b) include the necessary provisions in their national legislation (AIPs).
- c) ICAO Regional Offices concerned circulate to States the Sample AIC and Sample National Legislation on RVSM.

Draft Conclusion 7/19 - Amendment to ICAO Doc.7030

That ICAO initiates as appropriate an amendment proposal to the AFI SUPPs to include relevant provisions for RVSM and RNP implementation in AFI Region.

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Draft Conclusion 7/20 - Participation of representatives of

States and international organizations involved in the implementation of

RVSM approval process

That Representatives of States and international organizations with experience in the RVSM approval process of aircraft and operators, be invited to attend the future meetings of the RVSM Task Force.

Draft Conclusion 7/21 - Funding of the RVSM implementation programme

That National Governments, Regulatory bodies, operators, service providers and other stakeholders be granted budgetary allocations for acquisitions and other activities necessary for ensuring that all the requirements be met in a timely manner in order to safely implement RVSM in the AFI Region.

Draft Conclusion 7/22 - Guidance material for RVSM and RNAV/RNP

That in order to enhance awareness campaign on RVSM and RNAV/RNP the documents at Appendix F to this report be circulated to States.

Draft Conclusion 7/23 - AFI RVSM/RNAV/RNP implementation plan

That the material at Appendix G to this report be circulated to States for comments.

Draft Conclusion 7/24 - Future Work Programme of the RVSM/RNAV/RNP Task Force

That, having noted the RVSM/RNAV/RNP Task Force terms of reference, the Sub-Group formed the opinion that the Task Force should continue its work as assigned to it.

Report on Agenda Item 6: Review of the Report of the second meeeting of the Airspace Management Task Force (ASM/TF 2)

- 6.1 Under this Agenda Item the Sub-Group reviewed the Report of the Second Meeting of the Airspace Management Task Force which was held in Dakar, Senegal from 13 to 14 June 2002
- 6.2 The Task Force reviewed and proposed additional changes to its Terms of Reference. These appear at **Appendix H** to this report.

Terms of Reference

- 6.3 The Sub-Group recalled that the Airspace Management Task Force was established within the framework of the ATS/AIS/SAR Sub-Group in order to explore ways and means of solving some pressing problems affecting the safety of air navigation in the region and proposed operational solutions.
- The Sub-Group noted that the Task Force meeting had reviewed the various aspects concerning the ATS airspace organization in the Region covering in the agenda the following: airspace organisation, establishment and identification of significant reporting points and the allocation of five letter name-code designators to the relevant significant points, implementation of 10 minutes longitudinal separation, development of the Chart ATM 1 for the FASID document, and reviewed SIDs and STARs. The Sub-Group then discussed in detail the report of the Task force and noted with appreciation the detailed analysis carried out by the Task force and finally endorsed the following 12 draft conclusions:

Draft Conclusion 7/25 - Categorization of Terminal Areas and Aerodromes

That:

- a) States which have not yet done so be reminded to provide the Secretariat with traffic data required for the categorization of TMAs and aerodromes;
- b) IATA and ASECNA should finalize the categorization of TMAs and aerodromes based on traffic data available and present it at the next CNS/ATM/IC -SG Meeting.

Draft Conclusion 7/26 - Implementation of RNAV Route UM114

That:

- a) Accra ATS authority implement and delegate to Kano/Lagos ATS authorities the portion of UM114 within its airspace.
- b) ICAO arrange at the earliest possible date, a co-ordination meeting between Accra, Kano and Niamey FIRs, preferably before the implementation of UM114.

Draft Conclusion 7/27 - Delineation of FIR Boundaries

That ICAO convene a meeting between Algeria and Tunisia to harmonize the publication in their respective AIPs of the delineation of the FIR boundaries pursuant to AFI/7 Rec 5/1, Rec 5/9 and APIRG/13 Conc. 13/26.

Draft Conclusion 7/28 - Globalization of FIRs in the AFI Region

That to achieve globalization of FIRs in the AFI Region pursuant to AFI/7 Rec.5/1 relative to a co-operative approach to airspace management, the concerned States explore the possibility of forming functional groups of FIRs such as:

Ghana/Nigeria
Namibia/Botswana
South Africa/Lesotho/Swaziland
Zambia/Zimbabwe
Mozambique/Malawi
Indian Ocean States (Madagascar, Mauritius, Seychelles)
Kenya/Tanzania/Uganda
Ethiopia/Eritrea/Djibouti

Draft Conclusion 7/29 - Review of AFI ATS incidents

That:

- a) Efforts to enhance Controller training, proficiency and work environment and ATS Staff Management continue throughout the Region.
- b) Dakar Oceanic, Kano (Lagos), Khartoum, Kinshasa, Tripoli, Luanda and Niamey FIRs to continue to improve Staff training.
- c) For better assessment of the situation, joint ICAO/IATA technical missions including other Organizations to the ATS units where the highest number of incidents have occurred be encouraged.
- d) States and ATS providers (Angola, Democratic Rep. of the Congo, Libya, Sudan, ASECNA) expedite extension of VHF coverage to ATS routes in the upper airspace, and provision of ATC service in the region.
- e) Action be taken by all States to fully implement/improve ATS/DS links, especially between N'Djamena -Tripoli, N'Djamena-Khartoum, Accra-Lagos and Niamey-Accra.

- f) States establish and periodically update ATS Co-ordination procedures between all adjacent ATS units.
- g) States which have not already done so, implement procedures for the timely investigation of ATS incidents and notification of the results in accordance with AFI/7 Rec.5/26.
- h) States, which have not already done so, implement voluntary non punitive ATS incident reporting procedures.

Draft Conclusion 7/30 - Amendment to the assignment of 5-letter

name codes at crossing points of ATS Routes

That States concerned assign 5 letter names codes at crossing points of ATS routes as shown in Appendix I.

Draft Conclusion 7/31 - Publication of the air to air communications channel on 123.45 MHz

That States which have not yet done so, publish in their regulations and AIPs, the air to air VHF communication frequency 123.45MHz in accordance with ICAO Annex, 10 Vol.V paragraph 4.1.3.2 and the AFI VHF utilization Plan.

Draft Conclusion 7/32 - Application of flexible use of airspace (FUA)

That:

- a) States adopt a flexible use of airspace approach in the establishment of prohibited, restricted or danger areas such that these areas are established on temporary basis taking into account the needs of civil aviation; and
- b) States constantly review the existence of prohibited, restricted or danger areas pursuant to LIM/AFI (1988) Rec.2/21 as shown in Appendix J.

Draft Conclusion 7/33 - Implementation of 10-minute longitudinal separation minimum

That:

- a) States that have not already done so, to urgently implement the 10-minute longitudinal separation minimum taking into cognisance the relevant requirements in APIRG/13 Conc.13/43 and the provisions of ICAO PANS/ATM (Doc.4444/501) and AFI CNS/ATM System Plan (Doc.003).
- b) Algeria and ASECNA implement a common 10-minute longitudinal separation minimum in selected airspaces so as to avoid confusion.
- c) ICAO editorially amend Doc.7030 to harmonize with the provision in the PANS/ATM Manual Doc.4444/501.

Draft Conclusion 7/34 - Development of Chart ATM 1 (Part V-ATM of the AFI FASID)

That the SSR Code Allocation Plan (Chart ATM 1 for Part V-ATM FASID) as contained in Appendix K be submitted to States for comments and subsequently be presented to the APIRG/14 meeting for their consideration.

Draft Conclusion 7/35 - Application of SIDs and STARs

That States to implement the application of flexible use of airspace in establishing SIDs and STARs considering the following:

- a) As the period immediately after take off is one of high cockpit workload, the first significant point of a standard instrument departure route which requires reference to a radio navigation facility should, if possible, be established at a distance of at least 2 nautical miles from the end of the runway;
- b) Level restrictions, if any, be expressed in terms of minimum and/or maximum levels at which significant points are to be crossed;
- c) The designation of significant points as reporting points (compulsory or on request) be kept to a minimum;
- d) Standard instrument departure (SIDs) and arrival routes (STARs) be established in consultation with the users and other parties concerned.

Draft Conclusion 7/36 - Implementation of SIDs and STARs coupled to RNAV Route structure

That States implement SIDs and STARs coupled to RNAV Route structure where required, in order to relieve congestion on existing single routes.

Draft Conclusion 7/37 - Classification of airspaces :

That:

- a) ICAO expedites the revision of the current airspace classification taking into account the fact that there is no class for uncontrolled airspace which does not accept VFR;
- b) In the meantime airspaces which do not accept VFR (Oceanic, above FL145) be classified A in order to comply with Annex 11 and Doc.7030.
- c) In the meantime in case for one or another reason an airspace which does not accept VFR cannot be of class A, a NOTAM be published that the States concerned shall inform of the non acceptance of VFR in such an airspace.

Agenda Item 7: Review of the Report of the Second Meeting of the AIS Automation Task Force

7.1 Under this Agenda Item the Sub-Group reviewed the report of the second meeting of the AIS/MAP Automation Task Force which was held in Nairobi from 25 to 27 September 2002. Among the issues covered were: the provisions relating to the implementation of the Integrated aeronautical information package and the status of implementation of ICAO requirements in the AIS/MAP field. Based on the Task Force report the Sub-Group updated the list of deficiencies in this field and emphasized that appropriate measures should be taken in order to eliminate them. The meeting thus endorsed the following draft conclusions:

Draft Conclusion 7/38 - Collection of Data for the Identification of National AIS Centers (NASCs) in AFI Region

That:

- a) the data collected be used to determine future regional AIS Centres (RASCs);
- b) States concentrate their efforts in implementing their National AIS Centers (NASC) and those which have not completed the AIS questionnaire do so as soon as possible for submission of the replies to the relevant ICAO Regional Offices.

Draft Conclusion 7/39 - Production of the AIP in the ICAO format

That ICAO initiate a Special Implementation Project (SIP) to assist those States which have no AIP or have not published the AIP in the new format.

Draft Conclusion 7/40 - Dissemination of AIS data

That in the spirit of APIRG Conclusion 13/48, States which have not done so, establish a civil aviation website and ensure that AIS data are posted in the relevant website taking into account integrity and security of the information.

Draft Conclusion 7/41 - Publication of AIS Checklist and Summaries

- a) That NOTAM checklist for each month be published on the first day of the following month and that current NOTAMs should be listed by serial number and date to facilitate identification.
- b) That NOTAM checklist refer to the latest AIP Amendments, AIP Supplements and the internationally distributed AICs.

c) That the printed plain-language summary of NOTAMs in force, including references to the latest AIP Amendments, checklists of AIP Supplements and AICs issued be prepared every month and forwarded by the most expeditious means to all recipients of the Integrated Aeronautical Information Package.

Draft Conclusion 7/42 - Aerodrome AIS Units Implementation

That States ensure that the AIS Aerodrome Units at Appendices L and M to this report are established and manned by qualified AIS personnel.

Draft Conclusion 7/43 - Quality and Status of AIS Personnel

That States take the necessary action to ensure that:

- a) AIS is accorded a status commensurate with the current technological developments requiring high calibre and skilled personnel;
- b) Personnel recruited for AIS receive adequate professional training;
- c) Such personnel are accorded a status comparable to that of personnel of other air navigation services;
- d) Adequate facilities and funds needed for the efficient performance of AIS duties and priorities are provided.

Draft Conclusion 7/44 - Training Guidelines for AIS Personnel

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.

Draft Conclusion 7/45 - Membership of the AIS/MAP
Automation Task Force

That Kenya, Nigeria, South Africa, Tanzania and Zimbabwe be included in the list of the AIS/MAP Automation Task Force members.

Draft Conclusion 7/46 - Continuity of AIS/MAP Task Force

That the AIS/MAP Automation Task Force continue its work programme in order to address uncompleted tasks as assigned by APIRG.

Agenda Item 8: Review of the implementation of ICAO requirements for NOTAM, WGS 84 coordinates and mandatory charts

8.1 The new AIP and the world aeronautical chart (WAC) - ICAO 1:1 000 000

8.1.1 The Sub-Group examined the above requirement under Agenda Item 8 and felt that the provision and distribution of some elements of the integrated aeronautical information system in the AFI Region as considered by AFI/7 and APIRG/13 meetings remain unsatisfactory although a significant improvement was noted in some States. This means that States and ICAO should continue their efforts aimed at devoting more attention to AIS and MAP Services in the AFI Region so that it would achieve the level of efficiency required by the international air operations, in particular in respect to the AIP (new model) and the world aeronautical chart (WAC) 1:1000 000. The meeting noted that the Task Force had established a small committee to address, among others, issues relating to WAC.

The Sub-Group endorsed the following draft conclusions:

Draft Conclusion 7/47 - Conversion of en-route geographical coordinates

That:

- a) States which have not done so, complete the required conversion to WGS-84 of their en-route and FIR boundary reporting points coordinates:
- b) ICAO assist States concerned as necessary, in respect of a) above.

Draft Conclusion 7/48 - Publication of WGS-84 Information on Charts

That States give high priority to the promulgation of WGS-84 coordinates on the following mandatory charts:

- a) Instrument Approach Chart ICAO;
- b) Aerodrome Obstacle Chart ICAO Type A;
- c) Aerodrome Chart ICAO;
- d) Precision Approach Terrain Chart ICAO for Categories II and III, where applicable.

Draft conclusion 7/49 - Responsibility for the Production of the World Aeronautical Chart – ICAO 1:1 000 000

- a) That awareness of States concerned be brought to the fact that those States which had the responsibility for the production of the following sheets of the world aeronautical chart ICAO 1: 1 000 000 are no longer in a position to continue their production: 2344-45, 2420-21, 2422, 2451, 2454-55, 2536-37, 2423, 2454-55, 2536-37, 2570, 2574, 2658, 2659-60, 2660, 2662, 2663, 2664, 2691, 2692, 2693, 2694, 2695, 2696-97, 2697, 2780-81, 2781-82, 2784-85, 2785-86, 2812-13, 2813-14, 2814-15, 2816-17, 2817-18, 2905, 2906-07, 2935, 2936, 3052, 3155-56, 3173-74, 3278, 3297.
- b) That States covered by the above-mentioned WAC sheets and which are unable to produce their sheet initiate consultations with other States having the capability to produce charts 1:1000 000 for assistance in this respect.

Agenda Item 9: Review of the implementation of ICAO requirements in the Search and Rescue (SAR) Services field

- 9.1 Under this agenda item the Sub-Group reviewed the status of implementation of all ICAO provisions relating to search and rescue services. It was noted with concern that most of these provisions had remained unimplemented and the meeting was of the view that States should be sensitized on the urgent need to take prompt corrective action and furthermore, sustained that assistance should be provided by ICAO in order to improve the provision of search and rescue services in the Region.
- 9.2 It was pointed out that major deficiences still existed in the following areas:
 - Co-operation between States in order to promote a more effective and economic utilization of SAR facilities;
 - Training of SAR personnel;
 - Requirement for search and rescue exercises;
 - Implementation of local user terminal/mission control centre (LUT/MCC) in the AFI Region, at locations that would take maximum advantage of satellite coverage to receive distress signals;
 - Publication in their respective AIPs of the ELT registration information which could be shared with other rescue co-ordination centres (RCCs) of other States;
 - Provision of SAR point of contact (SPOC);
 - Establishment of appropriate SAR Agreements and legislation.
- 9.3 The Sub-Group also noted that the Task Force had emphasized the need for States to support the AFCAC SAR project. Furthermore, the Sub-Group noted the proposal to create a small Task Force under the ATS Sub-Group to address, among others, issues relating to the implementation of relevant pending SAR provisions.

In view of the foregoing, the Sub-Group endorsed the following draft conclusions:

Draft Conclusion 7/50 - SAR Cooperation Agreements between States

That in order to promote a more effective and economic utilization of SAR facilities, States should enter into precise agreements with other States in order to pool their resources and provide mutual assistance in SAR operations, using the specimen agreement in the IAMSAR Manual (Doc.9731), Volume One, Appendix I.

Draft Conclusion 7/51 - Implementation of SAR Legislation

That, as a matter of priority, States undertake to:

- a) enact the SAR legislation that will make SAR operations legal and empower the SAR mission coordinator to request external assistance when the available facilities and personnel are found not to be coping with an emergency or are viewed impaired or insufficient to cope with a distress situation.
- b) make sure that the request referred to in a) is not subjected to any approval by high level authorities, but that a notification should be sufficient.

Draft Conclusion 7/52 - AFCAC Project on Search and Rescue

That, considering the long-time problems which have continued to prevent the implementation of the ICAO provisions in the field of search and rescue, States be urged to express support to the AFCAC project aimed at expediting implementation of the ICAO SAR provisions, with particular emphasis to SAR legislation, organization and agreements.

Report on Agenda Item 10 : Consideration of the operational implications of the introduction of ICAO CNS/ATM System in the AFI Region

10.1 The Sub-Group reviewed the ATM operational requirements in the AFI CNS/ATM Plan (Doc 003). It noted that this Plan was adequate and only minor amendments to the AFI CNS/ATM Plan (Doc 003) were necessary. The Sub-Group then concluded as follows:

Draft Conclusion 7/53 - Implementation of CNS/ATM Systems in Routing areas AR1 and AR6

That, the implementation of CNS/ATM systems within areas of routing AR1 and AR6 be coordinated by the SAT Informal Group.

Draft Conclusion 7/54 - Coordination between SAT Group and the AEFMP Group (Algeria, France, Spain, Morocco and Portugal)

That:

- a) in the implementation of CNS/ATM systems, close coordination be maintained between the SAT group and the AEFMP group; and
- b) attendance at each others meetings be encouraged and whenever possible reports from each others' group meeting be exchanged.

Draft Conclusion 7/55 - Review of areas of routing in the AFI Region

That a review be conducted by the CNS/ATM/IC/SG in order to determine whether the 10 areas of routing adequately respond to the present traffic flows.

Draft Conclusion 7/56 - CNS/ATM Planning Target Dates

That the CNS/ATM Sub-Group develop CNS/ATM planning targets dates for the period 2005 onwards.

Report on Agenda Item 11: Consideration of specific air navigation planning and implementation problems and the review of air navigation field deficiencies

- 11.1 The Sub-Group recalled the concerns of the ANC and the Council related to safety impact of deficiencies. The Sub-Group noted the appreciation by the ANC and the Council of the efforts made by the APIRG as well as those of status to identify, assess and report air navigation deficiencies. The Meeting recalled in particular that APIRG/13 developed a list of deficiencies using the approved uniform methodology.
- The Sub-Group using the methodology updated the list of deficiencies in the ATS, SAR and AIS/MAP fields as shown in **Appendix N** and formulated the following draft conclusion:

Draft Conclusion 7/57 - List of deficiencies in the ATM, SAR and AIS fields

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:

- a) States concerned should take as soon as possible concrete measures to eliminate all deficiencies at Appendix N to this report.
- b) the matter be regularly followed up by the ICAO regional offices; and
- c) results be brought to the attention of APIRG

Report on Agenda Item 12: Review of outstanding Conclusions and Decisions of APIRG, Decisions of the ATS/AIS/SAR/SG/6 and its future work programme

12.1 The Sub-Group reviewed its outstanding Conclusions and 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 meeting thus formulated the following draft conclusion:

Draft Conclusion 7/58 - Carriage and Operation of
Airborne Collision Avoidance
System (ACAS) and PressureAltitude Reporting Transponders

That States which have not done so, expedite the implementation of mandatory carriage and operation of ACAS II and carriage and operation of pressure-altitude reporting transponders by aircraft in the spirit of ICAO Annex 6, Part I paragraph 6.18 and Annex 10 Vol. IV and Doc. 8168 Annex 6, Part I paragraph 6.19, Annex 6, Part II paragraph 6.13.1, Annex 10 Vol. IV, Doc. 8168 Volume I, Part VIII and PANS/ATM, Doc.4444 Chapter 8, paragraph 8.5.

12.2 The Sub-Group reviewed its terms of reference and future work programme and accorded priority for implementation of the tasks. This appears at **Appendix O** to this report.

Report on agenda Item 13: Any Other Bussiness

- 13.1 The Sub-Group noted the request submitted by Ghana and Zimbabwe to become additional members of the ATS/AIS/SAR Sub-Group.
- 13.1 The Sub-Group was also concerned about the matters relating to lack of the implementation of the ICAO provisions governing Contingency Plans, Reporting and Analysis of ATS incidents, ATS operational auditing and proficiency maintenance. In view of the foregoing the following draft conclusions were formulated:

Draft Conclusion 7/59 - Membership to the ATS/AIS/SAR Sub-Group

That Ghana and Zimbabwe be considered as additional members of the ATS/AIS/SAR Sub-Group

Draft Conclusion 7/60 - ATS Contingency Planning

That the non-availability of ATS contingency plans in States be included in the APIRG list of deficiencies in the ATM field.

Draft Conclusion 7/61 - Reporting and analysis of ATS incidents

That in compliance with Assembly resolution A31-10, the provisions in the ICAO Annex 13, paragraph 7.3 and the AFI/7 Recommendation 5/26 States establish reporting systems which should be non-punitive and educational in order to capture the maximum number of incident reports.

