INTERNATIONAL CIVIL AVIATION ORGANIZATION

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
FIFTEENTH MEETING (APIRG/15)**

(Nairobi, Kenya, 26 – 30 September 2005)

Agenda Item 4: Air Navigation and Aviation Security (AVSEC) Issues
4.3: Air Traffic Management (ATS, AIS & SAR)

**Review of the Report of the Eighth Meeting of the ATS/AIS/SAR
Sub-Group (ATS/AIS/SAR/SG/8)**

(Presented by the Secretariat)

Summary
This paper presents the report of the Eighth Meeting of the ATS/AIS/SAR Sub-Group. The Sub-Group reviewed its terms of reference (**Appendix B**), work programme and applicable procedure. It also reviewed the air navigation plan requirements in the fields of Air Traffic Services, AIS/MAP and Search and Rescue aimed at meeting the current and future aircraft operations. It took note of the Report of the Seventh Meeting of RVSM Task Force. In carrying out the review the Sub-Group identified specific air navigation planning and implementation problems and made recommendations for appropriate remedial actions.
Action by APIRG is at paragraph 3
References:
ATS/AIS/SAR/SG/7 - Report APIRG/14 - Report AFI/7 RAN Meeting Report (Doc 9702)

1. **Introduction**

1.1   The Eighth meeting of the ATS/AIS/SAR Sub-Group   (ATS/AIS/SAR/SG/8) was held at the WACAF Office, Dakar from 10 to 12 August 2005. Copies of the report were distributed to members of the Sub-Group as well as to AFI provider and user States. It can be obtained from the ICAO website: www.icao.int . The meeting was attended by **43** experts from **14** Member States and **2** Member Organizations namely, ASECNA, IATA, one non-member from AFRAA. IFALPA sent their apologies for non-attendance.

1.2   The Sub-Group recorded its action in the form of draft Conclusions. Apart from endorsement of the report, the action required from APIRG is related to **30** draft conclusions which are submitted for consideration in **Appendix A** to this paper.

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

2.1   The Sub-Group reviewed outstanding APIRG <u>Conclusions</u> and its outstanding Decisions in the light of developments in order to keep them current and limit their number to a minimum consistent with the progress achieved in their implementation. The Sub-Group validated and amended the conclusions that were still in force. The meeting thus endorsed draft conclusions **8/1, 8/2** and **8/3**.

2.2   The Sub-Group reviewed its terms of reference and future work programme and accorded priority for implementation of the tasks. MET issues relating to CNS/ATM Plan were added as new tasks. This appears at **Appendix B** to this working paper.

3.   Review of the report of the seventh meeting of the RVSM/RNAV/RNP Task Force

3.1   Under this item, the Sub-Group reviewed the report of the RVSM/RNAV/RNP Task Force meeting which was held in Dakar from 8 to 9 August 2005. The Sub-Group noted that the Task Force had developed **29** conclusions. The Sub-Group noted that conclusions **8/4, 8/5, 8/7, 8/8** and **8/9** would be of interest to APIRG.

4.   Review of the Report of the Third Meeting of the AIS Automation Task Force (AIS/MAP/TF/3)

4.1   Under this Agenda Item the Sub-Group reviewed the report of the third meeting of the AIS/MAP Automation Task Force which was held in Dakar from 4 to 5 August 2005. Among the issues covered were the provisions governing the automation of the   integrated aeronautical information package. The meeting thus endorsed <u>draft conclusions</u> **8/10, 8/11, 8/12, 8/13, 8/14, 8/15, 8/16, 8/17, 8/18, 8/19, 8/20, 8/21** and **8/22**.

5.   Review of implementation of the Area Control Service

5.1   Under this Agenda item, the Sub-Group reviewed the requirements for implementation of the Area Control Service in the Region.

5.2   The Sub-Group recalled the Statement of the Basic Operational Requirements and Planning Criteria in AFI Region requiring that Area Control Service should be provided for all IFR flights along all ATS routes to be used by international aircraft operations, except where the type and density of traffic do not justify the provision of such service. Furthermore, the Statement requires that Approach Control Service should be provided at all aerodromes used for international aircraft operations and that control areas should be established so as to encompass at least the climb to cruising levels of departing aircraft and the descent from cruising level of arriving aircraft. The AFI/7 RAN meeting in reviewing the status of implementation of the area control service in the region developed an implementation strategy which was the subject of its Recommendation 5/21.

5.3   The Sub-Group noted with concern that the status of implementation of the area control service has not been   encouraging. It however, considered necessary to extend the implementation target date to **8 June 2006**. Based on the foregoing, the Sub-Group formulated <u>draft</u> **conclusion 8/23**.

