

INTERNATIONAL CIVIL AVIATION ORGANIZATION
WESTERN AND CENTRAL AFRICAN OFFICE



REPORT OF THE THIRD MEETING OF THE APIRG
AIM IMPLEMENTATION TASK FORCE (AFI AIM TF/3)

(Dakar, Senegal, 15 – 17 October 2014)

Prepared by the Secretary of the AFI AIM TF/3 Meeting

March 2015

The designations employed and the presentation of the 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.

APPENDICES:

Appendix: A Draft Conclusions and Recommendations of the AIM Task Force Meeting

Appendix: B List of Participants

Appendix: C the current list of AFI Region AIM deficiencies

Appendix: D Draft e-ANP

Appendix: E Format for development of National ASBU implementation Plan

Appendix: F Table B0-DATM 3-1 to Table B0-DATM 3-4-3

Appendix: G National Plans for the transition from AIS to AIM

Appendix: H Change_proposals_to_Annex_15_NOTAM_Distribution

Appendix: I PANS_AIM Consolidated

Appendix: J New Annex 15 - Draft

Appendix: K Amendment 38 to Annex 15

Appendix: L Amendment 58 to Annex 4

PART I – HISTORY OF THE MEETING

1. *Place/Duration*

1.1 The Third meeting of the AFI Region AIM Implementation Task Force was convened at the ICAO WACAF Office, Dakar, Senegal from 15 - 17 October 2014.

2. *Objective of the meeting*

2.1 The main objective of this meeting was to provide guidance to States, in line with Conclusion 19/40 and relative to regional and State planning and implementation of the transition from AIS to AIM. The meeting also aimed to provide guidance/information on Decision 19/48 (a) concerning the re-organization of APIRG working methods by using project management principles and other methodologies as and when necessary, and consider making adjustments to better support the ICAO performance framework in its planning and to implementation activities aligned with the Aviation System Block Upgrades (ASBUs).

3. *Secretariat*

3.1 The meeting was opened by Mr. Gaoussou KONATE, the ICAO Deputy Regional Director, who welcomed all participants to the ICAO WACAF Office, Dakar for attending the Third AFI AIM Implementation Task Force Meeting being organized under the aegis of ICAO pursuant to various relevant APIRG Conclusions

3.2 The ICAO Deputy Regional Director, reiterated that AFI AIM TF/3 meeting is expected to review the progress made in the transition from AIS to AIM and to identify further work required to be undertaken regionally by the Task Force. In addition, the Regional AIM transition performance will be reviewed and updated as reported on the ICAO Performance Dashboard available through the ICAO GIS website. In accordance with our WACAF State letter ref. T 2/7-0295 dated 13 May 2014, States were requested to provide updated information to the ICAO Performance Dashboards to be reflected in the annual ICAO Global Air Navigation Reports.

3.3 It is worth pointing out that APIRG has undergone some restructuring involving streamlining of its subsidiary bodies for a project oriented focus, thus requiring new coordination and working arrangements. This meeting of the Task Force will therefore need to take this into account in its deliberations and outcomes.

3.4 Further to the extraordinary meeting of APIRG held in Lusaka, Zambia, 10-11 July 2014, the meeting should note that APIRG has reviewed its working methods by using project management principles and other methodologies as and when necessary in order to make adjustments to better support the ICAO performance framework in its planning and implementation activities aligned with the Aviation System Block Upgrades (ASBU)

3.5 Mr. George A.Y. Baldeh, Regional Officer, AIM was the Secretary of the meeting. The meeting unanimously elected Mrs. Charity Muthoni from Kenya as the Chairperson.

4. Attendance

4.1 The meeting was attended by 30 participants from 13 AFI Region ICAO Contracting States, 1 International organization (ASECNA) and 1 Company from Industry, Thales. A list of participants is at **Appendix-B** to this report.

5. Working Languages

5.1 The meeting was conducted in English only.

6. Agenda

6.1 The following Agenda was adopted:

Agenda Item 1: Adoption of the Agenda and the revision of the Terms of Reference of the AFI AIM Implementation Task Force and election of the Chairperson.

Agenda Item 2: Follow-up on APIRG/19 Conclusion/Decision relevant to AIM and review of the revised structure and new working methods of the APIRG endorsed by the Extraordinary meeting of APIRG held in Lusaka, Zambia.

Agenda Item 3: Status of implementation of the ICAO requirements in the AIM field in the AFI Region (deficiencies).

Agenda Item 4: Performance Framework for AIM Implementation in the AFI.

Agenda Item 5: Implementation of ASBU BO-DATM Elements under Service Improvement through Digital Aeronautical Information Management in Performance Improvement Area 2 (ASBU Methodology).