Draft Conclusion 7/62 - ATS Operational Auditing and Proficiency Maintenance

That, in the spirit of AFI/7 conclusion 5/27, the lack of standard auditing and proficiency maintenance procedures in ATS units of States be included in the APIRG list of deficiencies relating to the ATM field.

INTERNATIONAL CIVIL AVIATION ORGANIZATION EASTERN AND SOUTHERN AFRICAN OFFICE

LIST OF PARTICIPANTS/LISTE DES PARTICIPANTS

Seventh Meeting of the APIRG Air Traffic Services Sub-Group (ATS/AIS/SAR/SG/7) (Nairobi 14 – 18 October 2002)

Septiéme réunion du Sous-Groupe ATS/AIS/SAR de l'APIRG (ATS/AIS/SAR SG/7) Nairobi, 14 – 18 octobre 2002

STATE/ETAT	NAME/NOM	TITLE/TITRE	ADDRESS
		DESIGNATION	
Algeria	Mr. ALILI Smail	Chef du CCR	Establissement National de la Navigation Aerienne
			Route de Cherabra – OUED SMAR - B.P. 70 D
			DAR EL-BEIDA 16100 ALGER
			Tel:213-21-681889 Fax:213-21-681889
			E-mail:CCR.ALGER@CARAMAIL.COM
Algeria	Mr. CHERGUI Larbi	Chef du Departement, AIS	Establissement National de la Navigation Aerienne
			Route de Cherabra – OUED SMAR - B.P. 70 D
			DAR EL-BEIDA 16100 ALGER
			Tel:021-50-9184 Fax:021-50-9184
			E-mail:MLCHERGUI@hotmail.com
Algeria	Mr. Bannekhal Abdelkader	Chef de bureau circulation aérienne	Ministère des Transports
			Direction d l'Aviation Civile et de la meteorology
			119 Rue Didouche Mourad Alger Algerie
			Tel:00-213-21-74-7630/21-74-7623
			Fax:00-213-21-74-7614/21-74-76-24

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
Cameroon	Mr. Désiré A. KAMAJOU	Chef de Service de la Sécurîté du Trafic Aérien	Cameroon Civil Aviation Authority B. P. 6998 Yaoundé - CAMEROON Tel:(237)-230-3090/980-77-90 Fax:(237)-230-33-62 E-mail: a kamajou@yahoo.fr
Ethiopia	Mr. Tesfaye Tsegaye	Director Air Operations and Navaids	Ethiopian Civil Aviation Authority P.O. Box 978, ADDIS ABABA – Ethiopia Tel:251-1-631995 Fax:251-1-612533 E-mail:CAA.AIRNAV@TELECOM.NET.ET
Egypt	Mr. Ibrahim M. Molouk	(ACC) Supervisor	National Air Navigation Services Company Area Control Service (ACC) Tel:364322-2654689
Egypt	Mr. Sayed M. Hassan	Director NOTAM Department,	AIS Center Cairo International Airport Terminal 1 Tel:419-7871 Fax:419-7871
France (Réunion)	Mr. Jean-Pierre ROLLION	Chef de la division Opérations	Service de l'Aviation Civile à la Réunion, Mayotte et Îles Eparses Aérodrome de Saint-Denis B.P. 12, 97408 Saint Denis-Messag CEDEX 9, La Réunion Tel:262-2-62-930079 Fax:262-2-62-930013 rollion-sac_jean-pierre@sac-reunion.dgac.fr
Ghana	Mr. Lewis Lotsu-Barlow	Deputy Director ATS	Ghana Civil Aviation Authority PMB, Kotoka Airport Accra Ghana West Africa Tel:233-21-773283 Fax:233-21-773293 E-mail:loblewish@excite.com

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
Ghana	Mr. George Kwami Agbo	Manager AIS Information/	Ghana Civil Aviation Authority
		Documentation	PMB, Kotoka Airport Accra Ghana
			West Africa
			Tel:233-21-770329 Fax:233-21-770329
			E-mail:ais-gcaa@ighmail.com
Kenya	Ms. Justina M. Nyaga	Chief Aeronautical Information	Directorate of Civil Aviation
		Officer	P. O. Box 30163 – NAIROBI - Kenya
			Tel:254-2-824557/824002/16
			Fax:254-2-824716/825333
			E-mail:ais_Kenya@yahoo.com
			E-mail:dca@insightkenya.com
Kenya	Mr. Bernard N. Gatune	Principal Air Traffic Control Officer	Directorate of Civil Aviation
			P. O. Box 30163 – NAIROBI - Kenya
			Tel:254-2-824557 Fax:254-2-824716
			E-mail:dca@insightkenya.com
Kenya	Mrs. Truphosa A. Chocho	Chief Air Traffic Control Officer	Directorate of Civil Aviation
			P. O. Box 30163 – NAIROBI - Kenya
			Tel:254-2-824557 Fax:254-2-824716
			E-mail:dca@insightkenya.com
Kenya	Raphael W. Warukira	Air Traffic Controller	P. O. Box 19031
			Nairobi – Kenya
			Tel:254-2-823607
Kenya	Mr. Nduati H. Njama	Head Safety and Technical	Kenya Airlines Pilots Association (KALPA
		Committee	P. O. Box 57509 – Nairobi – Kenya
			Tel :254-2-713153
			kalpa@africaonline.co.ke

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
Lesotho	Mr. Daniel M. Bolofo	Senior Aeronautical Information	Department of Civil Aviation
		Services Officer	Moshoeshoe 1 International Airport
			P.O. Box 629,
			MASERU 100, Lesotho
			Tel :09-266-22350777 Fax:09-266-22350012
			E-mail:ain@mia.gov.ls (official)
			E-mail:dmbollie2@yahoo.co.uk (private)
Morocco	Mr. Abderrahim ASSOUFI	Chief AIS	SIA – Aeroport Casa/Anfa Hay Essalam
			Cassablanca - Maroc
			Tel:212-22-913493
			Fax:212-22-913508
			E-mail:ar_assoufi@hotmail.com
Morocco	Mr. El Aomari Bekkal	Superviseur en Contrôle Aerien	DCNCSA/CRR
			BP 5239 MAARIF - Cassablanca - Maroc
			Tel:212-22-539012
Nigeria	Mr. E. O. Onasanya	General Manager, Airspace	Nigerian Airspace Management Agency
		Planning and Technical Evaluation	P.M.B 21084, Ikeja, Lagos
			Tel:234-(0)1-4931330 Fax:234-(0)1-4931330
			E-mail:eonasanya@nama-nig.com
Nigeria	Mr. Richard O. J. Akalugwa	General Manager, AIS Nigeria	Nigerian Airspace Management Agency
			P.M.B 21084, Ikeja, Lagos
			Tel:234-(0)1-4931331 Fax:234-(0)1-4931331
Somalia (CACAS)	Mr. Humphrey Mwachoki	ATS Instructor	ICAO SOM/PROJECT - Nairobi
			Civil Aviation Caretaker Authority for
			Somalia (CACAS)
			P. O. Box 46294
			00100 - Nairobi - Kenya
			Fax:254-2-522340 Tel:254-2-622785
			E-mail: icaosom@africaonline.co.ke

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
Somalia (CACAS)	Mr. Peter Mbugua	Chief, AIS	ICAO SOM/PROJECT - Nairobi
			Civil Aviation Caretaker Authority for
			Somalia (CACAS)
			P. O. Box 46294
			00100 - Nairobi - Kenya
			Fax:254-2-522340 Tel:254-2-622775
			E-mail: icaosom@africaonline.co.ke
Somalia (CACAS)	Mr. Ahmed Bahur Hagi	SATCO	ICAO SOM/PROJECT - Nairobi
			Civil Aviation Caretaker Authority for
			Somalia (CACAS)
			P. O. Box 46294 –
			00100 - Nairobi - Kenya
			Fax:254-2-522340 Tel:254-2-722788431
			E-mail:atc17@hotmail.com
Somalia (CACAS)	Mr. Mohamed Abukar Nour	SATCO	ICAO SOM/PROJECT - Nairobi
			Civil Aviation Caretaker Authority for
			Somalia (CACAS)
			P. O. Box 46294
			00100 - Nairobi - Kenya
			Fax:254-2-522775Tel:254-2-622785
			E-mail: MohamedNour@hotmail.com
Somalia (CACAS)	Mr. Ahmed Hassan Mohamed	SATCO	ICAO SOM/PROJECT - Nairobi
			Civil Aviation Caretaker Authority for
			Somalia (CACAS)
			P. O. Box 46294
			00100 - Nairobi - Kenya
			Fax:254-2-522775 Tel:254-2-622785
			E-mail: icaosom@africaonline.co.ke

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
Somalia (CACAS)	Mr. Abdulkadir Omar Mohamed	AIS Officer	ICAO SOM/PROJECT - Nairobi
			Civil Aviation Caretaker Authority for
			Somalia (CACAS)
			P. O. Box 46294
			00100 - Nairobi - Kenya
			Fax:254-2-622775
			Tel:254-2-622775/622785/6/9 Ext.113
			E-mail: icaosom@africaonline.co.ke
Spain	Mr. Tomas Vidriales	CNS/ATM Focal Point	Centro de control
			Aeropuerto – Las Palmas – Spain
			Tel:34928577054/34650487146
			Fax:34928577052
			E-mail:tvidriales@aena.es
			SATMA: e-mail:satma@aena.es
			Web:www.satmasat.com RCC Canarias:
			e-mail:rcc_canarias@lycos.es
			Tgn:+34928577080
South Africa	Mr. Kevin Ewels	Air Traffic Management Specialist	ATNS - Private Bag X15
			Kempton Park, 1620
			Republic of South Africa
			Fax: 27-11-392-3946 Tel:27-11-961-0273
			E-mail:kevine@atns.co.za
South Africa	Mr. Jeff Matshoba	Operations Research Specialist	ATNS - Private Bag X15
			Kempton Park, 1620
			Republic of South Africa
			Fax: 27-11-392-3946 Tel:27-11-961-0208
			E-mail:jeffm@atns.co.za

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
Sudan	Mr. Yousif Ismail Magzoub	Director Air Traffic Control	Civil Aviation Authority
		Services	P. O. Box 430 – Khartoum – Sudan
			Tel:779125/777128/783766
			Fax :779125/773632
Sudan	Mr. Abdelrahim Mohmed A.	Senior AIS Officer	Civil Aviation Authority
			P. O. Box 430 – Khartoum – Sudan
			Tel :779125/777128/783766
			Fax :779125/773632
Sudan	Mr. Mohamed Elamin M. Rustom	Chief SAR Section	Civil Aviation Authority
			P. O. Box 430 – Khartoum – Sudan
			Tel :773093 Fax :773632
Tanzania	Mr. Said Onga	Principal, Air Traffic Control	Tanzania Civil Aviation Authority
		Officer – Operations	P.O. Box 2819,
			DAR ES SALAAM - Tanzania
			Tel:255-22-2115079/80 Fax:255-22-2118905
			E-mail:civil-aviation@twiga.com
Tanzania	Mr. Aspedito Mfugale	Manager, AIS	P. O. Box 18157
			Dar-es-Salaam – Tanzania
			Tel:255-22-2115080 or 255-22-2844437
			Fax:255-22-2118905
			E-mail:civil-aviation@twiga.com
Tunisia	Mr. CHERIF MOHAMED	Directeur de la maintenance	Office de l'Aviation Civile et
		électronique	des Aeroports – TUNIS
			TUNISIA
			Fax:216-71-752513
			Tel:216-71-752513
			E-mail:cherif.Mohamed@planet.tn

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
Tunisia	Mr. Mohamed ALI BEN ALAYA	Chef, Division des Etudes de la	22 cité de e air ELAOUINA
		Navigation Aérienne	2045 – TUNIS TUNISIA
			Tel :216-71755000 Fax :216-71753211
			E-mail:balaya.mdali@planet.tn
Tunisia	Mr. Ridha DRIDI	Chef Service des operations	Direction Générale de l'Aviation Civile
		aériennes	13, Rue 8006 Montplaisir
			1002 TUNIS – TUNISIE
			Tel :216-71-787-675/216-71-787-022 Ext.316
			Fax :216-71-794-227
			E-mail:rdridi_dgac@yahoo.com/dridi@email.com
Uganda	Mr. Andrew F. K. Musoke	Director, Air Navigation and	Civil Aviation Authority
		Regulatory Services	P.O. Box 5536,
			KAMPALA, Uganda
			Tel:256-41-320486 Fax:256-41-320964/321401
			E-mail:caadanrs@africaonline.co.ug
Zambia	Mr. Happy K. Chishala	Director Air Navigation	National Airports Corporation Ltd.
			P. O. Box 30175 - Lusaka - Zambia
			Fax:260-1-271118 Tel:260-1-271118
			E-mail:pdp@zamnet.zm
Zambia	Mr. Samson M. Kabaso	Manager Air Traffic Services	National Airports Corporation Ltd.
			P. O. Box 30175 - Lusaka - Zambia
			Fax:260-1-271018 Tel:260-1-271018
			E-mail:nacl@zamnet.zm
			E-mail:skabaso@hotmail.com
Zimbabwe	Mrs. Sylvia Mabodo	Chief AIS Officer	Civil Aviation Authority of Zimbabwe
			3rd Level New Terminal - Harare Airport
			Private Bag CY 7716, Causeway
			HARARE, Zimbabwe
			Tel:263-4-585073-88 Fax:263-4-585100
			E-mail:mabodos@caaz.co.zw

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
Zimbabwe	Mr. A. Chirongoma	Chief Air Traffic Control	Civil Aviation Authority of Zimbabwe
		Officer/A/ATS Manager	Private Bag 6002,
			HARARE AIRPORT, Zimbabwe
			Tel:263-4-585011-19 Fax:263-4-575163
INTERNATIONAL			
AFCAC	Mr. Lievre Gregory	Expert en Transport Aérien	CAFAC
			15 Bd de la République, B. P. 2356 Dakar – Sénégal
			Tel :221-839-93-73 Fax :221-823-26-61
			E-mail:secretariat@afcac-cafac.org
ASECNA	Mr. BAKIENON LOUIS	Chef du Bureau Circulation	Direction Générale ASECNA
		Aérienne	32 –38, Av. Jean Jaures
			Dakar BP 3144 - DAKAR - Sénégal
			Fax :221-8205694 Tel :221-8695209
			E-mail:bakienonlou@asecna.org
ASECNA	MR. MAIGA ISSA SALEY	In charge of Air Navigation Bureau	ASECNA - 75, Rue la Boetie
		ASECNA - Paris	75008 Paris – France
			Tel:00-331-44-950788 Fax:00-331-42-257311
			maigaiss@asecna.fr
IATA	Mr. Meissa N'diaye	A. Director IATA - AFI	Operations and Infrastructure (AFI)
			IATA - P. O. Box 47979, 00100
			NAIROBI - Kenya
			Fax:254-2-723978 Tel:254-2-710100
			E-mail:nd'iayem@iata.org
IFALPA	Mr. P. Ten Duis	Technical Coordinator Africa	International Federation of Air Line Pilots' Associations
			IFALPA - Administrative Headquarters
			Interpilot House Gogmore Lane
			Chertsey, Surrey, KT16 9AP
			LONDON, England
			Fax:44-1932-570920 Tel:44-1932-571711
			E-mail:admin@ifalpa.org

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
INTERNATIONAL	ORGANIZATIONS	·	
IFALPA	Ms. Dina Carole Sawi	IFALPA Regional Officer	International Federation of Air Line Pilots' Associations IFALPA - Administrative Headquarters Interpilot House Gogmore Lane Chertsey, Surrey, KT16 9AP LONDON, England Fax:44-1932-570920 Tel:44-202-2918867 E-mail:admin@ifalpa.org
KALPA	Capt. Herman Njama	Executive Council Member	KALPA P.O. Box 57509 Nairobi, Kenya Tel: +254-2-713153 Fax: +254-2-719101 E.Mail: kalpa@africaonline.co.ke
IFATCA (Kenya)	Mr. Joseph Mureithi Gichu	Chief Air Traffic Controller	P. O. Box 2572- Mombasa - Kenya Tel :254-2-823607 Fax :254-2-823699 E-mail :jmgichu@yahoo.com
IFATCA (Kenya)	Mr. Emmanuel Mvoi	Chief Air Traffic Controller	P. O. Box 30689 Nairobi, Kenya Tel:254-2-823607 Fax:254-2-823699 E-mail:emvoi@yahoo.com
IFATCA (Kenya)	Ms. Tabitha Litala	Vice Chairperson Professional - KATCA	Kenya Air Traffic Controllers Association P. O. Box 53939 Nairobi - Kenya Tel:0722-898137 Fax: 254-2-823699 E-mail:kenyaa@yahoo.com
IFATCA	Ms. Keziah A. Ogutu	Executive Secretary	Kenya Air Traffic Controllers Association P. O. Box 53939 City Square 00200 Nairobi - Kenya Tel:0722-386001 E-mail:kenyaatca@yahoo.com

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
SECRETARIAT		·	
ICAO - Nairobi	Mr. Lot Mollel	Regional Director	Eastern and Southern African Office (ESAF) P. O. Box 46294 00100 – Nairobi – Kenya Tel:254-2-622394 or 622395 or 622396 E-mail:Lot.Mollel@icao.unon.org E-mail:icao@icao.unon.org
ICAO – Nairobi	Mr. Samuel Githaiga	Deputy Regional Director	Eastern and Southern African Office (ESAF) P. O. Box 46294 00100 – Nairobi – Kenya Tel:254-2-622397 or 622395 or 622396 E-mail:Samuel.Githaiga@icao.unon.org E-mail:icao@icao.unon.org
ICAO - Dakar	Mr. George Baldeh	Regional Officer, ATM	Western and Central African Office (WACAF) 15, Boulevard de la République Dakar – Senegal Tel:221-839-93-80 Fax:221-823-6926 gbaldeh@icao.sn or icaodkr@icao.sn
ICAO - Dakar	Mr. FALL Sidy Mohamed	Regional Officer, AIS/MAP	Western and Central African Office 15, Boulevard de la République Dakar – Senegal Tel:221-839-93-81 Fax:221-823-6926 E-mail:smfall@icao.sn or icaodkr@icao.sn
ICAO - Nairobi	Mr. Apolo Kharuga	Regional Officer, ATM Secretary of ATS/AIS/SAR/SG	Eastern and Southern African Office (ESAF) P. O. Box 46294 00100 – Nairobi – Kenya Tel:254-2-622372 or 622374 E-mail:Apolo.Kharuga@icao.unon.org E-mail:icao@icao.unon.org

STATE/ETAT	NAME/NOM	TITLE/TITRE DESIGNATION	ADDRESS
SECRETARIAT			
ICAO – Nairobi	Mr. Marcel Munyakazi	Regional Officer, ATM	Eastern and Southern African Office (ESAF) P. O. Box 46294 00100 – Nairobi – Kenya Tel:254-2-622372 or 622374 E-mail:Marcel.Munyakazi@icao.unon.org E-mail:icao@icao.unon.org
TRANSLATORS/IN	TERPRETERS		2 mm none (common or g
Liberia	Mrs. Milly M. Buchanan	Interpreter/Translator	Tel :0722-710362/0733-290953 E-mail :millyb14@yahoo.com
Ethiopia	Mr. Emmanuel Petros	Interpreter	P. O. Box 63200 – Nairobi Tel:254-2-3740722 Fax:254-2-523038 E-mail:emmanuelpetros@petrosconferences.co.ke
Congo	Mr. Jean Jeannot Ngoma	Interpreter	Tel :0722-522699 E-mail :jngoma@yahoo.com

ATS Routes in the ICAO AFI ANP (Doc. 7474) requiring implementation

Route Designator	Segment(s)	States	Observations/Remarks
UA293	Ibiza Tiaret	Algeria	Required northbound
UA411	Jerba Tripoli Benina	Libya	Implemented at variance with the Plan via: A411 - Jerba/Zawia/Tripoli/Misurata A411N - Jerba/TANLI/Mitiga/Misurata
UA617	Kinshasa Windhoek	D. R. Congo	
UA618	SAGBU Malakal	Sudan	
UA748	(GOZO) Tripoli Mizda	Libya	
UA861	Lagos Garoua	Nigeria Cameroon	
UB525	Addis Ababa Luxor	Sudan	
UB607	El Obeid Dongola Abu Simbel	Sudan	
UG207	Mogadishu Karachi	Somalia	
UG623	Annaba	Algeria	Segment of the route suspended since 1980 by Libya.
	Tebessa Ghadames	Libya	by Lioya.
UG855	Tripoli Ghadames B. Omar Driss	Libya	

Route Designator	Segment(s)	States	Observations/Remarks
UG864	Tunis Ghardaia Timimoun	Libya	
UG979	Bordj Omar Driss Bou Saada Zemmouri	Algeria	
UL612	Goma	D. R. Congo	Egypt can accept implementation via ATMUL
	El Dhaba	Sudan Egypt	New Valley/KATAB/DBA
UM114	Lagos	Nigeria	Implemented at variance with the Plan within Kano FIR. LITAK (11 ⁰ 00'00"N – 003 ⁰ 24"05"E)
UM220	Lodwar		Implemented by Kenya on segment from AVAGI to Lodwar.
	Abu Simbel	Sudan	AVAOI to Louwai.
UM665	Addis Ababa Merowe	Sudan	
UM731	MOLOM Saurimo Johannesburg	Angola Botswana D. R. Congo South Africa	
UM994	Beni Walid ORNAT	Libya	RNAV