6.   Review of the implementation of ATS Direct Speech (ATS/DS) Circuits

6.1   Under this Agenda item, the Sub-Group reviewed and identified additional required circuits, and circuits to be deleted from Table CSN IB of the AFI Plan. These are contained in the ATS/AIS/SAR/8 meeting report **Appendix J**. The Sub-Group identified ATS/DS Circuits requiring

implementation and set **30 June 2006** as a target date of implementation. In view of the foregoing, <u>draft </u>**conclusion 8/24** was endorsed.

7.1   Review of the ATS route network

7.1.1   Under this Agenda item, the Sub-Group considered in detail the overall status of implementation of the basic ATS route network including RNAV routes contained in the ICAO AFI Air Navigation Plan (Doc 7474/27) Table ATS 1, Charts ATS 2 and ATS 3 in order to:

a)   identify additional route requirements;

b)   identify route segments requiring realignment;

c)   identify routes which can be deleted from the Air Navigation Plan (ANP);

d)   identify the non implemented routes and establish target date(s) for their implementation.

7.1.2   The Sub-Group prepared an implementation tabulation for all the non-implemented routes and agreed that States be requested to implement those routes not later than **8 June 2006.**

7.1.3   In view of the discussions the Sub-Group formulated **draft conclusions 8/25** and **8/26.**

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

8.1   Under this agenda item the Sub-Group reviewed the status of implementation of the ICAO provisions relating to search and rescue services. It was noted with concern that most of these provisions had remained unimplemented for decades and the meeting was of the view that States should now be sensitized on the need to take remedial action. Furthermore, the Sub-Group sustained that assistance should be provided by ICAO in order to improve the provision of search and rescue services in the Region.

8.2   It was pointed out that major deficiences still existed in the establishment of appropriate SAR agreements and legislation.

8.3   The Sub-Group also noted that AFCAC continued to assist States in the region in bringing improvement in their SAR services and emphasized on the need for States to support the AFCAC SAR initiative.

8.4   In view of the foregoing, the Sub-Group endorsed <u>draft conclusions</u> **8/27, 8/28** and **8/29.**

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

9.1   The Sub-Group, using the approved methodology, updated the list of deficiencies in the ATS, SAR and AIS/MAP and formulated <u>draft </u>**conlusion 8/30**.

10.   Review of the implementation of ICAO requirements in the AIS/MAP field.

10.1   The Sub-Group reviewed the ICAO provisions in the AIS/MAP and endorsed the relevant conclusions under Agenda Item 4.

11.   Action required

11.1   APIRG is invited to:

   a)   note the report of the eighth meeting of the ATS/AIS/SAR Sub-Group;

   b)   take action on the draft conclusions of the eighth meeting of the Sub-Group, as contained in **Appendix A** to this paper;

   c)   approve the future work programme of the ATS/AIS/SAR Sub-Group at **Appendix B**.

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Draft Conclusions of the Eighth Meeting of the ATS/AIS/SAR Sub-Group
(Dakar, 10 – 12 August 2005)

Number	Title	Action by	Remarks
Draft Conclusions 8/1:	**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.	States	APIRG to note
Draft Conclusions 8/2:	**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.	States	APIRG to note
Draft Conclusion 8/3:	**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.	States	APIRG to note

Number	Title	Action by	Remarks
Draft Conclusion 8/4:	**AFI RVSM Implementation – Cost recovery** That: a) IATA member airlines continue to financially support the RVSM implementation effort in order to improve safety and economy of Air Traffic across Africa; and b) IATA puts in place an RVSM cost recovery scheme based on a charge imposed on all international jet flights in Africa operated by its member airlines.	IATA, States	APIRG to Approve
Draft Conclusion 8/5:	**Regional Aircraft Certification Agency for RVSM Operation** That: a) States having difficulties with the implementation of operational airworthiness certification on the RVSM implementation should seek assistance from other States having this expertise; **b)** Seminars/Workshops be conducted for airworthiness/operations personnel on issues relating to RVSM certification; and **c)** Studies be conducted by IATA in cooperation with ICAO relating to the establishment of RVSM Certification Agencies for the AFI Region.	States, ICAO, IATA	APIRG to Approve

Number	Title	Action by	Remarks
Draft Conclusion 8/6:	**Campaign to enhance RVSM Implementation** That sensitisation of Civil Aviation CEO/DGs by Regional Directors of ICAO and IATA on importance of RVSM and the need for its early implementation in the AFI Region be accorded priority during ICAO and IATA missions to States.	States, ICAO, IATA	APIRG to Approve
Draft Conclusion 8/7:	**AFI RVSM Strategy/Action Plan** That the updated RVSM Strategy/Action Plan at **Appendix C** be circulated to States for action.	States, ICAO	APIRG to Approve
Draft Conclusion 8/8:	**Amendment to ICAO Doc. 7030** That ICAO process, as soon as possible, the amendment proposal to the Regional Supplementary Procedures – Doc.7030/4 – African Indian Ocean Region (AFI) (Serial No. ESAF – S 04/1 – AFI RAC/1) which includes relevant provisions for RVSM implementation. (**Appendix D** refers) taking into account the results of PISC and its review by ANC.	ICAO	APIRG to Approve