Route	Segment(s)	States	Observations/Remarks
Designator			
UM998	(Martigues) BALEN Constantine B.O. Driss Tobuk ENBUT		RNAV
	Maiduguri EBIMU	Nigeria	
	Kinshasa	Congo D. R.	Congo DR not implemented as RNAV between Kinshasa Luena-Maun-Gaborone implemented as UB733 Kinshasa -Gaborone
	Luena Maun Gaborone	Angola Botswana	1
UM999	Casablanca Errachidia El Golea Zarzaitine Sebba	Morocco Algeria	RNAV
	Sarir New Valley Luxor Jeddah	Libya Egypt Sudan Saudi Arabia	
UR400	Abu Simbel Kassala	Sudan	
UR613	Pantelleria	Libya	Implemented in Malta FIR via SARKI. Not implemented in Tripoli
	Lampedusa Tripoli		
UR780	Mogadishu Dire Dawa Asmara	Somalia Ethiopia Eritrea	
UR981	Casablanca Marraketch BULIS	Morocco Algeria	
	Gao		Not implemented segment Casablanca/Gao

Route Designator	Segment(s)	States	Observations/Remarks
UR986	Tunis Ghadames In Amenas	Algeria Libya	Not implemented due to restriction by Libya
UR991	ILDIR BOPAN	Namibia	
UR995	Addis Ababa Merowe	Sudan	

<u>Updated notes of Table ATS 1 of the ICAO AFI ANP (Doc 7474)</u> <u>Notes mises à jour du Tableau ATS 1 du Plan de Navigation aérienne OACI (Doc 7474)</u>

Lower ATS routes Routes ATS inferieures Rutas ATS inferiores	Upper ATS routes Routes ATS superieurs Rutas ATS superiores			
A293 Ibiza	Ibiza			
*Note 4 (DA)	UA293KIRLA			
1 (212)	*Note 4 (DA)			
Tiaret (5 (LE)	Tiaret			
A400	UA400			
Abidjan	Abidjan			
Sao Tome	Sao Tome			
Luanda	Luanda			
Luena	Luena			
A400 Kaoma	*Note 1 (Luena-Lusaka)			
EVOLU 1543S 2638E	UA400 Kaoma			
Lusaka	EVOLU 1543S 2638E			
Chileka	Lusaka			
	Antananarivo			
	Moramanga			
	Mauritius			
A403	UA403			
Tripoli *Note (HL)	Tripoli * Note (III.)			
A403 Sebha	*Note (HL) UA403 Sebha			
N'Djamena Berberati	N'Djamena Berberati			
Brazzaville	Brazzaville			
Brazzaviile	Brazzaville			
A405	UA405			
	Hargeisa			
	*Note 3 (HK)			
	Nairobi			
	Mbeya			
Harare	Harare			
Masvingo	*Note 1 (Harare-Greefswald)			
<i>U</i> -	Masvingo			
A405 Greefswald	UA405 Greefswald			
Hartebeespoortdam	Hartebeespoortdam			
Johannesburg	Johannesburg			
	Jonathicsout 8			

Lower ATS routes	Upper ATS routes		
Routes ATS inferieures	Routes ATS superieurs		
Rutas ATS inferiores	Rutas ATS superiores		
A411	UA411		
(NAT)	(NAT)		
Rabat	Rabat		
Fes	Fes		
Oujda	Oujda		
Oran	Oran		
Cherchell	Cherchell		
Alger	Alger		
Bejaia	Bejaia		
Annaba	Annaba		
Tunis	Tunis		
Monastir	Monastir		
Jerba	Jerba		
*Note (HL)	*Note (HL)		
Tripoli	Tripoli		
*Note (HL)	*Note (HL)		
Beni-Walid	Beni-Walid		
Benina	Beni-Walid		
GARFE 3236N 2401E	Benina		
	GARFE 3236N 24012E		
	*Note 2 (HE and HL)		
Mersa-Matruh	Mersa-Matruh		
*Note 3 (HE)	*Note 3 (HE and HL)		
Cairo	Cairo		
Sharm El-Sheikh	Sharm El-Sheikh		
(Wejh)	(Wejh)		
A607	UA607		
Ghadames	Ghadames		
*Notes 2 (HL) (DA)	*Notes 2 (HL) (DA)		
A607 Dirkou	UA607 Dirkou		
N'Djamena	N'Djamena		
Bangui	Bangui		
8	Lubumbashi		
	UA608		
_	El Bayadh		
	*Notes 2 (DA)		
	UA608 Niamey		
	Cotonou		
	UA615		
	Zemmouri		
	UA615 Ghardaia		
	Tamanrasset		
	Kano		
A619	UA619		
Paleohora) METRU	Paleohora) METRU		
Alexandria	Alexandria		
A619 Cairo	UA619 Cairo		
*Note 3 (HE	*Note 3 (HE		
Ras Sudr 2936N 3241E	Ras Sudr 2936N 3241E		
Nas Suul 2930IN 3241E	Nas suui 2930IN 3241E		

Lower ATS routes	Upper ATS routes			
Routes ATS inferieures	Routes ATS superieurs			
Rutas ATS inferiores	Rutas ATS superiores			
*Note 3 (HE)	*Note 3 (HE)			
METSA 2924N 3458E	METSA 2924N 3458E			
(Hail)	(Hail)			
A727	UA727			
(Sitia)	(Sitia)			
PAXIS	PAXIS			
Alexandria	Alexandria			
Cairo	Cairo			
Luxor	Luxor			
A727 Abu Simbel	UA727 Abu Simbel			
Merowe	Merowe			
*Note 3 (HS)	*Note 3 (HS) Khartoum			
Khartoum *Note 3 (HS)	Kilattouili			
Kenana	Kenana			
Lodwar	Lodwar			
*Note 4 (HK)	*Note 4 (HK)			
Nairobi	Nairobi			
Nanooi	Kilimanjaro			
A741	UA741			
(Palermo)	(Palermo)			
A741 *Note 2 (HL)	UA741 *Note 2 (HL)			
Tripoli	Tripoli			
A748	UA748			
Gozo	Gozo			
A748 *Note 2 (HL)	UA748 *Note 2 (HL)			
Tripoli	Tripoli			
A850	UA850			
A850 OTARO 3900N 0441E	(Nice)			
Zemmouri	*Note 5 (LF)			
Zemmouri	UA850OTARO 3900N 0441E			
	Zemmouri			
	UA854			
	(Palma)			
	*Note 2 (LE)			
	UA854SADAF 3748N 0220E			
	*Note 2 (DA)			
	Cherchell			
A856	UA856			
(Alicante)	(Alicante)			
*Notes 2 (LE, DA), 3(LE)	*Notes 2 (LE, DA), 3(LE)			
A856 Alger	UA856Alger			
Constantine	Constantine			
Tebessa	Tebessa			
Jerba	Jerba			

Lower ATS routes Routes ATS inferieures	Upper ATS routes Routes ATS superieurs
Rutas ATS inferiores	Rutas ATS superiores
A865 Menorca	Menorca
*Note 2 (DA)	UA865 *Note 2 (LE)
	RANKA
	*Note 2 (DA)
Cherchell	Cherchell
UB525 Addis Ababa:Luxor add Note 3 (HA)	
B607	UB607
(Sitia)	(Sitia)
TANSA	TANSA
El Daba	El Daba
B607 New-Valley	UB607 New-Valley
Abu Simbel	Abu Simbel
	Dongola
	*Note 3 (HS)
	EL Obeid
	Goma
	UB738
	UB738 (Malaga)
	*Note 5 (LE)
	*Note 1 (Malaga-El Bayadh)
	LIGUM 3550N 00200W
	Hamman Bou Hadjar
	El Bayadh
G623	UG623
(BALEN 4057N 0541E)	(BALEN 4057N 0541E)
*NOTE (LF)	SALMA 39N 00643E
G623 Annaba	UG623Annaba
Tebessa	*Note 4
	Tebessa
Chalama	*Note 3 (HL) Ghadames
Ghadames G652	UG652
Brazzaville	Brazzaville
Kinshasa	Kinshasa
Saurimo	Saurimo
	*Note 1 (Saurimo-Lusaka)
	G652 NIDOS 1304S 2651E
	NIDOS 1304S 2651E UG652
Lusaka	Lusaka
Harare	Harare Beira
	(Perth)
	(1 ciui)

Lower ATS routes	Upper ATS routes			
Routes ATS inferieures	Routes ATS superieurs			
Rutas ATS inferiores	Rutas ATS superiores			
G659	UG659			
Beni Walid	Ben Walid			
*Note (HL)	*Note (HL)			
Sarir	Sarir			
G731	UG731			
(Alghero)	(Alghero)			
*Note 2 (LF)	· · ·			
Zemmouri	Zemmouri			
G731 *Note 4 (DA)	UG731 *Note 4 (DA)			
Tiaret	Tiaret			
El Bayadh	El Bayadh			
Timimoun	Timimoun			
	Atar			
G855	UG855			
G855 Tripoli	Tripoli			
*Note (HL)	*Note (HL)			
Ghadames	*Notes (HL), 4 (DA)			
	UG855 Bordj Omar Driss			
	Tamanrasset			
	Niamey			
	Tamale			
	Abidjan			
	UG853			
	Las Palmas/Gran Canaria			
	*Note (GC)			
	AMDIB 2055N 1800W			
	TITOR 1300N 1800W			
	DEMAR 0539N 1100W			
	DEVLI 0400N 0730W			
	Luanda			
	Kuito			
	UG853 Cuito Cuanavale			
	Maun			
	Hartebeespoortdam Johannesburg			
	UG864			
	UG864 Tunis			
	Tebessa			
	Ghardaia			
	Timimoun			
R611	UR611			
(Caraffa)	(Caraffa)			
Benina	Benina			
R611 Merowe	UR611 Merowe			
Khartoum	Khartoum			
Addis Ababa	Lake Awasa			
	Mombasa			

Lower ATS routes	Upper ATS routes		
Routes ATS inferieures	Routes ATS superieurs		
Rutas ATS inferiores	Rutas ATS superiores		
R616	UR616		
(Pantelleria)	(Pantelleria)		
R616 Lampedusa	UR616 Lampedusa		
*Note (HL)	*Note (HL)		
Tripoli	Tripoli		
•	UR400		
	Abu Simbel		
	*Note 2 (HS)		
	UG400 Kassala		
	Bahr-Dar		
	Addis Ababa		
	Mogadishu		
	Praslin		
	Mauritius		
R981	UR981		
	Casablanca		
	*Note 2 (DA, DR, GA)		
R981 Gao	UR981 Gao		
Niamey	Niamey		
Lagos	Lagos		
R986	UR986		
Tunis	Tunis		
*Note 2 (HL)	*Note 2 (HL)		
R986 Ghadames	UR986 Ghadames		
*Note 2(DT)	*Note 2(DT)		
In Amenas	In Amenas		
Djanet	Djanet		
Kano	Kano		
	Foumban		
	Franceville		

TERMS OF REFERENCE OF AFI RVSM MONITORING AGENCY

The AFI Monitoring Agency for RVSM implementation has the following Terms of Reference:-

- a) to establish and maintain a central registry of State RVSM/RNP approvals of operators and aircraft using the AFI Region airspace where RVSM will be applied;
- b) to facilitate the transfer of approval data to and from other RVSM regional monitoring agencies;
- c) to establish and maintain a data base containing the results of height-keeping performance monitoring and all altitude deviations of 300 ft or more within AFI Region airspace, and to include in the database the result of AFI Monitoring Agency requests to operators and States for information explaining the causes of observed large height deviations;
- d) provide timely information on changes of monitoring status of aircraft type classifications to State authorities and operators;
- e) to assume overall responsibility for:
 - i) coordination of the Global Positioning System Monitoring System (GMS);
 - ii) assessing compliance of operators and aircraft with RVSM height-keeping performance in conjunction with RVSM introduction in the AFI Region;
- f) to provide the means of identifying non-RVSM approved using AFI airspace where RVSM is applied; and notifying the appropriate State approval authority; and
- g) to conduct readiness assessments and safety assessments as an aid for the RVSM/RNAV/RNP Task Force for decision making in preparation for RVSM implementation on a specified date.
- h) to establish and maintain a data base containing the results of navigation error monitoring;
- i) to prepare, each six months, reports setting out the results of navigation error monitoring for the preceding six-month period. These reports shall be presented to the ICAO ESAF Regional Office, Nairobi and States as part of their decision process related to safety management;
- to conduct safety assessments as an aid for the RVSM/RNAV/RNP Force for decision making in conjunction with expansion or changes to the RNP route structure within the AFI Region;
- k) to liaise with other Regional monitoring agencies and organizations to harmonize RNP implementation and upgrading.

AFI RVSM Monitoring Agency – Reporting Format

NAVIGATION DEVIATION INVESTIGATION FORM							
Type of Report: PILOT – Flight CONTROLLER – ATC Ur	nit						
Date/Time (UTC): Type of Deviation: VERTICAL Type (A to O) (*) LATERAL Type (A to G)							
Causes: WEATHER (See 2-G) OTHERS (Specify)							
Conflict Alert Systems:							
1				=			
DETAILS OF AIRCRAFT		First A	Aircraft	Second Aircr	raft (for vertical)		
Aircraft Identification:							
Name of Owner/Operator:							
Aircraft Type:							
Departure Point:							
Destination:							
Route Segment:							
Flight Level:		Cleared	Actual	Cleared	Actual		
Cleared Track:							
Extent of deviation - magnitude and direction (NM for lateral; feet for vertical)	1:						
Amount of time at incorrect Flight Level/Track:							
Position where deviation was observed: (BRG/DIST from fixed point or LAT/LONG))						
WAS ATC Clearance obtained: YES NO WERE Contingency procedures followed: YES NO					NO		
Action Taken by ATC/Pilot:	Conting	ency proce	dures iono	wed: YES	NO		
Other comments:							

(*) See deviation classification

NAVIGATION DEVIATION INVESTIGATION FORM

- The ATCO/Pilot should fill as many items as possible.
- Complementary data can be attached.
- The notification of any deviation (vertical or lateral) has to be classified, when possible, according to the following types:
 - 1.- For Large Height Deviations (vertical deviation)
 - A Contingency action due to engine fault
 - B Contingency action due to pressurisation failure
 - C Contingency action due to OTHER CAUSE
 - D Failure to climb/descend as cleared
 - E Climb/descend without ATC clearance
 - F Entry airspace at an incorrect level
 - G ATC FL re-clearance resulting in loss of lateral or longitudinal separation.
 - H Deviation due to TCAS
 - I Aircraft unable to maintain level
 - O Other

2.- For lateral deviations

- A Committed by aircraft not certified for operation in the RNP airspace
- B ATC system loop error
- C1 Equipment control error including inadvertent waypoint error
- C2 Waypoint insertion error due to the correct entry of incorrect position
- D Other with failure notified to ATC in time for action
- E Other with failure notified to ATC too late for action
- F Other with failure notified/received by ATC
- G Lateral deviations due to weather when unable to obtain prior ATC clearance

Note that there are data that have to be notified by the pilot.

Remarks:

- 1. As contingency procedures have to be followed, if a NO is included in "WERE the contingency Procedures followed", an explanation (WHY) have to be included in "Other comments"
- 2. The EUR/SAM corridor includes the FIR/UIRs: Recife (Atlantico), Dakar Oceanic, Sal Oceanic and Canarias (South and West).

SATMA DEVIATIONS MONITORING REPORT
AREA CONCERNED:
ALTITUDE: From FL 290 up TO FL 410 both included
ACC/AO:
MONTH: YEAR:
☐ (Number) Deviation Report Form attached (including TCAS RA and Airproxes)
□ NO Deviations reported (mark with an X)
The ACC/AO Responsible
Name:
Phone/E-mail:
Send to
SATMA – E-mail : <u>satma@aena.es</u> Fax :+34 928 57 7052

ACC's: To report monthly until further notice

AO's: To report monthly from April 1st 2003 until March 31st 2004

The activities undertaken by the SATMA are performed through the two components of the permanent structure:

- The SATMA coordinator who will be responsible for performing the functions assigned by the Agency and maintaining permanent communication with the representatives of the ACC's of the SAT Region.
- A Secretariat to facilitate the technical, operative and administrative tasks required by the Agency in order to follow the SATMA Coordinators' guidelines.

4. SUBMISSION OF STATISTICAL AND EQUIPMENT DATA

- 4.1 States and Organizations concerned are requested to submit to the South Atlantic Monitoring Agency (SATMA) the necessary statistical data to assist in the timely completion of the safety analysis.
- 4.2 The Operators flying through the EUR/SAM corridor are requested to notify SATMA, in an independent stage of the state regulator authorities, the aircraft equipment certification on RVSM and RNP-10.
- 4.3 In order to arrange sufficient data for safety assessment and testing for the implementation of CNS/ATM systems, aircraft operators are requested to include all the navigation and communications system availability, including ADS and CPDLC capability, in the flight plans (box no.10).
- 4.4 The ACC's of the AFI Region and the aircraft operators are also requested to send to SATMA the "Navigational Deviation Investigation Form" at page 2 above.

5. SATMA COOPERATIVE REQUEST

Any other cooperation in whatever way which may be required by the SATMA will ensure that all those tasks commissioned to SATMA by the corresponding ICAO forum may be duly performed.

6. ADDITIONAL INFORMATION

The SATMA is located in the ACC-Canarias and can be reached at the following E-mail address:

satma@aena.es

The coordinator, Ramón Pérez Parada, can also be contacted by telephone and Fax:

Tel:34-928 577 057

Fax:34-928 577 003

The Secretariat, Tomás Vidriales Bartolomé can be contacted at:

Tel:34-928 557 054 Fax:34-928 577 052

A SATMA WEB page is also in progress and will be ready by January/February 2001.