Number	Title	Action by	Remarks
Draft Conclusion 8/9:	**Target Date for AFI RVSM Implementation** **That:** a) the following target dates be met : - review of the revised Collision Risk Assessment (CRA) by ARTF/9 in March 2006; - review of draft Pre Implementation Safety Case (PISC) by ARTF/9 in March 2006; - review of the PISC by ANC in May 2006; - implementation of all NSPs by States in June 2006; - go/delay meeting in June 2006; - issuance of RVSM implementation NOTAM by all States with a 3 AIRAC cycle notice in June 2006; - completion of re-training of all Operational staff in July 2006. b) the target date for implementation of RVSM in the AFI Region will be AIRAC date **28 September 2006**.	States, RVSM Task Force	APIRG to note RVSM TF included the target date in the RVSM Strategy/ Action Plan
Draft Conclusion 8/10:	**Dissemination of AIS data** That in the spirit of APIRG conclusion 13/48, States which have not done so, establish a civil aviation website taking into account integrity, security of the information and the Guidance on the use of the public Internet for Aeronautical Applications (ICAO Doc. 9855 – AN/459).	States	APIRG to approve

Number	Title	Action by	Remarks
Draft Conclusion 8/11:	**Aerodrome AIS Units Implementation** That States ensure that AIS Aerodrome Units at FASID Table AIS (1) (**Appendix E**) are established and manned by qualified AIS personnel.	States	APIRG to Approve
Draft Conclusion 8/12:	**Status of implementation of the ICAO requirements in the AIS/MAP field in the AFI Region** That: a) the AFI FASID Table AIS-1, which sets out the requirements pertaining to the establishment of aerodrome AIS Units in the AFI Region; b) the AFI FASID Table-AIS-2, which sets out the requirements pertaining to the aeronautical information services required at aerodromes; and c) the AFI FASID Table AIS-4, which sets out the requirements for the Integrated Aeronautical Information Package from foreign Aeronautical Information Services (AIS) to be available at aerodrome/heliport AIS Units in the AFI Region, for pre-flight briefing; be circulated to the States for update and subsequently form the amendment proposal for the FASID.	States	APIRG to Approve

Number	Title	Action by	Remarks
Draft Conclusion 8/13:	**Status of Implementation of the Integrated Aeronautical Information Package** That the status of implementation of the integrated aeronautical information package, at **Appendix F** be circulated to States for update.	States	APIRG to Approve
Draft Conclusion 8/14:	**Organization of an Automated Aeronautical Information Services System** That States be urged to achieve automation at a national level in accordance with APIRG/13 Conc. 13/44 (AIS Automation Strategy) and by using the Principles Governing Introduction of AIS Automation in AFI Region at **Appendix G.**	States	APIRG to Approve
Draft Conclusion 8/15:	**Participation of AIS personnel in the planning meetings relating to CNS/ATM Implementation** That: a) AIS personnel be involved in planning meetings relating to CNS/ATM Implementations; and **b)** ICAO ensures the requirements of AIS/MAP are clearly defined in the CNS/ATM Plan.	States	APIRG to Approve

Number	Title	Action by	Remarks
Draft Conclusion 8/16:	**Approach to AIS Automation in the AFI Region** That: a) with a view to ensuring progressive implementation of automated AIS systems, States, which have not yet introduced automation within their Aeronautical Information Services, are urged to: b) arrange for the provision of automated services on their behalf on the basis of bilateral or multilateral agreements with States or other non-governmental organizations. c) Plan to initially automate their NOTAM and pre-flight information services; and/or	States	APIRG to Approve
Draft Conclusion 8/17:	**Harmonization of AIS, MET and FPL information** That: a) In view of AIS automation, States should take the necessary measures to enable users to access both AIS and MET information from a common interface based on the flight plan entry, to support combined AIS/MET/FPL pre-flight briefing from one common point access; and b) States implement a selection functionality based on the ICAO NOTAM Selection criteria and an update briefing functionality to enable the notification of updates following an initial briefing.	States	APIRG to Approve