RVSM Guidance Material

Documents	Explanation	Language	Web site / URL
Reference Documents			
Joint Aviation Authority (JAA) Temporary Guidance Leaflet (TGL N°6).	TGL N°6 Revision 1- Guidance material on the approval of aircraft and operators flight in airspace above flight level 290 where a 300m (1,000ft) vertical separation minimum is applied.	English	http://www.eur-rvsm.com/documents/TGL6rev1.pdf
FAA documents RVSM Approval Checklist - US Operators (01 May 02) RVSM Approval Checklist - Non-US Operators (01 May 02) Example Operator RVSM Application (17 Feb 99) Interim Guidance Material on the Approval of Operators/Aircraft for RVSM Operations 91-RVSM with Change 1 (30 June 99)(Complete RVSM Guidance Material with updated changes).	RVSM Aircraft and Operator Approval Documentation- documents and guidance related to RVSM aircraft and operator approval.	English	http://www.faa.gov/ats/ato/150_docs/91RVSM_CH1.d oc
ICAO Doc 7030/4 Regional Supplementary Procedures amendment for EUR RVSM (requirements and procedures).	This Doc 7030/4 amendment was approved by the ICAO Council on 23 November 2000.	English	http://www.eur-rvsm.com/documents/ApprovedE99-33Doc7030amendment.pdf

Documents	Explanation	Language	Web site / URL
Master Plan-European Reduced Vertical Separation Minimum Programme	This EUR RVSM Master Plan has been endorsed in 1999 by all Programme participants. It describes the general programme history, organization, key dates and associated responsibilities.	English	http://www.eur-rvsm.com/documents/A041.pdf
ATC Manual for a Reduced Vertical Separation Minimum (RVSM) in Europe-Version 2.0.	Whilst the English version is the only official version, two language versions are also provided.	English French	http://www.eur-rvsm.com/documents/ATCManualV2_0.pdf
Safety			
EUR-RVSM Pre-Implementation Safety Case Edition 2.0 of 14 August 2001.	This document constitutes the EUROCONTROL Pre-Implementation Safety Case (PISC) for the RVSM Programme.	English	http://www.eur-rvsm.com/documents/safety/EURRVSMPISCV2014AUG2001.pdf
Functional Hazard Assessment Results of 12 February 2001.	This document contains the results of the Functional Hazard Assessment (FHA) for the EUR RVSM Programme conducted during the last quarter of 2000.	English	http://www.eur-rvsm.com/documents/safety/RVSMFHAV1012FEB20 01.pdf
National Safety Plan	Guidance material to develop national safety plans.	English	http://www.eur-rvsm.com/documents/safety/GuidancetoStatesJune01.pdf
EUR RVSM Safety Policy Document	The Reduced Vertical Separation Minimum (RVSM) operational concept, sets out the Safety Policy European RVSM programme, lists the safety objectives and provides a high-level description of he deliverables of the RVSM Safety Sub-Programme.	English	http://www.eur-rvsm.com/documents/safety/A573SafetyPolicyDocV1_0.pdf

Documents	Explanation	Language	Web site / URL				
Wake Vortices							
The Effect of RVSM on Wake Vortices.	EUROCONTROL has sponsored a Vortex Turbulence study into the effects RVSM would have on the occurrence of turbulence due to wake vortex encounters. From that page, the full report including programme response is also available for download, as well as the Wake Turbulence Report Form.	English	http://www.eur-rvsm.com/documents/WakeVortexAugust2001.pdf				
RVSM Approval Requirements – Training							
Flight Crew Training and Associated RVSM Operational considerations	This brief provides guidance for RVSM operational considerations.	English	http://www.eur-rvsm.com/documents/RVSMFlightCrewtraining&operational considerations.pdf				

AFI RVSM/RNAV/RNP IMPLEMENTATION PLAN

ID	Description	Start	Finish	Status	Resources
1	Agree on structure of TF to enable efficient handling of specialist technical tasks				
2	Identify resources for performing specialist technical tasks				
3	Investigate methods of funding any outside assistance required				
	Safety Assessment and Monitoring				
4	Conduct preliminary data collection and readiness assessment				
5	Evaluate options for setting up a central monitoring agency				
6	Evaluate options for carrying out the safety analysis				
7	Evaluate options for implementation of a height monitoring program				

ID	Description	Start	Finish	Status	Resources
8	Develop procedures for reporting large height deviations in existing system				
9	Collect weather and turbulence data for analysis				
10	Develop detailed program for safety analysis				
11	Establish requirements for pre and post-implementation monitoring				
12	Undertake initial safety analysis				
13	Carry out pre-implementation safety analysis				
14	Carry out pre-implementation readiness assessment				
15	Carry out post-implementation safety analysis during verification phase				
16	Review of mathematical and statistical techniques to assure their appropriateness for AFI RVSM				

ID	Description	Start	Finish	Status	Resources
17	Ensure Transferability of aircraft data from other Regions				
18	Devise methodologies for incorporating the effects of projected traffic growth and system changes on occupancy & collision risk in the future environment				
19	Perform periodically other data collections (eg. ASE stability) in order to ensure that the parameter values used in the mathematical collision risk models remain current				
	ATC Operational Issues				
20	Determine the limits of RVSM airspace (geographic and vertical)				
21	Develop ATC operational policy & procedures for normal RVSM operations				
22	Identify transition areas and transition procedures				

ID	Description	Start	Finish	Status	Resources
23	States assess the impact of RVSM implementation on controller automation systems and plan for upgrades/modifications				
24	Develop ATC procedures for non-approved State act to transit RVSM airspace				
25	Develop procedures for handling non-compliant civil aircraft (inc ferry & maintenance)				
26	Develop procedures for suspension of RVSM				
27	Evaluate the need for simulations to assess ATC workload and possible need for airspace/air route/Sector changes				
28	Develop ATC regional training guidance material				
29	Identify issues to be addressed in Letters of Agreement				

ID	Description	Start	Finish	Status	Resources
30	States to conduct local RVSM training for air traffic controllers				
	OPS/AIR Issues				
31	States to examine existing legislation and regulations to identify any changes required for RVSM				
32	Develop and promulgate information on the operational approval process				
33	Develop procedures for aircraft found to be non-compliant through monitoring				
34	Evaluate the need for chart amendments related to RVSM				
35	Develop regional guidance on pilot and dispatcher training				
36	Examine issues related to the use of ACAS in RVSM airspace				
37	Monitor progress with operator approvals				

ID	Description	Start	Finish	Status	Resources
	Joint Tasks				
38	Review preliminary readiness assessment				
39	Set target proportion of RVSM approved aircraft for full RVSM implementation				
40	Set target AIRAC implementation date(AIP Supplement to be published)				
41	Prepare/maintain regional status report detailing RVSM implementation plans				
42	Identify major milestone and target dates				
43	Develop a regional RVSM informational campaign				
44	Develop regional RVSM Guidance Material				
45	Review weather and contingency procedures for applicability under RVSM				

ID	Description	Start	Finish	Status	Resources
46	Develop model AICs and NOTAMs				
47	Evaluate preliminary readiness and safety assessments				
48	Undertake coordination and harmonization of procedures with adjacent Regions				
49	Evaluate the need for tactical offset procedures to mitigate the effects of turbulence and TCAS alerts				
50	Develop Doc 7030 amendment				
51	Review aircraft altitude-keeping performance and operational errors				
52	Develop monitoring and evaluation program for the verification phase				
53	Evaluate final readiness assessment				
54	Evaluate final safety analysis				
55	Go/No-Go decision				

REVISED TERMS OF REFERENCE AND WORK PROGRAMME OF THE AIRSPACE MANAGEMENT TASK FORCE (ASM/TF)

a) Terms of Reference

To explore ways and means of finding operational solutions to some pressing problems affecting the safety of air navigation in the region and to propose remedial actions.

b) Work Programme

- i) To review the existing ATS airspaces in the AFI Region (ATS routes, TMAs, Control Zones, etc...) and to identify significant enhancements that could be made to improve safety efficiency and to propose pragmatic operational solutions in this regard;
- ii) To study problems associated with the implementation of WGS-84 coordinates of reporting points, etc...)
- iii) To review the assignment of significant points which have not been assigned five-letter name-code designators, and identify any proposed changes as appropriate;
- iv) To identify hot spots and bottlenecks where significant ATS incidents have been reported and propose solutions;
- v) Review of prohibited, restricted and danger areas in the AFI Region;
- vi) Implementation of 10 minute longitudinal separation minimum in the AFI Region;
- vii) Development of chart ATM 1 on AFI participating areas for Part V-ATM of the AFI FASID;
- viii) Review of SIDs and STARs in the AFI Region.

AMENDMENT TO THE ASSIGNMENT OF 5 LETTER NAME-CODES AT CROSSING POINTS OF ATS ROUTES

1. **ACCRA FIR DGAA** (Ghana)

- a) Make Accra TMA crossing points non-CRP's at FL 245 and above
- b) Add names to all crossings on Direct route Tamale (TLE) Gwasero (GW)
- c) Add names to all crossings on Direct route Accra (ACC) Gwasero (GW)
- d) Add names to all crossings on ATS route Lomé (LM) Niamtougou (NT)
- e) Add names to all crossings on ATS route Lomé (LM) Niamey (NY)
- f) (Re) name all FIR/UIR boundary points created by Direct/ATS routings
- g) Delete NANGA, TCP be BIGOM

2 ALGIERS FIR, DAAA

- a) Reroute UA 411 to cross UB 738 over HMB NDB, the straight to MOS VOR and delete ORA or name crossing
- b) UA 411 with UB 738 and delete HMB NDB
- c) Suggest to route UA 411 out of ALR VOR and not via BNA NDB, and name crossing with UB 726
- d) On UA 31 out of ALR, name crossing with UB 726 and delete BNA as CRP
- e) Add name to crossing UA 31 with UB 734 and delete BABOR
- f) Add names to crossings UG 26 with UB 734, UV 508, UR 978, make these X-ings TCP's and delete BOURI
- g) Add names to crossings UG 6 with UA 605, UG 14
- h) Add name to crossing UG 14 with UR 34
- i) Add names to crossings UA 411 with UR 978, UA 605, UG 14
- j) Delete CHLAL as CRP on UB 726
- k) Add names to crossings UR 985 with UG 859, UV 508, UG 864 and delete ZIBAN as CRP
- l) Add names to crossings UG 864 with UV 508, UR 978, UA 605 and delete ROANE, NADJI, AMIRA, RADJA
- m) Add name to crossing UA 605 with UV 71 and delete KRIMA
- n) Add name to crossing UG 852 with UA/UM 614, delete RGN as CRP
- o) Relocate RAHIL to crossing UG 852 and UM 608
- p) Add name to crossing UM 608 and UB 727, make this crossing transfer of control Algiers/Niamey, delete RASIR, TERIN (State indicated that codes are used as TCPs and cannot be deleted)

- q) Add names to crossing UB 727 with UM 978 and UB 730 and delete TIDOU, HINAN, OUREL
 - (State indicated that codes are used as TCPs and cannot be deleted)
- r) Delete ILZ on UB 727 as CRP
- s) Make Ghat transfer of control Algiers/Tripoli and delete TWARG, on route DJA-GHT (compare situation at IMN)
- t) Add names to crossing UM 608 with UR 990 and UG 864 and delete JOKKA, RIAME, MOUNA

3. ANTANANARIVO FIR, FMMM (Madagascar)

Antananarivo FIR is managed by ASECNA

- a) Make EDAMA transfer of control point Beira/Antananarivo FIR's, delete EROPA, EGMAD
- b) Delete IXAGU on UB 536 as CRP (Note: ASECNA indicated that IXAGU cannot be deleted as it is a TMA entry/exit point for Antananarivo, that above code is to be retained as TCP)
- c) Delete TIKAN on UR 775F

 (Note: ASECNA indicated that TIKAN will be used as on demand CRP while considering the airspace statute in this zone)
- d) Add crossing UR 782F with UM 609 to Antananarivo FIR, name this crossing, delete ONIVE, ATOLA
 (Note: ASECNA indicated that the deletion of ATOLA requires a preliminary coordination between the ATS Authority of FIRs Seychelles and Antananarivo).
- e) Make ANVOR (X-ing UG 661 with UR 780F) transfer of control point with Saint Denis TMA, then delete UVENA and APLEM.

 (Note: ASECNA indicated that the deletion of the UVENA point and APLEM requires a preliminary coordination between the responsible ATS of Saint-Denis TMA and of Antananarivo FIR).
- f) Make KARAT (X-ing UA 665 with UR 401 transfer of control point with Mauritius FIR, delete AMBOD
- g) Delete APKOT on UA 609F
 - (ASECNA indicated that this point is used as TCP, its deletion requires a preliminary coordination between the responsible ATS of the Centers of Antananarivo, Saint-Denis and Mauritius)
- h) Add name to crossing UA 400 with direct route Mahajanga VOR- Inhambene NDB (Jeppesen charts)

 (ASECNA indicated that the new segment direct VOR Mahajanga–NDB Inhambene must be registered in the Table ATS 1 of the network of ATS routes)
- i) Add name to crossing UA 401 with direct route Moroni VOR- RAKAT (Jeppesen charts)
 - (ASECNA indicated that the new segment direct VOR Moroni–RAKAT should at first be registered in the Table ATS 1 of the network of ATS routes)

- j) Add name to crossing UG 661 with Direct route Moroni VOR- SOKAR (Jeppesen charts), and delete TABNO and make this X-ing TCP, or reroute direct route via TABNO
 - (ASECNA indicated that, for the first case, the new segment direct VOR Moroni–SOKAR should at first be registered in the Table ATS 1 of the network of ATS routes; in the second case, a coordination is necessary with the FIRs Seychelles and Dar Es Salaam for the harmonization of the TCP).
- k) Reroute direct route DO NDB- MG VOR via NSB VOR, via ANDIL, and name crossing with UB 790
 (ASECNA indicated that the new segment direct NDB DO VOR MG via VOR NSB
- and ANDIL should firstly be registered in the Table ATS 1 of the network of ATS routes)
 Add names to crossings Direct route NSB VOR- St Denis VOR with UB 459, UG 661, UR 348

(ASECNA indicated it would be preferable for this new segment, to be at first registered on the table ATS 1 of the network of ATS routes, and that its track passes via UVGET in order to decrease the creation of many CRPs)

4. **BAMAKO TMA** (Mali)

The airspace of the TMA BAMAKO is managed by ASECNA

- a) Airspace above FL 245 should be controlled from the ACC/FIC responsible for the FIR.
 - (ASECNA indicated that a relative to global survey of the reorganization of the airspace of the ASECNA region is ongoing)
- b) Name or delete all current CRP's under "FIR" name only

5. **BRAZZAVILLE FIR, FCCC** (Congo)

ASECNA is the agency managing the airspace

- a) All upper airspace in Brazzaville FIR must be managed by Brazzaville ACC. (ASECNA indicated that a relative global survey of the reorganization of the airspace of the ASECNA region is ongoing)
- b) There must be only **one** direct ATS route between Douala and Yaounde. (ASECNA noted the proposition)
- c) Delete TI and VITLI as CRP on UR 984 or replace by one in the middle (ASECNA noted the proposition, these points will be considered as « CRP non compulsory)
- d) Add name to crossing route FL (N'Djamena)- IRO (DRC) with UA 410, with UG 655 (ASECNA indicated that the itinerary FL (N'Djamena)-IRO (DRC) should at first be registered in the Table ATS 1 of the network of ATS routes)
- e) Delete MERON on UG 655 and UIR CRP at N 05.04.05/E 024.12.2 (ASECNA indicated that the coordinates of the new point(TCP) proposed will be verified)

- f) Add name to UIR boundary N 8 and E 020.04.0 and E 018.46.5

 (ASECNA indicated that the creation of this point must be subject to a requirement of creation of ATS routes on the basis of a meaningful air traffic statistics. The creation of this point is on stand by)
- g) On route DLA-BT, add names to crossings with UR 986, UH 455, UG727 (ASECNA indicated that, considering the procedures of exploitation and the composition of the area circulation in the sector, the itinerary DLA-BT (BERBERATI) must to be used via VOR YD)
- h) Delete on same rout 2 TMA crossing CRP's
- i) Add name to crossing UH 455 with ATS route TJN-INASU-Kano
 (ASECNA indicated that the creation of this new point requires a preliminary coordination with the responsible ATS of Kano on the necessity to establish the track of ATS route TJN-INASU-KANO with coordination of the two adjacent FIRs)

6. CANARIAS FIR, GCCC

Whilst it is recognized that virtually all of the Canarias FIR is radar covered, it is still recommended that all airway crossings be given names. This is to allow aircraft data bases to have access to these names and thus provide an additional contingency redundancy, such as in case of radar outage. These named airway crossings can be made non-compulsory reporting points.

7. CASABLANCA FIR, GMMM

a) Whilst it is recognized that virtually all of the Casablanca FIR is radar covered, it is still recommended that all airway crossings be given names. This is to allow aircraft data bases to have access to these names and thus provide an additional contingency redundancy, such as in case of radar outage. These named airway crossings can be made non-compulsory reporting points

(State indicated that most of these requirements have been done but some are still remaining to be done)

8. **DAKAR FIR - Abidjan Sector, DIII** (Côte d'Ivoire)

ASECNA is the agency managing the airspace.

- a) Delete ENERA on UA 560
 (ASECNA noted this proposition, ENERA point could be used as "on demand CRP" and TESKI as TCP)
- b) When W1 is extended beyond SN (Accra FIR), two new crossings with UG 859 and UA 614/UM 104 are created.

 (ASECNA noted the proposition that must first be approved for an insertion in the ICAO AFI Air Navigation Plan)
- c) Then delete MOLAB and GUPEX.

 (The proposition has been noted by ASECNA, but the above codes are to be retained as TCPs at present)

d) Suggest W 1 to connect at GUREL (The proposition has been noted by ASECNA and awaits approval of the ICAO AFI Air Navigation Plan)

9. DAKAR, FIR, GOOO (Senegal)

ASECNA is the agency managing the airspace

a) The segment ARLEM-IPEKA on UA560 to be delegated to Dakar or Abidjan by Roberts FIR.

(ASECNA indicated that it requires an agreement between the competent ATS Authorities of the FIR/UIR of Dakar, Roberts and Abidjan Sector).

- b) Delete MAURI on UB 600F (See Canarias FIR, GCCC)
- c) Delete KIMGA on UA 600D
- d) Delete MISKI on UM 974
- e) Delete DILPO on UR 620F
- f) Delete KOMOR on UB 600
- g) Delete LUSTI on UA 602

10 DOUALA (Cameroon)

ASECNA is the agency managing the airspace

See Brazzaville FIR.

11. **DOUALA** (Cameroon)

See Brazzaville FIR.

12. **HARARE FIR, FVHA** (Zimbabwe)

- a) Realign airway UA 409 (Lusaka-Gabarone to run over IBRAK (crossing with UA 404 and UB 528). At this moment IBRAK will not appear on flight plans along UA 409.
- b) Add name to crossing UA 404D with UB 540, and delete BONAL
- c) At present Harare airport code similar to FIR code, FVHA

13. **JOHANNESBURG FIR, FAJS** (South Africa)

a) At present Johannesburg airport code similar to FIR code, FAJS (State indicated that this is subject to research until further decision is made)

14. KANO FIR, DNKK (Nigeria)

- a) Delete GAMTA on UG 660, position OVSAT on same route is enough (State indicated GAMTA is a CRP only for flights at or below FL145 in lower airspace)
- b) Add names to crossings ATS route BD-JS with UV 20, with UV 15
- c) Add name to crossing UV 20 with UR 778
- d) Consider routing UA 604 via JO in stead of JS (State has confirmed that this is in progress)

15. KHARTOUM HSSS (Sudan)

a) At present airport code Khartoum similar to FIR code, HSSS

16. **KINSHASA, FIR FZAA** (Democratic Republic of Congo)

- a) Name crossing UHI and UA607.
- b) Delete UNUTU on UV30

(Note: State indicated that UNUTU cannot be deleted as it is a TMA exit point for Gbadolite)

c) Delete DESEK, LISAT, EDIKU and INUVA from upper airspace.

(Note: That State has decided to maintain them in order to determine the entry/exit points of Mbandaka TMA)

- d) Delete TEKTI on FIR boundary FCCC and FZAA FIR's on UA 607 (compare with other routes from Bangui)
- e) Delete as CRP, DESEK, LISAT, EDIKU, INUVA, NUPON, OVRIG on Mbandaka TMA
- f) Delete CRP at N 0209.6/E 019.37.8, on UV 30 out of MBA VOR
- g) Add name to crossing MBA-KGI with ATS route BSU-LJA and delete BDE029 as CRP
- h) Add names to crossing points UA 609 with UJ 200, UV 30, ATS route BLT-KGI
- i) Delete UNUTU, TUVAB, ISDIM on Gbadolite TMA
- i) Check desirability of UBIDA as non-CRP on UA 610
- k) Change name ENUTU, too similar to UNUTU in same FIR (except if agreed to delete UNUTU)
- 1) Add names to crossing points UH 1 with UR 984, UA 610, UA 607, V 48
- m) Add names to crossing points UH 10 with UR 984, UA 607, delete CRP at N 0019.6/E 02238.3
- n) Add name to crossing UB 535 with V 48, confirm TIPER is crossing UB 535 with ATS route KSA-KGI
- o) Add name to crossing UH 325 with UA 607
- p) Delete PONOB, ARABA on UG 450
- q) Delete ULVAS on UA 406
- r) Delete EDLIN as CRP on UG 652

17. **KIGALI - HRYR**

- a) Add name to crossing UB532 with UB607
- b) At present Kigali airport code similar to FIR code, HRYR

18. KINSHASA FIR (KISANGANI TMA)

- a) Delete TUSOX on UA607
 - (Note: State has decided to maintain TUSOX and delete VABIS)
- b) Make ILBOK on UA613 non-CRP.
- c) Delete LOSMI on UA613
 - (Note: State has decided to maintain it as reporting point UH325/UA613)
- d) Delete TENKA and EDUSA on UA607 and create new CRP.
 - (Note: State indicated that these points would be maintained)
- e) Delete PIRVO and GALIC on UA618.
- f) Add names to crossings UH 10 with A 609F, with UA 609F
- g) Add name to crossing UB 535 with ATS route IRO-BUN
- h) Make ARMEN a CRP
- i) Delete DEDIX, EDATO, PILSI, SEROK, ULPIG, TMA boundary (route KGI-BLT), VIVRO on Kisangani TMA
- j) Add names to crossings UA 618 with UV 3, with UB 531, UH 1, ATS route BUN-IRO, UG 862
- k) Add name to crossing UB 532 with UB 607
- 1) Add name to crossing ATS route BKV-KMI with UG 450, with UA 613 add name to crossing UV 3 with ATS route KGI-BKV
- m) Delete EBERA, TIPLI on Goma TMA
- n) Delete ONABA, AVGER, USDUP as CRP's due proximity of PONAL and to be named inters. UG 450/UG 655
- o) Add name to crossing UH 325 with UR 984
- p) Delete OMOXA on Kisangani TMA
- q) Delete GAMEX
- r) Add name to crossing ATS route KIN-KMI with UG 450
- s) Add name to crossing point UR 984 with Route/Radial 197 out of KGI VOR
- t) At present Kisangani airport code similar to FIR code, FIZC

19. LAGOS (SUB) FIR, DNLL (Nigeria)

- a) Delete MOPAD as CRP on UA 609 (State has indicated that MOPAD is a CRP in lower airspace only (at or below FL415)
- b) Delete ONTAL on UR 984 (State has indicated that ONTAL is a CRP in lower airspace only (at or below FL145)
- c) Add name to crossing point route TYE (Cotonou) Malabo (MBO) with UR 603 (State will propose a new route Cotonou-Malabo for inclusion in the AFI plan at ATS SG/7)
- d) Combine ONKOR and Abm OK on crossing route TYE-MBO with UG 856 (State will propose a new route Cotonou-Malabo for inclusion in the AFI plan at ATS SG/7)
- e) Give name to FIR boundary on route TYE- MBO (State will propose a new route Cotonou-Malabo for inclusion in the AFI plan at ATS SG/7)

f) Confirm proper name of FIR boundary on UG 856, ERAVA on Jepp, EDITO on KL/SK Chart

20. LIBREVILLE TMA (Gabon)

ASECNA is the agency managing the airspace Same as in II Brazzaville FIR

21. LILONGWE FIR, FWLL (Malawi)

- a) Add names to crossings of UA 407F with UG 656 and W 601
- b) At present Blantyre airport code similar to FIR, FWCL

22. **LUANDA FIR, FNAN** (Angola)

- a) Confirm APNET and ERDAB are indeed crossing points UA 617 with UG 450 and UH 612 respectively.
- b) Confirm necessity of FIR boundary point INUGA on UG 450 (compare with no boundary point on UH 612)
- c) Route UH 600 direct from KILBI to IMTOP and delete Malanje (MA) as CRP
- d) Re-route UA 617 APRIG direct AKAZU, name ensuing crossings with UG 853 and UV 858, then
- e) Delete TIBAD and EKBOM
- f) Add name to crossing UA 611 with Direct route ARLEM-GETAP and delete ITPIK
- g) Give name to Accra-Luanda FIR boundary on route ARLEM-GETAP
- h) Add names to crossings SAA Direct route Johannesburg-Atlanta (JAINS-BOPAN) with UA 611
- i) Make EGOLI a CRP on UA 611
- j) Give name to FIR boundary Accra-Luanda and Luanda-Johannesburg on route ARLEM-Robben Island

23. LUBUMBASHI FIR, FZQA

- a) Give name to intersection on UG 655 ex LUB VOR 88 nm. N of RUNGO
- b) Add name to crossing UG 655 with UG 450 and delete USDUP, AVGER, ONABA (all one country)
- c) Add name to crossing H4 with UR 984
- d) Delete NUTIR on UH 4, use only EDUSA
- e) Align either UA 618 or UR 984 to create one crossing point near ONRAB/MOMAX
- f) Delete KWZ as CRP on UA 406 ex LUB VOR, VISMA OK
- g) Add name to crossing V 48 with ATS route KNG-KIN and delete XIRUD/GULAS
- h) Delete AKROS, UBOLO, TAROK, SEXER as CRP on TMA of Kananga
- i) Delete SORGU, ONESI, too close after crossing point TUSEL
- j) Add name to crossing UG 450 with route MBY-KIN and delete UNIRI/INADO
- k) Add names to crossings ATS route KNG-KIN with ATS route MBY-LJA and with UA 607, delete UDRAB
- 1) Add names to crossings UA 450 with V 48 and with ATS route MBY-LJA

m) At present Lubumbashi airport code similar to FIR code, FZQA

24. **MAURITIUS FIR** (Mauritius)

At present Mauritius airport code similar to FIR code, FIMP

a) Make ANVOR (X-ing UG 661 with UR 780F) transfer of control point with Saint Denis TMA, then delete UVENA and APLEM.

25. **NAIROBI – HKNA** (Kenya)

- a) Add name to crossing UR 611 with ATS route NV-EMAMA
- b) Add name to crossing UG 657 with same
- c) Consider adjusting FIR delineation in order to delete GETAT and ITMAR (State indicated that above codes are still maintained as TCPs and cannot be deleted)
- d) Add name to crossing UR 611 with ATS route NV-Malindi (MLD)
- e) Delete MOBAT
- f) Delete MOKAD (State indicated that the above code is to be retained as TCP)
- g) Delete GADLA (State indicated that the above code is to be retained as TCP)
- h) Delete EKBAD, too close to boundary at APLOG (on UB 532 out of NV) (State indicated that the above codes are to be retained as TCPs)
- i) Delete NAKAT or MELMO on UA 609 NV- Entebbe (NN) (State indicated that the above codes are to be retained as TCPs in lower airspace)
- j) Delete IMLAT on ATS route NV-Malindi (MLD) (compare with UG 658 out of NV) (State indicated that the above code is to be retained as TCP in lower airspace)
- k) Delete KAVAR on UA 609 NV-Mombasa (MOV) (compare with UB 533 out of NV) (State indicated that the above code is to be retained as CRP in lower airspace)
- 1) Delete EGNOG on ATS route NV-EMAMA (compare with UG 450 out of NV)

26. **N'DJAMENA FIR, FTTT** (Chad)

(ASECNA is the agency managing the airspace)

- a) Make SABSI a non-CRP.

 (ASECNA indicated that SABSI is used as a TCP on the ATS route UR778; this point will be re-examined in order to to be utilized as a non-CRP).
- b) Delete KOBLA on UG 655F
 (ASECNA indicated that the KOBLA point is also used as a Meteorological reporting point)
- c) Name CRP at N 0800/E 02004.9

 (ASECNA indicated that the creation of this point must be subject to the requirement of the creation of ATS route on the basis of a meaningful air traffic statistics. The proposition of creation of this point is not accepted at present)
- d) Add name to crossing point UW 605 with route FL-FA

 (ASECNA indicated that the creation of this point must be subject to the requirement of the creation of ATS route on the basis of a meaningful air traffic statistics. The proposition of creation of this point is not accepted at present)

- e) Add name to crossing point UB 736 with route FL-FA

 (ASECNA indicated that the creation of this point must be subject to the requirement of the creation of ATS route on the basis of a meaningful air traffic statistics. The proposition of creation of this point is not accepted at present)
- f) Add name to crossing UG 857 with UB 736 and confirm PITRU is indeed crossing UG 85 with UM 998

27. **NIAMEY FIR, DRRR** (Niger)

(ASECNA is the agency managing the airspace)

- a) Airspace above FL 245 must be managed by the ACC.

 (ASECNA indicated that a relative global survey of the reorganization of the airspace of the ASECNA region is ongoing)
- b) Delete NANGA, TCP be BIGOM.

(Note: ASECNA indicated that the suppression of NANGA and the change of BIGOM as TCP requires a preliminary coordination between the ATS Centres of Ouagadougou, Niamey and Accra. BIGOM is used currently as TCP between Abidjan ACC and Ouagadougou ACC.

- c) Name crossing UG854 and UG858.

 (ASECNA indicated that this proposition has been noted, the point "ZR" will be used as non compulsory Report Point).
- d) Delete TB as CRP on UB 727
- e) Delete KILKO on UM 974
- f) Add name to crossing point UA 615 with ATS route Niamey (NY)-Agades (AS) (ASECNA indicated that the designation of this point will be achieved after the placement of this new track of ATS route in the ICAO AFI Air Navigation Plan)
- g) Add names to crossing points D route Bamako In Salah with UR 981, with UA 614, then delete IPOBA

 (ASECNA indicated that all these new points of the crossings between the new route Bamako—In Salah and UA 614/UM104, UR 981, UR 866 can only be achieved after the placement of this new track of route in the ICAO AFI Air Navigation Plan)

 IPOBA continues to be used as TCP on the ATS route UA 614/UM104 between the FIR/UIR Algiers and Niamey
- h) Add names to all crossing points created by direct route Bobo Dioulasso-Kano (ASECNA indicated that, considering the applied procedures and the complexity of the composition of the air traffic circulation in this sector, it doesn't appear at the present time appropriate to create some compulsory reporting points (CRPs) along the line close to the interface with the FIR Accra.)
- i) Add names to all crossing points created by direct route Niamey- Nouakchott (ASECNA indicated that, considering the complexity of the composition of the air traffic circulation in this sector, it is not feasible to examine this requirement for an optimisation of the direct itinerary Niamey Nouakchott which is only activated during the seasonal "Haj operations")

28. **ROBERTS FIR, GLRB** (Guinea/Liberia/Sierra Leone)

- a) Delete EBRAK as CRP on UG 433 (compare with NAMIB)
- b) Add name to crossing UB 600 with V 207
- c) Add name to crossing UG 854 with UB 727, delete AMKAX
- d) Delete AXIRO, PIMSO, ILGOT, EDBAL, KIMKA
- e) Route UG 854 to cross UR 979 over ARBAL
- f) At present Monrovia airport code similar to FIR, GLRB

29. Tripoli FIR, HLLL

- a) Add name to crossing H 500 with A 18
- b) Add names to crossings G 659 with V 400 and V 300
- c) Add names to crossings UL 731 with A 411, with V 400 and V 300
- d) Add name to crossing UM 727 with A 411 and delete AMWAJ
- e) Add names to crossings UW 857 with UL 731 and A 411
- f) Add name to crossing M 621 with UZ 350 and delete FARUJ
- g) Add names to crossings W 859 with UZ 350, with UM 732, A 411 and W 861
- h) Add names to crossings G 661 with G 660 and W 861
- i) Add name to crossing B 21 with G 663/UM 999
- j) Delete TWARG on route DJA-GHT and make GHT transfer of control point
- k) Add names to crossings UM 999 with UW 986, with W 853 and UG 13/UM 731
- 1) Add names to crossings W 861 with UW 986, with W 858, with W 853
- m) Add names to crossings W 853 with UG 655, W 858, UW 986
- n) Add names to crossings UG 655 with V 900, G 855, A 18, W 853
- o) Add names to crossings A 18 with UW 986, W 858

30. Tunis FIR, DTTC

Whilst it is recognized that the Tunis FIR is virtually fully radar covered, it is still recommended that all airway crossings be given names. This to allow aircraft data bases to have access to these names and thus provide an additional contingency redundancy, such as in case of radar outage. These named airway crossings can be made non-compulsory reporting points.

31. **WINDHOEK FIR, FYWH** (Namibia)

- a) Delete MIDNA as a result
- b) Add names to crossings D-route GETAP (on boundary with Luanda FIR)- GBV with R 987, UA 617, A 404
- c) Delete OMATA
- d) Change name of FIR as FYWH is also used as Windhoek airport designator.

LIST OF PROHIBITED, RESTRICTED AND DANGER AREAS IN THE AFI REGION

STATE/FIR	DESCRIPTION LIMITS	TYPE RESTRICTION	REMARKS
Algeria - Algiers	DAP51 : GND - UNL		
	DAP58 : GND - UNL		
	DAP60 : GND - UNL		
	DAD79 : GND - UNL		
	DAD 82 : GND - UNL		
Angola - Luanda	FNR8: GND-FL150	A/G firing and bombing	FLTS Forbidden during activity
	FNR10: GND-FL100	Military training flights	activity
	FNR11: GND-FL100	Military training flights	
	FNR12: GND-FL50	Military training flights	
	FNR13 : GND-FL1500 FT	Military training flights	
	FNR14 : GND-FL1500FT	Military training flights	
	FNR15 : GND-FL1500FT	Military training flights	
	FINKIS : GIND-FE1300F1	Winitary training frights	
Benin - Cotonou	DBD 1 :GND/MSL - 4000FT	Firing and military activities	Activitated by NOTAM
Burkina Faso - Ouagadougou	DFR 1 : GND – FL240	Military activities	Activitated by NOTAM
- Bobo-Dioulasso	DFR 2 : GND – FL240	Military activities	Activitated by NOTAM
Botswana-Gaborone	FBP1 : GND-2000FT		Avoid area at all times
	FBP3: GND-FL125		Military airfield avoid at all times
	FBP5 : GND-2500FT		Military activities
	FBR20 : 7000-FL220		Military activities
	FBR25 : 7000-FL460		Military activities
	FBR10 : GND-1000FT		National park
	FBR11: GND-1000FT		Game reserve
	FBR12 : GND-1000FT		Game reserve
	FBR13 : GND-1000FT		National park
	FBR14 : GND-1000FT		National park
	FBR15 : GND-1000FT		National park
	FBR18: GND-FL125		Avoid area at all times
	FBR24 : GND-2000FT		Flamingo breading ares
	FBD6 : GND31000FT		Rock blasting
	FBD9 :GND 6000FT		Rock blasting
D	N.T.	N1'1	N'1
Burundi - Bujumbura	Nil	Nil	Nil
Cameroon - Foumban	FKP 1 : GND-FL130	Parachuting	Permanent activity
- Mbandjok	FKP 2 : GND – FL80	Parachuting	Permanent activity
- N'Gaoundere Falaise	FKP 3 : GND – 6000FT	Ground and Anti-Air firings	Activated by NOTAM
	:GND-10000FT	Permanent Prohibition	,
-Cap Limboh	FKP5 : GND - UNL	Permanent prohibition	Overflight of refinery is prohibited.
-Yaounde	FKP 6 : GND-FL245	Permanent prohibition	Prohibition includes aircraft on Approach/departure phases of flight.
-Bakassi	FKP 7 : GND-FL250	Permanent prohibition	
-Mike	FKP 8 : GND/MSL -FL245	Permanent prohibition	
-Kribi	FKD 4: MSL-FL245	Permanent prohibition	Air/Ground Firings activated

STATE/FIR	DESCRIPTION LIMITS	TYPE RESTRICTION	REMARKS				
			by NOTAM				
Yaounde Zone Sud	FKR 9 : FL45-FL245		Activated by Yaounde TWR				
Yaounde Zone Nord	FKR 10 : FL45-FL245		Activated by Yaounde TWR				
Garoua	FKR 11 : FL60-UNL		Activated by Garoua TWR				
Garoua	FKR 12 : FL60-UNL		Activated by Garoua TWR				
Centrafrique - Baoli	FEP 3 : GND-1000 Metres	Permanent activity					
Sakoulou	FED 1 : GND-300 Metres	Parachuting	Activated by NOTAM				
Congo-	FCP1: GND-1000Metres	Permanent prohibition					
Brazzaville/Mayamaya							
Military base							
-Kinkala/Sud	FCP2 : GND-UNL		Activated by Air Traffic				
			Control				
M'pila/Brazzavile	FCP3: GND-FL70		Presidential Zone				
Mayamaya							
	FCD4 : GND-FL245	Firing Zone	Activated by NOTAM				
-Pointe Noire	FCD5: GND-3000Metres	Parachuting	Activated on every				
			Wednesday, Thursday and				
			Saturday between 1300-1700				
			UTC otherwise activated by				
			TWR on exceptional cases.				
Maya-Maya	FCD6: GND-3000M	Parachuting	Activated on every				
			Wednesday between 0600-				
			1000 UTC otherwise as				
			activated by TWR.				
Biloko	FCD7 : GND-2000M	Parachuting	Activated by TWR				
Kibouende	FCD8 : GND-2000M	Parachuting	Activated by TWR				
	FCR9 : GND-FL245		Activated by ATC unit.				
Chad – N'djamena-Farcha	FTD 2 :GND-4000M	Parachuting	Activated daily				
-Massaguet		Firing	Activated by NOTAM				
Cote d'Ivoire-Fetekro	DIP1 :GND-FL245		Air Firings from Monday-				
	D. D. J. D. J. O. D. D. J.		Friday at 0800-1800.				
	DIR1 :FL100-FL245	Military aircraft training	Mon-Fri from 0800-1800				
	D. D. D. D. A. O. D. A. A.		Activated by Bouake TWR				
	DIR2 :FL100-FL245	Military aircraft training	Mon-Fri from 0800-1800				
	DID2 EL 100 EL 245	N. C	Activated by Bouake TWR				
	DIR3 :FL100-FL245	Military aircraft training	Mon-Fri from 0800-1800				
Dahaa	DID 4 CND COOM	Dama lastina	Activated by Bouake TWR Mon-Fri from 0700-1800 and				
-Dobou	DIR 4 :GND-600M	Parachuting					
	:GND-3500M	Darachutina	Sat from 0700-1430 Sat from 1430-1800, Sun and				
	.GND-3300M	Parachuting	Holidays from 0800-1800				
			Holidays Holli 0800-1800				
-Abidjan	DID 1 :GND-600M	Parachuting	Permanent day activity				
-Aviujan	ויייטטס-עווט. ז עוע	1 arachumg	Activated by NOTAM with				
	:Above 600M	Parachuting	48 hours notice.				
		1 arachathig	TO HOURS HOUSE.				
 	.710000 000101						
Dem. Rep of Congo							
Dem. Rep of Congo -Shinkolohwe			Overflight Prohibited up to a				
Dem. Rep of Congo -Shinkolobwe	FZP1:		Overflight Prohibited up to a certain altitude				
-Shinkolobwe	FZP1:		certain altitude				
			certain altitude Overflight Prohibited up to a				
-Shinkolobwe -Mont Ngaliema	FZP1: FZP2:		certain altitude Overflight Prohibited up to a certain altitude				
-Shinkolobwe	FZP1:		certain altitude Overflight Prohibited up to a certain altitude Overflight Prohibited up to a				
-Shinkolobwe -Mont Ngaliema	FZP1: FZP2:		certain altitude Overflight Prohibited up to a certain altitude				

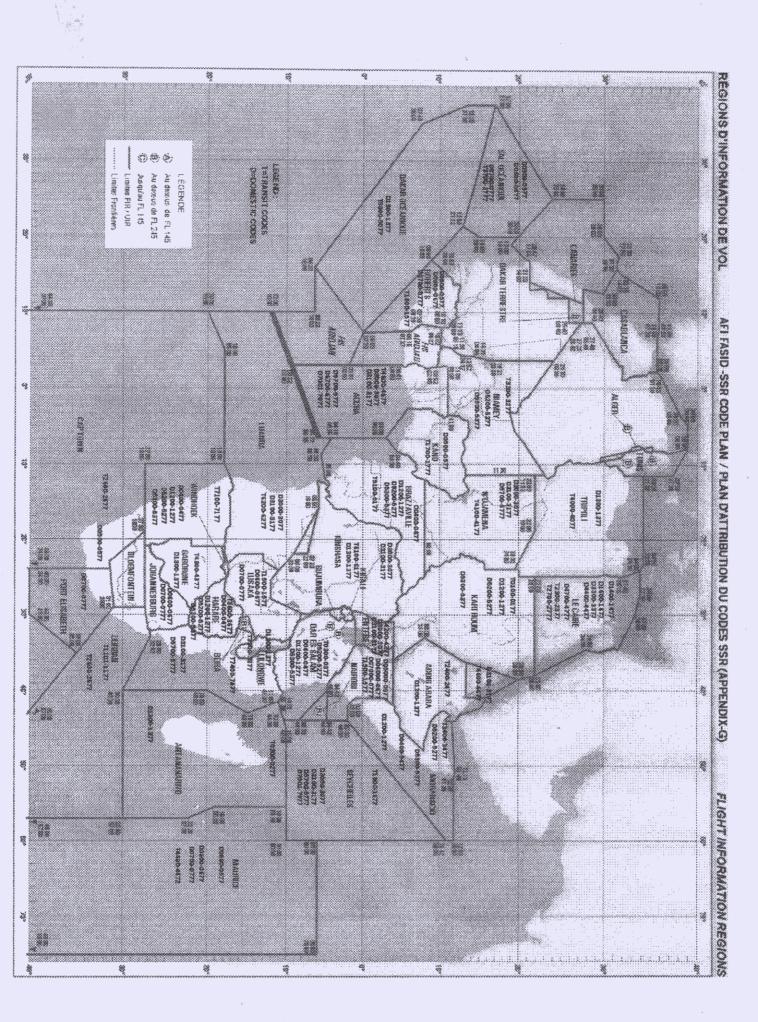
STATE/FIR	DESCRIPTION LIMITS	TYPE RESTRICTION REMARKS						
-Bukavu Kavumu	FZD3:		Overflight is subject to ATC					
-Matadi Tshimpi	FZR1:		Overflight is subject to ATC					
-Kinshasa/N'dolo	FZR2:		Overflight is subject to ATC					
-Kinshasa/N'djili	FZR3:		Overflight is subject to ATC					
-Kimbambi	FZR4:		Overflight is subject to ATC					
-Kinsembo	FZR5:		Overflight is subject to ATC					
-Likasa-Kamatunda	FZR6:		Overflight is subject to ATC					
-Kamina-Base	FZR7:		Overflight is subject to ATC					
-Kitona et Muanda	FZR8:		Overflight is subject to ATC					
-Luga	FZR9:		Overflight is subject to ATC					
-Parc Nat de Virunga	FZR10:		Overflight is subject to ATC					
-Kalemie	FZR11:		Overflight is subject to ATC					
-Kotakoli	FZR12:		Overflight is subject to ATC					
-Goma	FZR13:		Overflight is subject to ATC					
			8 - 2 - 2 - 2					
Egypt - Cairo	HEP 1 :GND UNL							
GV I	HEP 2 :GND UNL							
	HEP 16 :GND UNL							
	HEP 18 :GND UNL							
	HEP 19 :GND UNL							
	HEP 20 :GND UNL							
	HED 4 :GND UNL							
	HED 5 :GND UNL							
	HED 10 :GND - FL400							
	HED 12 :GND UNL							
	HED 14 :GND – FL400							
	HED 22 :GND – 50,000							
	HED 23 :GND – 50,000 HED 23 :GND – FL350	+						
	HED 23 .GND - FL330							
Ethiopia – Addis Ababa	HAR 1 – GND – FL290							
Eritrea - Asmara	HHP – 1 : GND - UNL							
Gabon - Libreville	FOP1 : MSL - UNL		Overflight prohibited to all					
Canon Energy mic	TOTT. MODE OF A		aircraft					
-Libreville	FOP 2 : GND/MSL-UNL		Overflight prohibited to all					
Biotevine	1012:01:02:00		aircraft					
-Libreville	FOP3 :GND-UNL		Overflight prohibited to all					
Biotevine			aircraft					
-Ayeme	FOD4 :GND-3000M	Parachuting	Activated by Libreville and					
Tryeme		1 draonating	Port Gentil TWR					
-Nzomo	FOD5 :GND-3000M	Parachuting	Activated by Libreville and					
Tizonio	1003.010 300011	1 didending	Port Gentil TWR					
-Dom-les-bam	FOD6 :GND-3000M	Parachuting	Activated by Libreville and					
-Bom ies bum	TODO :GIVD 3000IVI	1 drachating	Port Gentil TWR					
-Mvengue	FOD7 :GND-FL95	Air/Ground Firing	Activated daily from 0600 –					
Wivengue	TODY IGNOTEDS	7 m/ Ground 1 ming	1700 UTC					
-Libreville	FOD8 :GND-3000M	Parachuting	Activated by Libreville and					
Librevine	TODO :GIVD 3000IVI	1 drachating	Port Gentil TWR					
	FOD9 :GND/MSL-UNL	Firings	Activated by Libreville and					
	1 OD / .GIND/IVISE-UNL	1 1111153	Port Gentil TWR					
-Le point - Denis	FOD10 :GND 3000M	Parachuting	Activated by Libreville and					
Le point - Denis	TODIO .OHO JUUUN	1 arachamig	Port Gentil TWR					
	FOD11 : FL65 - UNL	Training Flights	Activated by Libreville and					
	TODII.ILUS - UNL	Training Frights	Port Gentil TWR					
-Mvengue	FOD12:	Training on high and middle	Activated daily from 0600 –					
-1VI VCIIgue	10012.	altitudes.	1700 UTC.					
	1	annucs.	1700 010.					