Number	Title	Action by	Remarks
Draft Conclusion 8/18:	**Quality Management System** That: a) in accordance with Annex 15 provisions, AFI States, not having done so, are required to take the necessary measures to implement a quality management system within their Aeronautical Information Services, in conformity with the ISO 9001 series of standards; and b) draft questionnaire on quality management system at **Appendix H** be circulated to States for comments before adoption for application in the AFI Region; and c) ICAO develops as a matter of urgency, an AIS Guidance material on Quality Management Systems.	States ICAO	APIRG to Approve
Draft Conclusion 8/19:	**Conversion of en-route geographical coordinates to WGS84 and updating of aeronautical charts** **That :** a) States, which have not done so, complete the required conversion of their WGS-84 coordinates for en-route and FIR boundary reporting points and, accordingly, update all the aeronautical charts; and b) ICAO assist States concerned in respect of a) above.	States ICAO	APIRG to Approve

Number	Title	Action by	Remarks
Draft Conclusion 8/20:	**Familiarization Visits** That in the spirit of AFI/7 Rec. 12/3, States be encouraged to put in place a plan for familiarization visits to foreign AIS units.	States	APIRG to Approve
Draft Conclusion 8/21:	**Terms of Reference and Composition of the AIS/MAP Task Force** **That:** a) the name of the AIS/MAP automation task Force be changed to AIS/MAP Task Force in order to embrace all matters relating to AIS/MAP; and b) the revised terms of reference of the AIS/MAP Task Force at **Appendix I** be considered by the ATS AIS/SAR Sub-Group as its future Work Programme and Terms of Reference of the Task Force.	APIRG	APIRG to note
Draft Conclusion 8/22:	**Centralized AFI AIS data base** That IATA, in cooperation with ICAO and Air Navigation Service Providers in the AFI Region, study the establishment of a centralized AFI AIS data base similar to the European Aeronautical Data base (EAD).	ICAO IATA	APIRG to Approve

Number	Title	Action by	Remarks
Draft Conclusion 8/23:	**Implementation of ATC Service** That States which have not yet done so, implement ATC service along all ATS routes contained in Table ATS 1 of the AFI Plan (Doc.7474) as soon as possible, but not later than **8 June 2006** in the spirit of AFI/7 Rec.5/21.	States	APIRG to Approve
Draft Conclusion 8/24:	**Amendment Proposal to the AFI ATS/DS Plan** That: a) The AFI ANP Doc.7474 Table CNS-IB be amended as shown at **Appendix J**. That in view of the revised proposed implementation date of RVSM is **28 September 2006**. States are urged to implement their ATS DS circuits as soon as possible, but not later **30 June 2006** in order to enhance safety.	ICAO States	APIRG to Approve
Draft Conclusion 8/25:	**Amendment to AFI ANP Table ATS – 1** a) That the ICAO AFI ANP Table ATS-1 be amended to include a requirement for ATS routes cf **Appendix K.** b) The ATS routes at **Appendix L** be deleted from the AFI ANP; and c) That ATS routes at **Appendix M** be realigned as shown**.**	ICAO States	APIRG to Approve

Number	Title	Action by	Remarks
Draft Conclusion 8/26:	**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 N** should be the AIRAC date of **8 June 2006**. b) States that have not yet done so, expedite the implementation of ATS routes in their FIR as shown in **Appendix N** to this report; pending realignment of ATS route UM998 and UM731; c) Pending the realignment of ATS route UM998 and UM731 Angola, Botswana, D.R. Congo, Libya and South Africa implement segments of RNAV Route of UM731 at the common AIRAC date of **19 January 2006**; and d) Angola, Botswana and D.R. Congo implement segments of RNAV routes UM998 at the common AIRAC date of **19 January 2006**.	States	APIRG to Approve

Number	Title	Action by	Remarks
Draft Conclusion 8/27:	**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.	States	APIRG to Approve
Draft Conclusion 8/28:	**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.	States	APIRG to Approve

Number	Title	Action by	Remarks
Draft Conclusion 8/29:	**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.	States	APIRG to Approve
Draft Conclusion 8/30:	**Consideration of specific air navigation planning and implementation problems and the review of air navigation deficiencies in the Region** That considering the negative impact of non implementation of the air navigation plan requirements and the persistence of serious cases of deficiencies in several parts of the AFI region; and a) States concerned should take as soon as possible concrete measures to eliminate all deficiencies at **Appendix O** 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.	States ICAO	APIRG to approve as discussed in working paper 12 Agenda Item 5.3**.**

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

1.   **Terms of reference**

   a) To identify, State by State, those specific 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 **MET issues** 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.	C	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

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* This task will be a subject of coordination with the Traffic Forecasting Task Force.

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)	B	Continuing
15	Review the requirements and monitor the implementation of search and rescue services.	B	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.

3.   **Composition:**

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

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