STATE/FIR	DESCRIPTION LIMITS	TYPE RESTRICTION	REMARKS
Zone A : Hors TMA	FL105-FL500		
Mvengue	FL103-FL300		
Zone B : Au dessus de la	FL245-FL500		
TMA Mvengue	122.012000		
Gambia – Banjul	GBP 1 : GND-FL55		Permanent
-Kassa Kunda	GBD 1 : GND-FL55		Permanent
Ghana – Osu Castle	DGP 1 :GND-4000FT		Permanent
-Tokaradi	DGR6::GND-FL65	GAF Local Flying	Permanent
-Tamali Air Force Training	DGR7 :ALT7000FT-FL225	High level flying training	0600-1800 daily
Area -Tamali Air Force Training	DGR8 :GND-FL65	Low level training	0600-1830 daily
Area	DGK8 .GND-FL03	Low level training	0000-1830 daily
Tamale	DGR9 :GND-200FT	Parachute dropping	By NOTAM
Tamale	DGR10 :GND-2000FT	Parachute dropping	By NOTAM
Tamale	DGR11 :GND-2000FT	Parachute dropping	By NOTAM
-Bundase	DGD2 :GND-10000FT	Gun Firing	By NOTAM
-Teshie	DGD3 :GND-1200	Gun Firing	By NOTAM
-Sekondi/Takoradi	DGD4 :GND-MSL-UNL	Naval Gun firing	By NOTAM
-Tema	DGD5 :GND-MSL-UNL	Gun Firing	By NOTAM
-Guinea	R1 :FL060-FL170	Military Exercise	Activated by NOTAM and
	D2 D7 0 (0 D7 4 D		Conakry APP
	R2 :FL060-FL170	Military Exercise	Activated by NOTAM and
	R3 :FL060-FL170	Military Francisco	Conakry APP
	R3 :FL060-FL170	Military Exercise	Activated by NOTAM and Conakry APP
	R4 :FL060-FL170	Military Exercise	Labe TWR
	R5 :FL060-FL170	Military Exercise	Labe TWR Labe TWR
	R6 :FL060-FL170	Military Exercise	Labe TWR
	R7 :FL060-FL170	Military Exercise	Labe TWR
		,	
Kenya - Nairobi	HKP 2 : GND - UNL		
	HKR 10 : GND - 45000		
	HKD 3 : GND - 29000		
	HKD29 :GND - 25000		
Liberia	R41 :GND-3000FT	OMEGA Mast	Restricted H-24
	D42 :GND-FL65	Gunnery	Activated by NOTAM and
	D42 :GND-FL65	Cuman	ATC Activated by NOTAM and
	D42 .GND-FL03	Gunnery	ATC
			Mic
Libya - Tripoli	HLR 54 :GND - UNL		
	HLR 55 :GND - UNL		
	HLR 56 :GND – FL245		
	HLR 57 :GND - UNL		
	HLR 58 :GND - UNL		
	HLR 59 :GND - UNL		
	HLR 60 :GND - UNL		
	HLR 61 :GND - UNL		
	HLR 62 :GND - UNL		
	HLR 63 :GND - UNL		
	HLR 54 :GND - UNL		-
1			

STATE/FIR	DESCRIPTION LIMITS	TYPE RESTRICTION	REMARKS
Madagascar - Antananarivo	FMP – Antananarivo city:		
-	GND – UNL		
	FMR 24 : GND – UNL		
	FMR 25 : GND – UNL		
	FMR 27 : GND – UNL		
	FMR 29 – 34 : GND UNL		
	FMR 36 : GND – FL245		
	FMD5: GND FL460		
	FMD 26 : GND – UNL		
	FMD 50 : GND – FL460		
Malawi - Lilongwe	FWD 1 : GND – FL230		
Mar D 1	CARL CND FLA10	3.6'11'	A .: 1 :1
Mali - Bamako	GAP1:GND-FL410	Military activites	Active daily
-Kati	GAP 3 : GND - 3000	Firings	Active daily
	GAR 2 : GND-FL30		Overflight perm is to be
Cin-1i	CAD 2 - EL 50 EL 410	Eliabet Analysis	granted by DCA.
-Sirakoroni -Sibi	GAD 2 : FL50-FL410	Flight training	Activated by NOTAM
-Simidji	GAD 3 : FL 50-FL410 GAD 4 : FL 50-FL410	Flight Training	Activated by NOTAM
-Simiaji	GAD 4 : FL 50-FL410	Flight Training	Activated by NOTAM
Mauritania	GQD 1 : GND-2000M	Parachuting	Activated by NOTAM
112002	GOD 2 : GND-2000M	Parachuting	Activated by NOTAM
	GQD 3: GND-2000M	Parachuting	Activated by NOTAM
	GQD 4 : GND-2000M	Parachuting	Activated by NOTAM
	GQD 5 : GND-9000M	Firings	Activated by NOTAM
	GQD 6 : GND-1000M	Firings	Activated by NOTAM
	GQD 7 : GND-2000M	Firings	Activated by NOTAM
	GQR 1 : GND – 1000M	1 milgs	National Park
Morocco - Cassablanca	GMP02 : GND – UNL		
	GMP09 : GND – 8000FT		
	GMP10 : GND – FL200		
	GMP05 :GND – FL50		
Mauritius - Mauritius	FID5 : MSL - 40000		
Mozambique - Beira	FQR32 : GND - UNL		
	FQR33 : GND -UNL		
	FQD23 : GND - UNL		
	FQD25 : GND - UNL		
Namibia-Windhoek-	FYR131 : GND – FL240		
Tamibia- Windhock-	FYR131 . GND – FL240 FYR132-GND-FL220		
	FYR132-GND-FL220 FYR133-GND-FL220		
	1 1 K133-UND-FL22U		
Niger – Anou Araren	GND – FL70		
Nigeria - Lagos	DNP1 : GND – 1500FT	Aerostat	
-Lanlate	DNP2 :GND-2000FT	Aerostat	
-Lagos	DNP3 :GND-15000FT	Aerostat	
-Abuja	DNP4 :GND-UNL	3	
·	DNR1 :GND-10000FT	Helicopter Area by NAF	Pilots warned to avoid area.
	DNR2 :GND-FL100		
	DNR3 : GND – FL120	Military training	0600-1800 daily
	DND 1 : MSL-30000FT	Marine gunnery	Activated by NOTAM
	DND 2 : MSL-30000FT	Marine gunnery	Activated by NOTAM

STATE/FIR	DESCRIPTION LIMITS	TYPE RESTRICTION	REMARKS
SIAIE/FIK	DND 3 : MSL-30000FT	Marine/Navy exercises	Activated by NOTAM
	DND 4 : MSL-30000FT	Marine/Navy exercises	Activated by NOTAM Activated by NOTAM
	DND 4 : MSL-30000FT DND 5 : MSL-30000FT	Marine/Navy exercises	Activated by NOTAM Activated by NOTAM
	DND 6 : MSL-30000FT	Marine/Navy exercises	Activated by NOTAM Activated by NOTAM
	DND 7 : MSL-30000FT	Marine/Navy exercises	Activated by NOTAM Activated by NOTAM
	DND 7 : MSL-30000FT DND 8 : MSL-30000FT	Marine gunnery	Activated by NOTAM Activated by NOTAM
	DND 8 : MSL-30000FT DND 9 : MSL-30000FT		Activated by NOTAM Activated by NOTAM
Vana		Marine gunnery	0700-1200 weekdays
-Kano	DND 10 : MSL-30000FT DND 11: MSL-30000FT	Air Firing Range	
-Lagos		Air Firing Range	0700-1200 weekdays
	DND 12 : GND-40000FT	Kachia Military Range	Pilots warned to avoid area
	DND 13 :GND-40000FT	Kontagora Military Range	Pilots warned to avoid area
Senegal – Thies	GOP 1 :GND-FL100	Training flights	Pilots warned to avoid area
-Thies			Activated by NOTAM
-Thies	GOD 8 CND 1000M	Firing	3
	GOD 8 :GND - 1000M	Parachuting	Activated by NOTAM
Semou Djimitte	GOD 9 :GND – 1000M	Firing	ActivateH24 daily
Sangalkam	GOD 12 :GND – 400M	Parachuting	Activated by NOTAM
Niaga	GOD 13 :GND - 400M	Parachuting	Activated by NOTAM
M'baouane	GOD 14 :GND -400M	Parachuting	Activated by NOTAM
M'bour	GOD 15 :GND – 400M	Parachuting	Activated by NOTAM
Taiba	GOD 16 :GND – 400M	Parachuting	Activated by NOTAM
Tambacounda	GOD 17 :GND – 500M	Firing	Activated daily
-Botou	GOD 21 :GND – 35000M	Firing	Activated by NOTAM
	GOR6 :GND – FL195	Training flights	Activiated by Dakar TWR
	GOR7 :150M-FL50	Training flights	Activated by NOTAM
	GOR8 :GND – FL40		No over flight below FL40
South Africa-hannesburg	FAR 20 : GND-UNL		
	FAR 23 : GND-FL460		
	FAR 25 : GND-UNL		
	FAR 27 : FL90-F280		
	FAR 29 : GND-UNL		
	FAR 45A: 1500 – FL460		
	FAR 45B : FL120 – FL460		
	FAR 47 : GND-UNL		
	FAR 71 : GND-FL250		
	FAR 147 : FL460		
	FAR 148 : UNL		
	FAD 26 : FL130 – FL460		
	FAD 30 : FL130 – FL280		
	FAD 53 : GND - FL390		
	FAD 143 : GND - FL460		
Sudan - Khartoum	HSP – AREA GND – UNL		
	HSP1 :GND – FL270		
	HSP7 :GND-FL280		
	HSP8 :GND-UNL		
	HSP6 :GND-UNL		
	5-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		
Tanzania – Dar-es-Salaam	HTP6 :GND – UNL		
Togo- Lome	DXP1 :GND-FL35		+
-Lome	DXP2 :GND-FL35		+
-Lome	DXP3 :GND-FL35		
Lonic	DXR1 :GND-FL33		Training Flights
	DXR1 :GND-FL400 DXR2 :GND-FL400		Military training flights
	DAKZ .GND-FL400		winitary training flights

STATE/FIR	DESCRIPTION LIMITS	TYPE RESTRICTION	REMARKS			
-Lome	DXD1 :GND-FL140	Parachuting	Up to FL115 activated by TWR and above FL115 by NOTAM			
m · · m ·	DED3 CMD LDH					
Tunisia - Tunis	DTP3 :GND-UNL					
	DTR9 :GND-FL55-FL280					
	DTR9 :FL105-FL280					
	DTR10 :GND-FL460					
	DTR10 :A, B, C : FL130-					
	FL280					
	DTR28 :GND-UNL					
	DTRD 5A, B :NOTAM					
	DTRD11 :MSL - UNL					
Uganda- Entebbe	HUP1 :GND-UNL					
<u> </u>	HUP7 :GND-UNL					
	HUD2 :GND-UNL					
	HUD3 :GND-UNL					
Zambia- Lusaka	FLP4 :GND - UNL					
Zumbu Eusuku	FLD23 :GND-UNL					
Zimbabwe- Harare	FVP1 :GND UNL					
Zimbabwe- Harare	FVP2 :GND – FL290					
	VRP6 :GND – UNL					
	FVR30 :12000 UNL					
-	FVR31 : GND UNL					
	FVR60 :GND UNL					



AERODROME AIS UNITS REQUIRING IMPLEMENTATION IN THE ESAF STATES

AERODROME AIS UNITS TO BE	ANGOLA	BOTSWANA	COMOROS	ERITREA	MADAGASCAR	NAMIBIA	SOMALIA	SOUTH AFRICA
ESTABLISHED								
HUAMBO	X							
FRANCISTOWN		X						
ANJOUAN/OUANI			X					
ASSAB				X				
MAHAJANGA/AMBOROVY					X			
TOAMASINA					X			
KEETMANSHOOP						X		
BERBERA							X	
BURAO							X	
MOGADISHU							X	
KISIMAYU							X	
JOHANNESBURG/RAND								X

AERONAUTICAL INFORMATION SERVICES IMPLEMENTED AT AERODROMES IN THE WACAF REGION

EXPLANATION OF THE TABLE

Column

- 1 Name of the aerodrome or location where aeronautical information services implemented
- 2 Designation of aerodrome:
 - RS international scheduled air transport, regular use
 - RNS international non-scheduled air transport, regular use
 - RG international general aviation, regular use
 - AS international scheduled air transport, alternate use
- 3 ICAO location indicator of the aerodrome
- 4 Name of the AIS office responsible for the provision of aeronautical information service at the aerodrome concerned indicated in column 1
- 5 ICAO AFTN address of the responsible AIS office
- 6 AIS information to be available at the aerodrome:
 - AIP+: Includes AIP and Amendments, AIP Supplements, NOTAM, AIC
 - L country in which the aerodrome is located
 - S surrounding countries
 - FIL all countries up to and including the aerodrome of first intended landing
 - PIB: Pre-flight Information Bulletins
 - P1 Aerodrome (AD) format
 - P2 Area format, AD format
 - P3 Route format, Area format, AD format
 - PREP: Preparation method of PIB
 - C Centralized preparation
 - L Local preparation (at the aerodrome concerned)
- Area of coverage by AFTN routing areas for which aeronautical information/flight documentation is available
 - Note.— The AFTN routing areas are shown on FASID Chart MET 1
- 8 Availability of Post-Flight Reporting Forms
- 9 Remarks

(Indicate where processing of aeronautical information is automated/database).

A - Automated

Aerodrome where service is i	equire	d	Responsible AIS Office	Responsible AIS Office AIS informate provide						Area of coverage by AFTN routing areas	Post Flight Report	Remarks
						AIP+			PIB			
Name	Use	ICAO loc. ind.	Name	ICAO loc. ind.	L	S	F I L	P1 P2 P3	PREP			
1	2	3	4	5				6		7	8	9
BENIN			AEROCIVIL COTONOU, DAC. Cotonou.	DBBBYAYX								
COTONOU/Cadjehoun	RS	DBBB			X	X	X	P2			X	
BURKINA FASO			MINITP OUGADOUGOU, DAC, Ouagadougou. (ASECNA).	DFFVYAYX								
BOBO-DIOULASSO/Bobo-Dioulasso	RS	DFOO	5 5 (/-		X			P2			X	
OUAGADOUGOU/Ouagadougou	RS	DFFD			X	X		P2			X	
CAMEROON			AEROCIVILE YAOUNDÉ, DAC,	FKKYYAYX								
CHMEROON			Yaoundé. (ASECNA).									
DOUALA/Douala	RS	FKKD			X	X	X	P2			X	
GAROUA/Garoua	RS	FKKR				X		P2			X	
MAROUA/Salak	RS	FKKL			X			P2			X	
N'GAOUNDERE/N'Gaoundere	AS	FKKN				X		P2			X	
YAOUNDE/Nsimalen	RS	FKYS			X	X	X	P2			X	
CAPE VERDE			AVIACIVIL SAL, ASA ENASA, Aeroporto Amilcar Cabral, Ilha do Sal.	GVACYOYX								
PRAIA/Francisco Mendes	RS	GVFM			X	X		P2			X	
SAL I./Amilcar Cabral	RS	GVAC			X	X	X	P3			X	

Aerodrome where service is r	equire	d	Responsible AIS Office			AIS i		matio ovide	on to be d	Area of coverage by AFTN routing areas	Post Flight Report	Remarks
CENTRAL AFRICAN REPUBLIC			DIREGENAVIA CIVIL BANGUI, DGACM, Bangui.	FEFVYAYX								
BANGUI/M'Poko	RS	FEFF			X	X	X	Р3			X	
BERBERATI/Berberati	RS	FEFT			X	X		P2			X	
СНАД			DAC, N'Djamena.	FTTVYAYX								
N'DJAMENA/N'Djamena	RS	FTTJ			X	X	X	P3			X	
SARH/Sarh	RS	FTTA			X			P2				
COMOROS			AVIACIVIL MORONI, DAM, Moroni.									
ANJOUAN/Ouani	RS	FMCV			X	X		P2			X	
DZAOUDZI/Pamanzi, Mayotte I.	RS	FMCZ			X	X		P2			X	
MORONI/Hahaia	RS	FMCH			X			P1			X	
CONGO			AVIACIVILE BRAZZAVILLE, ANAC, Brazzaville. (ASECNA)	FCBVYAYX								
BRAZZAVILLE/Maya-Maya	RS	FCBB			X	X	X	Р3			X	
POINTE NOIRE/Agostino Neto	RS	FCPP			X	X		P2			X	
COTE D'IVOIRE			ANAM, Abidjan. (ASECNA)	DIAPYAYX								
ABIDJAN/Felix Houphouet Boigny Intl	RS	DIAP			X	X	X	Р3			X	
BOUAKE/Bouake	RS	DIBK			X	X		P2			X	

			_			pro	vided	n to be	coverage by AFTN routing areas	Post Flight Report	Remarks
		NOFKIN, SIA, RVA, Kinshasa/N'Dolo.	FZAZYOYX								
RS	FZNA			X	X		P2			X	
RS	FZAA			X	X	X	Р3			X	
AS	FZIC			X	X		P2			X	
AS	FZQA			X	X	X	P2			X	
		DGAC, Malabo. (ASECNA)	FGSLYFYX								
RS	FGSL			X	X		P2			X	
		AVIACIVILE LIBREVILLE, SGACC, Libreville, (ASECNA)	FOOVYAYX								
RS	FOON			X	X		P2			X	
RS	FOOL			X	X	X	P2			X	
RS	FOOG			X	X		P2			X	
		AIS, Banjul International Airport	GBYDYOYX								
RS	GBYD			X	X		P2			X	
		AIS GCAA, Kotoka International Airport,	DGAAYOYX								
RS	DGAA			X	X	X	P3			X	
RS	DGSI			X	X		P2			X	
RS	DGLE			X	X		P2			X	
	RS AS AS RS RS RS RS RS RS RS	RS FZAA AS FZIC AS FZQA RS FGSL RS FOON RS FOOC RS FOOG RS FOOG RS DGAA RS DGSI RS DGLE	RS FZAA AS FZIC AS FZQA DGAC, Malabo. (ASECNA) RS FGSL AVIACIVILE LIBREVILLE, SGACC, Libreville. (ASECNA) RS FOON RS FOOL RS FOOG AIS, Banjul International Airport RS GBYD AIS GCAA, Kotoka International Airport, Accra RS DGAA RS DGSI RS DGLE	RS FZAA AS FZIC AS FZQA DGAC, Malabo. (ASECNA) RS FGSL AVIACIVILE LIBREVILLE, SGACC, Libreville. (ASECNA) RS FOON RS FOOL RS FOOG AIS, Banjul International Airport GBYDYOYX RS DGAA RS DGAA RS DGAA RS DGSI RS DGLE	RS FZAA X AS FZIC X AS FZQA X DGAC, Malabo. (ASECNA) FGSLYFYX RS FGSL X AVIACIVILE LIBREVILLE, SGACC, Libreville. (ASECNA) X RS FOON X RS FOOL X RS FOOG X AIS, Banjul International Airport GBYDYOYX RS GBYD X AIS GCAA, Kotoka International Airport, Accra RS DGAA X RS DGSI X X	RS FZAA	RS FZAA	RS FZAA	RS FZAA	RS FZAA	RS FZAA

Aerodrome where service	e is require	d	Responsible AIS Office		,	AIS i		matio ovided	n to be	Area of coverage by AFTN routing areas	Post Flight Report	Remarks
GUINEA			CIVIL AVIATION CONAKRY, AIS Conakry	GUCYYOYX								
BOKE/Baralande	RS	GUOK			X	X		P2			X	
CONAKRY/Gbessia	RS	GUCY			X	X	X	Р3			X	
FARANAH/Badala	RS	GUFH			X	X		P2			X	
KANKAN/Diankana	RS	GUXN			X	X		P2			X	
LABE/Tata	RS	GULB			X	X		P2			X	
N'ZEREKORE/Konia	RS	GUNZ			X	X		P2			X	
GUINEA-BISSAU			AEROCIVIL BISSAU, DGAC Bissau	GGOVYAYX								
BISSAU/Osvaldo Vieira Intl	RS	GGOV			X	X		P2			X	
LIBERIA			CIVILAIR MONROVIA, DCA Monrovia	GLMCYAYX								
MONROVIA/Roberts Intl	RS	GLRB			X	X	X	Р3			X	
MALI			AVIACIVIL BAMAKO, DNAC, Bamako	GABVYAYX								
BAMAKO/Senou	RS	GABS			X	X	X	Р3			X	
GAO/Gao	RS	GAGO			X	X		P2			X	
KAYES/Kayes	RS	GAKY			X	X		P2			X	
KIDAL/Kidal	RS	GAKL			X	X		P2			X	
MOPTI-BARBE/Mopti-Barbe	RS	GAMB			X	X		P2			X	
NIORO/Nioro	RS	GANR			X	X		P2			X	
TOMBOUCTOU/Tombouctou	RS	GATB			X	X		P2			X	

Aerodrome where service is 1	equire	d	Responsible AIS Office		,	AIS		matio ovided	n to be	Area of coverage by AFTN routing areas	Post Flight Report	Remarks
MAURITANIA			MINITRANS NOUAKCHOTT, DAC Nouakchott. (ASECNA).									
ATAR/Atar	RS	GQPA			X	X		P2			X	
NEMA/Nema	RS	GQNI			X	X		P2			X	
NOUADHIBOU/Nouadhibou	RS	GQPP			X	X	X	Р3			X	
NOUAKCHOTT/Nouakchott	RS	GQNN			X	X	X	Р3			X	
ZOUERATE/Zouerate	RS	GQPZ			X	X		P2			X	
NIGER			AVIACIVILE NIAMEY, DAC Niamey. (ASECNA)	DRRVYAYX								
AGADES/Sud	RS	DRZA			X	X		P2			X	
NIAMEY/Diori Hamani Intl	RS	DRRN			X	X	X	Р3			X	
ZINDER/Zinder	AS	DRZR			X	X		P2			X	
NIGERIA			AIRCIVIL LAGOS, NAMA-ATS-AIS, Ikeja.	DNLLYAYX								
ABUJA/Nnamdi Azikiwe	RS	DNAA			X	X		P2			X	
CALABAR/Calabar	RS	DNCA			X	X		P2			X	
ILORIN/Ilorin	AS	DNIL			X	X		P2			X	
KADUNA/Kaduna	RS	DNKA			X	X		P2			X	
KANO/Mallam Aminu Kano Intl	RS	DNKN			X	X	X	Р3			X	
LAGOS/Murtala Muhammed	RS	DNMM			X	X	X	Р3			X	
MAIDUGURI/Maiduguri	RS	DNMA			X	X		P2			X	
PORT HARCOURT/Port Harcourt Intl	RS	DNPO			X	X	X	Р3			X	
SOKOTO/Abubakar Saddiq III Intl	RS	DNSO			X	X		P2			X	

ATS/AIS/SAR/SG/7 Appendix M to report on Agenda item 8

Aerodrome where service is	require	d	Responsible AIS Office			AIS		matio ovided	n to be	Area of coverage by AFTN routing areas	Post Flight Report	Remarks
SAO TOME & PRINCIPE			ENASA SAO TOME, ENASA-AIS, Aerporto de Sao Tome	FPSTYOYX								
SAO TOME/Sao Tomé	RS	FPST			X	X	X	P3			X	
SENEGAL			AVIACIVIL DAKAR, DAC, Dakar/Yoff.	GOOOYAYX								
CAP SKIRING/Cap Skiring	RS	GOGS			X	X		P2			X	
DAKAR/Leopold Sedar Senghor Intl	RS	GOOY			X	X	X	Р3			X	
SAINT LOUIS/Saint Louis	RS	GOSS			X	X		P2			X	
TAMBACOUNDA/Tambacounda	RS	GOTT			X	X		P2			X	
ZIGUINCHOR/Ziguinchor	RS	GOGG			X	X		P2			X	
SIERRA LEONE			AIRCIVIL FREETOWN, DCA-MTC, Freetown	GFLLYAYX								
FREETOWN/Lungi	RS	GFLL	Tiesown		X	X	X	Р3			X	
TOGO			MINCOMMERCE LOMÉ, MCT, Lomé, (ASECNA).	DXXXYAYX								
LOME/Tokoin	RS	DXXX			X	X	X	Р3			X	
NIAMTOUGOU/Niamtougou	RS	DXNG			X	X		P2			X	

ATM Deficiencies

State Name Red	4	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for implementation	Priority
Algeria									
Tab	I/7 Rec.5/8 and ble ATS 1 AFI ANP oc.7474/27	RNAV UM999	Casablanca-Errachid ia-El fly non-economic Golea-Zarzaitine-Se bha-Sarir-New Valley-Luxor-Jeddah		Aircraft subjected to coordinate common routes	States concerned to Morocco-Saudi implementation date	Algeria-Egypt-Libya- Arabia	22/1/04	A
Tab	I/7 Rec.5/8 and ble ATS 1 AFI ANP oc.7474/27	Route UR981	Casablanca-Marrake ch-BULIS-Gao-Niame y-Lagos		Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date (Route segment implemented in Algeria)	Mali-Mauritania-Mor cco-Niger-Nigeria	0 22/1/04	А
Tab	I/7 Rec.5/8 and ble ATS 1 AFI ANP oc.7474/27	Route UR986	Tunis-Ghadames- In Amenas-Djanet-Kan o-Foumban-Yaoundé -France Ville	1995	Aircraft subjected to fly non-economical routes.	States concerned to coordinate common implementation date	Algeria	22/1/04	A
Anr 2		Five-letter name code	Route crossing not identified	1998	Difficulties for pilots identifying potential traffic conflicts.	ICAO Regional Office concerned allocate the 5-letter name codes.	Algeria	22/1/04	Α
	IRG/13 nc.13/43		Non-implementation of 10 minutes longitudinal separation	-				22/1/04	Α
AFI	I/7 Rec.5/21		Non-implementation of ATC in the upper airspace	-				22/1/04	Α

State Nam	e Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body 1	Target date for mplementation	Priority
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474/27	Route UA293	(Ibiza) (KIRLA) Tiaret	1995	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Algeria	22/1/04	Α
	AFI/7 Rec.5/8 and Table ATS 1 AFI ANP Doc.7474/27	Route UG623	(BALEN) Annaba-Tebessa-Gh	1995	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Algeria	22/1/04	Α
Angola	AFI/7 Rec.5/21	Provision of ATC 150 NM concept	Non-provision of ATC service 150 NM of Luanda and	1998	Steep descent for arrival and steep climb for departure.	Implement as required.	Angola	22/1/04	U
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	RNAV UM731	Huambo Carbonara-OSMAR- Tunis-Jerba-FARES- Dirkou-N'Djamena-Be riberati-Saurimo-Joh annesburg	1996	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Angola-Botswana-C entral African Republic-Congo(DRO)-Chad-Libya-Niger- South Africa-Zambia	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	RNAV UM998	Gaborone-Kinshasa- Luena-Maun	1996	Aircraft subjected to fly non-economic routes	States concerned to coordinate common implementation dates	Angola-Botswana- D. R. Congo	22/1/04	Α
	APIRG/13 Conc. 13/43	Non-implementation of 10 minutes longitudinal separation	-	-	-	-	-	22/1/04	U
n ·									

Benin

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for implementation	Priority
Botswana									
	AFI/7 Rec.5/21	RNAV UM731	Johannesburg-Sauri mo	1990	Aircraft subjected to fly non-economical routes	State concerned to coordinate common implementation date	Angola-Botswana-South Africa-Zambia	3 22/1/04	Α
Burkina F	aso .								
	This State has no deficiency in this field								
Burundi									
	This State has no deficiency in this field								
Cameroon	1								
	AFI/7 Rec.5/8 Table ATS 1 Doc.7474/27	Route UA861	Lagos-Garoua	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Cameroon	22/1/04	Α
Cape Verd	de								
	This State has no deficiency in this field								
Chad									
	This State has no deficiency in this field								
Comoros									
	AFI/7 Rec.5/21	Provision of ATC 150 NM concept	Non-provision of ATC service 150 NM Windhoek	1994	Delayed descend for arrival and steep climb for departure	To implement as required	Comoros-Madagase ar	22/1/04	U

State Name	e 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	Need for SSR surveillance in extended TMA as expressed in the AFI CNS/ATM Plan	1998	Traffic density/complexity contributing to frequent ATS incidents	Implement SSR at Brazzaville	Congo	22/1/04	U
Côte d'Ivo	pire								
	This State has no deficiency in this field								
Dem. Rep.	of Congo								
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	UM731	Johannesburg-Sauri mo-Berberati	1995	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date (Need of VHF coverage before implementation)	Angola-Botswana-Congo (DRC)	22/1/04	A
	AFI/7 Rec.5/21	-	Non-provision of ATC service	-	-	-	-	22/1/04	
	APIRG/13 Conc.13/43	-	Non-implementation of 10 minute longitudinal separation	-	-	-	-	22/1/04	
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UA617	Kinshasa-Windhoek	1995	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date (coordination meeting with military authorities on-going)	Congo (DRC)	22/1/04	A
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	RNAV UL612	Goma-El Dhaba(Paleohora)	1995	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Congo (DRC)-Egypt-Sudar	22/1/04 1	Α

							-	-	Ü
State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for implementation	Priority
Djibouti									
	This State has no deficiency in this field								
Egypt									
	This State has no deficiency in this field								
Equatoria	l Guinea								
	This State has no deficiency in this field								
Eritrea									
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UB525	Addis Ababa-ALEBA-Luxo	1996	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Eritrea	22/1/04	Α
Ethiopia									
	This State has no deficiency in this field								

France (Réunion)

This State has no deficiency in this field

Gabon

State Nam	e Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for implementation	Priority
Gambia									
	This State has no deficiency in this field								
Ghana									
	This State has no deficiency in this field								
Guinea									
	This State has no deficiency in this field								
Guinea B	issau								
	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	22/1/04	Α
Lesotho									
	This State has no deficiency in this field								
Liberia									
	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
Libya									
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	RNAV UM999	Zarzaitine-Sebha-Sa rir-New Valley	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Libya	22/1/04	Α
	AFI/7 Rec.5/21	Provision of ATC 150 NM concept	Non-provision of ATC 150 NM of Tripoli	1990	Delayed descent for arrival and steep climb for departure	Implement as required	Libya	22/1/04	U
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UA748	(Gozo)-Tripoli-Mizda- Cairo-Sharm Sheikh	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Libya and adjacent States	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UA411	Jerba-Tripoli-Beni-W alid-Benina-GERFA- Mersa Matruh-Cairo	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Libya	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UG855	Tripoli-Ghadames-B. Omar Driss	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Libya	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UG864	Tunis-Tebessa-Ghar daia-Timmimoun	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Libya	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	RNAV UM994	Monastir-Mitiga-Beni- Walid-ORNAT	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Libya	22/1/04	Α
	AFI/7 Rec.5/1	Airspace Management	Inadequate airspace management between ATS units leading to frequent traffic incidents in the FIR boundaries between Alger, N'djamena, Tripoli and Niamey not responding to existing route structure flows	1998	Frequent ATS incidents in the area attributed to airspace management	Need for urgent meeting of the States concerned to address the problem of airspace management and prevalent ATS incidents in the area	Libya and adjacent States	22/1/04	A

State Nam	e 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 Table ATS 1 AFI ANP Doc.7474/27	Route UG623	BALEN-Annuba-Teb essa-Ghadames	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Libya	22/1/04	Α
	AFI/7 Rec.5/1	P21-R23-Airspace Management	Prohibited area-Restricted area	1990	Non-availability of direct routing	State concerned to withdraw these	Libya	22/1/04	Α
Madagas	car								
	This State has no deficiency in this field								
Malawi									
	This State has no deficiency in this field								
Mali									
	This State has no deficiency in this field								
Mauritan	ia								
	This State has no deficiency in this field								
Mauritius	,								
	This State has no deficiency in this field								
Morocco									
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UR981	Casablanca-Marrake ch-BULIS	1995	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Morocco	22/1/04	Α

State Nam	e 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 Table ATS 1 AFI ANP Doc.7474/27	Airspace Management	Problems associated with non flight level allocations on ATS routes	1998	Non-standard flight level allocations contributed to ATS incidents	States concerned to meet and address issues under column 3	Morocco-Portugal	22/1/04	U
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	(SSR) Provision of effective	Need for SSR surveillance in extended TMA as expressed in the AFI CNS/ATM Plan	1998	Traffic density/complexity contributing to frequent ATS incidents	Implement SSR at Casablanca	Morocco	22/1/04	U
Mozambio	que								
•	This State has no deficiency in this field								
Namibia									
	AFI/7 Rec.5/21	Provision of ATC 150 NM concept	Non-provision of ATC service 150 NM Windhoek	1994	Delayed descent for arrival and steep climb for departure	To Implement as required	Namibia	22/1/04	U
Niger									
	This State has no deficiency in this field								
Nigeria									
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UA861	Lagos-Garoua	1995	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Nigeria	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	RNAV UM998	Ngaondere-Maidugur i-Djanet	1995	Aircraft subjected to fly non-economical routes	-	Nigeria	22/1/04	Α

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for implementation	Priority
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								
Seychelles									
	This State has no deficiency in this field								
Sierra Leo	one								
	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	22/1/04	U
	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	22/1/04	Α

State Nam	e Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for implementation	Priority
South Afric	ea -								
	This State has no deficiency in this field								
Spain (Ca	nary Is.)								
	This State has no deficiency in this field								
Sudan									
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UR400	A. Simbel-Kassala	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Sudan	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UR995	Merowe-Addis Ababa	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Sudan	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	RNAV UM665	Addis Ababa-Merowe	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Sudan	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	RNAV UM220	Lodwar-A.Simbel	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Sudan	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	RNAV UL612	Goma-El Dhaba	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Sudan	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UB607	Goma-El Obeid-New Valley-El Dabha	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Sudan	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UB525	Addis Ababa-Luxor	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Sudan	22/1/04	Α
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474/27	Route UA618	Bukavu-Malakal	1994	Aircraft subjected to fly non-economical routes	States concerned to coordinate common implementation date	Sudan	22/1/04	Α

State Nam	e 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 Table ATS 1 AFI ANP Doc.7474/27	Provision of ATS	Area control service not provided to most ATS routes in the upper airspace	1998	-	State to expedite implementation process	Sudan	22/1/04	Α
Swazilana	d								
	AFI/7 Rec.5/1	P4 - Airspace Management	Prohibited area	1990	Non-availability of direct routings	Withdraw this area - P4	Swaziland	22/1/04	Α
Tanzania									
	AFI/7 Rec.5/8 Table ATS 1 AFI ANP Doc.7474	UB527	Lubumbashi - Dar-es-Salaam	2001	Aircraft subjected to fly non-economical routes	Tanzania is coordinating with the States for a common implementation date	D. R. Congo - Tanzania	22/1/04	Α
	-	UB607	Bujumbura - Dar-es-Salaam	2001	-	-	Zambia - Burundi	-	Α

Togo

This State has no deficiency in this field

Tunisia

This State has no deficiency in this field

Uganda

State Nan	ne Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for implementation	Priority
Zambia									
	AFI/7 Rec.5/1	D23 P4	Danger area - Restricted area	1990	Non-availability of direct routing	Withdraw area	Zambia	22/1/04	Α
Zimbabw	ve								

Deficiencies SAR eng

State Nan	ne Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	•	Target date for implementation	•
Algeria									
	This State has no deficiency in this field								
Angola									
	Annex 12, 3.1.5 AFI/7 Conc.6/3	SAR Agreements	-	1995	Delay to conduct SAR OPS	Coordination with States concerned.	Angola and adjace States.	nt 22/1/04	Α
	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.	1997	Delay to conduct SAR OPS	Implement 406/121. MHz	5 Angola	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR y legislation	-	22/1/04	Α
Benin									
	Annex 12, 3.1.5, AFI/7 Conc. 6/3	SAR Agreements	-	1996	Delay to conduct SAR OPS	Coordinate with States concerned.	Benin and adjacen States.	t 22/1/04	Α
	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	1993	Delay to conduct SAR OPS	i) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz.	Benin	22/1/04	U
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR legislation.	-	22/1/04	Α

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first Reported	Deficiency	Description of Corrective action	•	Target date for mplementation	•
Botswana									
	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) Implement 406 MH	Iz Botswana	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency.	Establish SAR / legislation	-	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1995	Delay to conduct SAR OPS	Coordination with States concerned.	Botswana and adjacent States	22/1/04	Α
Burkina F	aso								
	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	1993	Delay to conduct SAR OPS	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz.	Burkina Faso	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR / legislation	-	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements.	-	1995	Delay to conduct SAR OPS	Coordinate with States concerned.	Burkina Faso and adjacent States.	22/1/04	Α
Burundi									
	Annex 12, 3.1.5, AFI/7 Conc. 6/3	SAR Agreements	-	1995	Delay to conduct SAR OPS	Coordinate with States concerned.	Burundi and adjace States.	nt 22/1/04	Α
	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	1993	Delay to conduct SAR OPS	Implement 406 MHz	Burundi	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	-	22/1/04	Α

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	Executing Body	Target date for implementation	Priority
Cameroon									
	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	1993	Delay to conduct SAR OPS	Implement 406/121.9 MHz	5 Cameroon	22/1/04	Α
	Annex 12, 3.1.5: AFI/7 Conc.6/3	SAR Agreements	-	1995	Delay to conduct SAR OPS	Coordinate with States concerned.	Cameroon	22/1/04	Α
Cape Verd	le								
	This State has no deficiency in this field								
Central Aj	frican Republic								
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation		22/01/04	Α
	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	1993	Lack of legal authority could delay SAR efficiency	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz	Central African Republic	22/01/04	Α
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 adjacer States	nt 22/1/04	Α
	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	1993	Delay to conduct SAR OPS	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz	Chad	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Chad	22/1/04	Α

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	•	Target date for implementation	Priority
Comoros									
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Comoros	22/1/04	Α
	Annex 12, 3.1, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coodinate with States concerned	Comoros and adjacent States	22/1/04	Α
	Annex 12, 2.4, Annex 12, 3.2, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	406 MHz and 121.5 MHz	1993	Delay to conduct SAR OPS	Implement 406/121.5 MHz	Comoros	22/1/04	Α
Congo									
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Congo	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc. 6/3	SAR Agreements	-	1995	Delay to conduct SAR OPS	Coordinate with States concerned	Congo and adjacer States	nt 22/1/04	Α
	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	1993	Delay to conduct SAR OPS	Implement 406/121.5 MHz	Congo	22/1/04	Α
Côte d'Ivo	pire								
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1996	Delay to conduct SAR OPS	Coordinate with States concerned	Côte d'Ivoire and adjacent States	22/1/04	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	-	Côte d'Ivoire	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Côte d'Ivoire	22/1/04	Α

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	•	Target date for mplementation	•
Dem. Rep.	of Congo								
	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	1993	Delay to conduct SAR Operations	Coordination with States concerned	Congo (DRC)	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc. 6/3	SAR Agreements	-	1995	Delay to conduct SAR Operations	Coordination with States concerned	DR Congo and adjacent States	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Congo (DRC)	22/1/04	Α
Djibouti									
	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	1993	Delay to conduct SAR OPS	I) Provide SPOC and ICAO: ii) Implement 406/121.5 MHz	Djibouti	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Djibouti and adjace States	nt 22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Djibouti	22/1/04	Α
Egypt									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR agreements	-	1995	Delay to conduct SAR Operations	Coordination with States concerned	Egypt and adjacent States	22/1/04	Α
	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	1993	Delay to conduct SAR Operations	Coordination with States concerned	Egypt	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Egypt	22/1/04	Α

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	•	Farget date for mplementation	•
Equatorial	Guinea								
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Equatorial Guinea	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Equitorial Guinea an adjacent States	nd 22/1/04	Α
	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	1993	Delay to conduct SAR OPS	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz	Equitorial Guinea	22/1/04	Α
Eritrea									
	Annex 12, 2.1	SAR Legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Eritrea	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	Establish SAR legislation	1995	Delay to conduct SAR OPS	Coordination with States concerned	Eritrea and adjacen States	t 22/1/04	Α
	Annex 12, 2.4, Annex 12, 3.2.4, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	Implement 406/121.5 MHz	1997	Delay to conduct SAR OPS	Implement 406 MHz	Eritrea	22/1/04	Α
Ethiopia									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1995	Delay to conduct SAR/OPS	Coordinate with States concerned.	Ethiopia and adjace States	nt 22/1/04	Α
France (R	éunion)								
	This State has no deficiency in this field								
Gabon									
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Gabon	22/1/04	Α

State Nam	ne Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	•	Target date for mplementation	Priority
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1990	Delay to conduct SAR OPS	Coordinate with States concerned	Gabon and adjacen States	t 22/1/04	Α
	Annex 12, 3.2.4, AFI/7 Rec.6/1 and 6/2	SARSAT ELT	406 MHz and 121.5 MHz	1993	Delay to conduct SAR 0PS	Provide SPOC to ICAO	Gabon	22/1/04	Α
Gambia									
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Gambia	22/1/04	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	Implement 406 MHz	Gambia	22/1/02	А
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1991	Delay to conduct SAR OPS	Coordinate with States concerned	Gambia and adjace States	nt 22/1/04	Α
Ghana									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1994	Delay to conduct SAR OPS	Coordinate with States concerned	Ghana and adjacen States	t 22/1/04	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	Implement 406 MHz	Ghana	22/1/04	А
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Ghana	22/1/04	Α
Guinea									
	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	1993	Delay to conduct SAR OPS	Implement 406/121.	5 Guinea	22/1/04	Α

State Nam	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	•	Target date for implementation	Priority
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Guinea	22/1/04	Α
Guinea B	issau								
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements	-	1996	Delay to conduct SAR OPS	Coordinate with States concerned	Guinea-Bissau and adjacent States	22/1/04	Α
	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	1993	Delay to conduct SAR OPS	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz	Guinea-Bissau	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Guinea-Bissau	22/1/04	Α
Kenya									
	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 adjacer States	nt 22/1/04	Α
	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	1993	Delay to conduct SAR OPS	Implement 406/121.9 MHz	5 Kenya	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Kenya	22/1/04	Α
Lesotho									
	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	Implement 406 MHz	Lesotho	22/1/05	Α

State Nam	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	•	Target date for implementation	Priority
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Lesotho and adjacent States	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Lesotho	22/1/04	Α
Liberia									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Liberia and adjacer States	nt 22/1/04	Α
	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	1993	Delay to conduct SAR OPS	I) Provid SPOC to ICAO ii) Implement 406/121.5 MHz	Liberia	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR / legislation	Liberia	22/1/04	Α
Libya									
	Annex 12, 2.,: Annex 12, 3.2.4, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	406 MHz and 121.5 MHz	1993	Delay to conduct SAR OPS	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz	Libya	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR / legislation	Libya	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Libya and adjacent States	22/1/04	Α
Madagas	car								
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Madagascar and adjacent States	22/1/04	Α

State Nan	ne Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	Executing Body	Target date for implementation	Priority
	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	1993	Delay to conduct SAR OPS	Implement 406/121.9 MHz	5 Madagascar	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR y legislation	Madagascar	22/1/04	Α
Malawi									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements		1995	Delay to conduct SAR OPS	Coordinate with States concerned	Malawi and Mozambique	22/1/04	Α
	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	1993	Delay to conduct SAR OPS	Implement 406/121.9 MHz	5 Malawi	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal famework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR y legislation	Malawi	22/1/04	Α
Mali									
	Annex 12, 2.4, Annex 12, 3.2.4, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	406 MHz	1993	Lack of legal authority could delay SAR efficiency	Implement 406 MHz	Mali	22/1/04	Α
Mauritar	nia								
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR agreements		1995	Delay to conduct SAR Operations	Coordination with States concerned	Mauritania and adjacent States	22/1/04	Α
	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	1997	Delay to conduct SAR Operations	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz	Mauritania	22/1/04	Α

State Nam	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	Executing Body	Target date for implementation	•
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Mauritania	22/1/04	Α
Mauritius									
	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 Operations	Implement 406 MHz	Mauritius	22/1/04	A
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR y legislation	Mauritius	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR agreements		1995	Delay to conduct SAR Operations	Coordination with States concerned	Mauritius and adjacent States of India, Madagasca and Maldives		Α
Morocco									
	Annex 12, 3.1, AFI/7 Conc. 6/3	SAR agreements		1995	Delay to conduct SAR Operations	Coordination with States concerned	Morocco and adjacent States	22/1/04	Α
	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	1993	Delay to conduct SAR Operations	I) Provide SPOC to ICAO ii) Implement 406/121.5 MHz	Morocco	22/1/04	A
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR y legislation	Morocco	22/1/04	Α
Mozambio	que								
	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	1997	Delay to conduct SAR Operations	Implement 406/121. MHz	5 Mozambique	22/1/04	Α

State Nam	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of A Corrective action	•	Target date for mplementation	Priority
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR agreements		1995	Delay to conduct SAR Operations	Coordination with States concerned	Mozambique	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Mozambique	22/1/04	Α
Namibia									
	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	1993	Delay to conduct SAR Operations	Implement 406/121.5 MHz	Namibia	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements		1991	Delay to conduct SAR OPS	Coordination with States concerned	Namibia and adjace States	nt 22/1/04	Α
Niger									
	Annex 12,2.4, Annex 12, 3.2, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	406 MHz and 121.5 MHz	1993	Delay to conduct SAR Operations	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz	Niger	22/1/04	Α
Nigeria									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Nigeria and adjacer States	t 22/1/04	Α
	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	1993	Delay to conduct SAR Operations	Implement 406/121.5 MHz	Nigeria	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Nigeria	22/1/04	Α

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	Executing Body	Target date for implementation	Priority
Rwanda									
	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	1993	Delay to conduct SAR Operations	Implement 406/121.5 MHz	5 Rwanda	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Rwanda	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Rwanda and adjacent States	22/1/04	Α
Sao Tome	& Principe								
	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	1997	Delay to conduct SAR Operations	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz	Sao Tome	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Sao Tome	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements		1995	Delay to conduct SAR OPS	Coordination with States concerned	Sao Tome and Adjacent States	22/1/04	Α
Senegal									
	Annex 12, 2.4, Annex 12, 3.2, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	406 MHz and 121.MHz	1993	Delay to conduct SAR Operations	Implement 406/121.5 MHz	5 Senegal	22/1/04	Α
Seychelles									
	Annex 12, 3.1.5, AFI/7 Conc. 6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Seychelles and adjacent States	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Seychelles	22/1/04	Α

State Nam	ne Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action		arget date for mplementation	•
	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	1993	Delay to conduct SAR Operations	Implement 406/121. MHz	5 Seychelles	22/1/04	Α
Sierra Le	one								
	-	-	-	-	-	-	-	-	-
	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	1993	Lack of legal authority could delay SAR efficiency	Implement 406/121. y MHz	5 Sierra Leone	22/1/02	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Sierra Leone	22/1/04	А
Somalia									
	Annex 12, 3.1.5, AFI/7 Conc.6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Somalia and adjace States	nt 22/1/04	Α
	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	1993	Delay to conduct SAR OPS	Implement 406/121. MHz	5 Somalia	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR y legislation	Somalia	22/1/04	Α

South Africa

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	•	Target date for F implementation	Priority
Spain (Can	eary Is.)								
	This State has no deficiency in this field								
Sudan									
	Annex 12, 3.1.5, AFI/7 Conc. 6/3	SAR Agreements		1995	Delay to conduct SAR OPS	Coordination with States concerned	Sudan and adjacer States	nt 22/1/04	Α
	Annex 12, 2.4, Annex 12, 4.2.4, AFI/7 Rec. 6/1 and 6/2	SARSAT ELT	406 MHz and 121.5 MHz	1997	Delay to conduct SAR OPS	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz	Sudan	22/1/04	Α
Swaziland	!								
	Annex 12, 3.1.5, AFI/7 Conc. 6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Swaziland and adjacent States	22/1/04	Α
	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	1993	Delay to conduct SAR OPS	Implement 406/121. MHz	5 Swaziland	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR / legislation	Swaziland	22/1/04	Α
Tanzania									
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR I legislation. Plans in hand to set up a National SAR Organization under the Ministry of Transport and Communication.	Tanzania	Dec.2005	A

State Nam	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	•	Target date for implementation	Priority
	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	Implement 406 MHz	z Tanzania	Dec.2005	Α
	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	Tanzania and adjacent States	22/1/04	Α
Togo									
	Annex 12, 3.1, AFI/7 Conc. 6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned. October 1998	Togo ad adjacent States	22/1/04	Α
	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	1993	Delay to conduct SAR OPS	I) Provide SPOC to ICAO: ii) Implement 406/121.5 MHz	Togo	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR / legislation	Togo	22/1/04	Α
Tunisia									
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR / legislation	Tunisia	22/1/04	Α
	Annex 12, 3.1.5, AFI/7 Conc. 6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Tunisia and adjace States	nt 22/1/04	Α

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	Executing Body	Target date for I implementation	Priority
Uganda									
	Annex 12, 3.1.5, AFI/7 Conc. 6/3: SAR Agreements	SAR Agreements		1995	Delay to conduct SAR OPS	Signed with EAC States. To coordinate with other neighbouring States concerned outside EAC	Uganda	22/1/04	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	Implement 406 MHz	z Uganda	31/03/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Uganda	31/03/04	Α
Western S	ahara								
	This State has no deficiency in this field								
Zambia									
	Annex 12, 3.1.5, AFI/7 Conc. 6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned	Zambia, Angola, Mozambique and Zimbabwe	22/1/04	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	Implement 406 MHz	z Zambia	22/1/04	Α
	Annex 12, 2.1	SAR legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could delay SAR efficiency	Establish SAR legislation	Zambia	22/1/04	Α

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported		Description of Corrective action	Executing Body	Target date for P implementation	Priority
Zimbabwe									
	Annex 12, 3.1.5, AFI/7 Conc. 6/3	SAR Agreements		1996	Delay to conduct SAR OPS	Coordinate with States concerned. Discussions are going on with South Africa and other States to follow	Zimbabwe and adjacent States	22/1/04	Α
	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	1993	Delay to conduct SAR OPS	Implement 406 MHz	z Zimbabwe	22/1/04	Α
	Annex 12, 2.1	SAR Legislation	Provide legal framework for the SAR Authority	1995	Lack of legal authority could dela SAR efficiency	SAR legislation is y under the promulgation process	Zimbabwe	31/12/03	Α

AIS Deficiencies

State Nam	e Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for P implementation	Priority
Algeria									
	This State has no deficiency in this field								
Angola									
	Annex 15, 3.4.4- AFI/7 Rec. 12/29	Coordinates WGS-84	Accuracy of coordinates to be established in accordance with Annexes 11 and 14	1/1/98	Delay in introduction of GNSS	Implement WGS-84 coordinates	Angola	31/12/03	U
	Annex 4, 3.2 and 13.2 Rec. 12/31 and Rec. 12/32 AFI/7	ICAO Mandatory Charts	Non-availability of the ICAO Aerodrome Chart and the ICAO Aerodrome Obstacle Chart - Type A	1990	Lack of charts affects safety	Publish these Charts for Luanda and Huambo	Angola	31/12/03	U
	Annex 15, 5.1 Annex 15, 6.11	NOTAM	Irregular publication of NOTAM	1990	Lack of NOTAM affects safety	Publish regularly	Angola	31/12/03	U
Benin									
	This State has no deficiency in this field								
Botswana									
	This State has no deficiency in this field								

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State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for implementation	
Burkina F	'aso								
	This State has no deficiency in this field								
Burundi									
	This State has no deficiency in this field								
Cameroon	ı								
	Annex 4, 3.2 and 13.2 Rec.12/31 and 12/32 AFI/7	ICAO Mandatory Charts	Non-availability of the ICAO Aerodrome Chart and the ICAO Aerodrome Obstacle Chart - Type A for Yaoundé	1990	Lack of charts affects safety	Publish these charts for Yaounde	Cameroon	31/12/03	U

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

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for P implementation	riority
Comoros									
	Annex 4, 3.2 and 13.2 Rec.12/31 and 12/32 AFI/7	ICAO Mandatory Charts	Non-availability of the ICAO Aerodrome Obstacle Chart - Type A for Dzaoudzi and Moroni	1990	Lack of this chart affects safety	Publish this Chart for Moroni and Dzaoudzi	Comoros	31/12/03	U
	Annex 15, 5.1 Annex 15, 6.11	NOTAM	Irregular Publication of NOTAM	1990	Lack of NOTAM affects safety	Publish regularly	Comoros	31/12/03	U
Congo									
	This State has no deficiency in this field								
Côte d'Ivo	ire								
	This State has no deficiency in this field								
Dem. Rep.	of Congo								
	Annex 4, 13.2 and AFI/7, Rec.12/31	NOTAM	Irregular publication of NOTAM	1990	Lack of NOTAM affects safety	Publish regularly	Congo (DRC)	31/12/03	U
	Annex 15, 5.1 Annexe 15, 6.11 CONC 12/7 d'AFI/7	ICAO Mandatory Charts	Aerodrome Charts outdated	1990	Non-updated charts affects safety	Publish new charts	Congo (DRC)	31/12/03	U
Djibouti									
	Annex 15, 6.1	Coordinates WGS84	Accuracy of coordinates in accordance with Annexes11 and 14	01/01/98	Delay in introduction of GNSS	Implement WGS-84 coordinates	Djibouti	31/12/03	U
	Annex 15, 3.3	Integrated AIS package	Irregular distribution of AIS package	01/01/98	Non-availability of latest status of information affects safety	Distribute regularly	Djibouti	31/12/03	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
Annex 15, 5.1	AIRAC NOTAM	Non-adherence to AIRAC requirements	1994	Non-observation of AIRAC procedures affects regularity of flight operations	Data indicated in Appendix 4 of Annex 15 to be promulgated on AIRAC dates	Djibouti	31/12/03	U

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

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	•	Target date for Pri implementation	ority
Gambia									
	Annex 15, 3.3	Intergrated AIS package	Irregular distribution of AIS package	01/01/98	Non-availability of latest status of information	Distribute regularly	Gambia	31/12/03	Α
Ghana									
	This State has no deficiency in this field								
Guinea									
	Annex 15, 3.3	Integrated AIS package	Irregular distribution of AIS package	01/01/98	Non-availability of latest status of information	Distribute regularly	Guinea	31/12/03	Α
Guinea Bi	ssau								
	Annex 15, 3.4.4	Coordinates WGS-84	Accuracy of coordinates in accordance with Annexes 11 and 14	01/01/98	Delay in introduction of GNSS	Implementation of WGS-84 coordinates	Guinea-Bissau	31/12/03	U
Kenya									
	This State has no deficiency in this field								
Lesotho									
	Annex 15, 4.1	Lack of new AIP format	Irregular distribution of AIS package	01/01/96	Non-availability of AIP affects safety	Implement and publish new AIP	Lesotho	31/12/03	Α
Liberia									
	Situation unknown								

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for Pricinglementation	ority
Libya									
	This State has no deficiency in this field								
Madagasc	rar								
	This State has no deficiency in this field								
Malawi									
	This State has no deficiency in this field								
Mali									
	This State has no deficiency in this field								
Mauritani	a								
	This State has no deficiency in this field								
Mauritius									
	This State has no deficiency in this field								
Morocco									
	Annex 15, 4.1	New AIP format	Irregular distribution of AIS package	1/1/96	Non-availability of AIP affects safety	Implement and publish new AIP	Morocco	31/12/03	U

State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for P implementation	Priority
Mozambiqi	ue								
	Annex 15, 5.1	NOTAM	Irregular Publication of NOTAM	01/01/98	Lack of NOTAM affects safety	Publish regularly	Mozambique	31/12/03	U
	Annex 15, 4.1	AIP in new format	Non-availability of up-to-date information	01/01/96	Use of outdated information may affect safety	Implement and publish new AIP format	Mozambique	31/12/03	Α
Namibia									
	Annex 4, 3.2 and 13.2 Rec.12/31 AFI/7	ICAO Mandatory Charts	Non-availability of ICAO Aerodrome Chart for Keetmanshoop and Windhoek/Hosea Kotako	1979	Lack of these charts affects safety	Publish the required charts	Namibia	31/12/03	U
Niger									
	This State has no deficiency in this field								
Nigeria									
	This State has no deficiency in this field								
Rwanda									
	Annex 4, 3.2 and 13.2 Rec.12/31 AFI/7	ICAO Mandatory Charts	Non-availability of ICAO Aerodrome Chart and Aerodrome Obstacle Chart - Type A for Kigali	1979	Lack of these charts affects safety	Publish the two Charts for Kigali	Rwanda	31/12/03	U
	Annex 15, 4.1	AIP new format	Non-availability of up-to-date information	1979	Use of outdated information may affect safety	Implement and publish new AIP format	Rwanda	31/12/03	U

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	•	Target date for Pr implementation	iority
Sao Tome o	& Principe								
	Annex 15, 5.1	NOTAM	Irregular Publication of NOTAM	1991	Lack of NOTAM affects safety	Publish regularly	Sao Tome (Roberts FIR)	31/12/03	U
Senegal									
	This State has no deficiency in this field								
Seychelles	,								
·	This State has no deficiency in this field								
Sierra Leo	one								
	Annex 15, 5.1	NOTAM	Irregular Publication of NOTAM Publication of reported points	1991	Lack of NOTAM affects safety	Publish regularly	Sierra Leone (Roberts FIR)	31/12/03	U
Somalia									
	Annex 15, 3.4.4	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	31/12/03	U
	Annex 4, 3.2, 11.2 and 13.2	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 Hargeissa, Kismayu, Mogadishu	1990	Lack of these charts affects safety	Publish the three Charts as required	Somalia	31/12/03	U

State Name	e Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for I implementation	Priority
South Afric	a								
	This State has no deficiency in this field								
Spain (Ca	nary Is.)								
	This State has no deficiency in this field								
Sudan									
	Annex 4, 13.2 15, 8.1	ICAO Mandatory Charts	Non-availability of ICAO Aerodrome Chart for Khartoum	1990	Lack of this chart affects safety	Publish the required chart	Sudan	31/12/03	U
Swaziland	,								
	Annex 15, 8.1	NOTAM AIRAC	Non-adherence to AIRAC requirements	1991	Non-observation of AIRAC procedures affects regularity of flight operations	Data indicated in Appendix 3 to Annex 15 to be promulgated on AIRAC dates	Swaziland	31/12/03	U
	Annex 4, para 3.2 and Rec.12/31 AFI/7	Non-availability of ICAO Aerodrome Chart and the ICAO Aerodrome Obstacle Chart - Type A	Non-availability of ICAO Aerodrome Obstacle Chart type A for Matsapha	1991	Lack of this chart affects safety	Publish the required chart	Swaziland	31/12/03	U
Tanzania									
	This State has no deficiency in this field								

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 Primplementation	riority
Tunisia									
	This State has no deficiency in this field								
Uganda									
	This State has no deficiency in this field								
Western S	ahara								
	This State has no deficiency in this field								
Zambia									
	Annex 15, 4.1	AIP new format	Non-publication of AIP new format	1996	Use of outdated information affects safety	Implement and publish new AIP	Zambia	31/12/03	U
Zimbabwe	?								
	This State has no deficiency in this field								

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 deficiencies 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.

2. Work programme

No.	Task description	Priority	Target date
1	Analyse the operational implications relating to the implementation of ICAO CNS/ATM systems in the fields of ATS, SAR and AIS/MAP and propose any required actions with a view to ensuring their smooth integration in the operational environment.	A	continuing
2	Taking into account human factors, study problems and make specific recommendations related to ATS and AIS personnel, with a view to ensuring the best services to users. (AFI/7 Rec. 14/7)	A	continuing
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 consider reducing and/or eliminating prohibited, restricted and danger areas. (AFI/7 Rec. 5/3)	A	APIRG/15
*4	Determine the framework within which air traffic data collection statistical analysis and forecasting should be carried out.	С	continuing
5	Review the requirements and monitor the programme of implementation of area control service. (AFI/7 Rec. 5/21)	A	APIRG/15
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/15
7	Consider problems and make specific recommendations relating to ATS interface routes with other regions.	A	Continuing

No.	Task description	Priority	Target date
8	Monitor achievements and progress in the implementation of RVSM/RNAV/RNP, RSP and RTSP in the AFI Region and provide recommendations in the light of acquired experience.	A	Continuing
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
10	Review the ATS requirements for navigation. (AFI/7 Rec. 10/4)	A	APIRG/15
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/15
12	Identify the ATS requirements for surveillance (RADAR, ADS, voice etc.) (AFI/7 Rec. 11/1)	A	APIRG/15
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	Monitor the implementation of uniform ATS operational auditing and proficiency maintenance. (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, including AIS automation.	A	Continuing
17	Analyse, review and monitor shortcomings and deficiencies in the fields of ATS, AIS/MAP and SAR.	A	Continuing
18	Develop guidance material for the reporting and investigation of air traffic incidents in the AFI Region, taking into account material developed by other organizations such as the European Commission, EUROCONTROL, FAA, etc.	A	Continuing
19	Develop a standard criteria for the determination of new ATS route requirements to be included in the ICAO AFI Air Navigation Plan	A	Continuing

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