Agenda Item 6: Review of the National Plans submitted by States in accordance with the Roadmap for the transition from AIS to AIM and a review of the current status in the AFI Region as per state circular letter ref. T 2/7-0295 dated 13 May 2014.

Agenda Item 7: Review of the Report of the First Working Group Meeting on the implementation of ANC Rec. 3/8 (c).

Agenda Item 8: Aeronautical Information and data assembly, exchange, and promulgation:

- a) NOTAM Proliferation in the AFI Region.
- b) Change proposals to ICAO AIS Provisions on NOTAM Distribution.

Agenda Item 9: Global/Regional developments related to AIM and SWIM.

Agenda Item 10: Any other business.

PART II – REPORT ON THE AGENDA ITEMS

Agenda Item 1: Adoption of the Agenda and the revision of the Terms of Reference of the AFI AIM Implementation Task Force and election of the Chairperson.

1.1 Under this Agenda Item, the meeting reviewed the Agenda with its Terms of Reference which were unanimously adopted.

Agenda Item 2: Follow-up on APIRG/19 Conclusion/Decision relevant to AIM and review of the revised structure and new working methods of the APIRG endorsed by the Extraordinary meeting of APIRG held in Lusaka, Zambia.

2.1 The meeting then adopted the Regional and State Planning and implementation of the Transition from AIS to AIM that concerns the following to be initiated by ICAO Secretariat and AFI States:

- a) The Region develop performance goals for the transition from AIS to AIM in the AFI region in line with the AFI roadmap from AIS to AIM and Aviation System Block Upgrades methodology
- b) The Region and States identify achievable milestones in relation to the transition roadmap phase 1, 2 and 3
- c) The region and states develop and implement progress reporting structures, processes and frequency in terms of the transition roadmap phase 1, 2 and 3
- d) States develop and action implementation plans addressing the transition from AIS to AIM in line with the AFI AIS to AIM transition roadmap phases 1, 2 and 3 as well as aviation system block upgrades.
- e) States to review and amend as required the AIS/AIM training programmes to encompass the required skills, competences and knowledge to transition from AIS to AIM in line with the AFI AIS to AIM transition roadmap

2.2 The Meeting then followed-up on APIRG/19 Conclusions/Decisions relevant to AIM and noted the new working methods of the APIRG.

Agenda Item 3: Status of implementation of the ICAO requirements in the AIM field in the AFI Region (deficiencies).

3.1 The meeting agreed that the existing list of deficiencies was not useful, given the situation reflected by, inter alia, reports from the USOAP audit of AFI States, and unsatisfactory condition reports (UCRs) considered by the AFI Tactical Action Group (TAG). The current list of AFI Region AIM deficiency is at **Appendix-C**.

3.2 The meeting also noted that the ATM/AIM/SAR Sub-Group acknowledged that there were other mechanisms under which deficiencies were reported, such as those within the purview of the AFI Tactical Action Group (TAG) and the ATS Incident Analysis Group (AIAG), and highlighted the need for effective coordination in reporting and management of the data there from.

Agenda Item 4: Performance Framework for AIM Implementation in the AFI.

4.1 The meeting noted that ICAO has adopted a performance based approach for regional and national air navigation planning, in line with the Global Air Navigation Plan (Doc 9750) and provided guidance to States, in accordance with the requirements of AFI Part of the Draft e-ANP at **Appendix-D**.

4.2 The meeting also reviewed the ASBU modules related to interoperability system and data (AIM) presented at the 12 Air Navigation Conferences. It is expected that operational improvements will be outlined in a logical stepwise block upgrades that at a minimum: identifies the operational benefit; determine the necessary procedures; nominate the required technology; develop the business case; and propose a preliminary strategy for regulatory approval.

4.3 The meeting reviewed and endorsed the Table of Aviation System Block Upgrades (ASBU) Block 0 Modules which included the format for National ASBU implementation Plan - Guidance on Elements, Equipage and Measurement. The meeting also introduced the document on ASBU Block 0 Modules, lists the elements it covers, identifies the equipage required both in the aircraft and on the ground, suggests ways to monitor implementation progress and explain qualitative benefits related to main five Key Performance Areas (KPA's). This document serves as a part of guidance material to States in the development of National ASBU implementation Plan at **Appendix-E**

Agenda Item 5: Implementation of ASBU B0-DATM Elements under Service Improvement through Digital Aeronautical Information Management in Performance Improvement Area 2 (ASBU Methodology).

5.1 The ICAO AFI Regional Offices in Dakar and Nairobi will, through the APIRG process endorse proposals for inclusion of the dynamic Material constituted by the AIS/AIM facilities and services required for international air navigation to be contained in the AFI e-ANP Volume III

5.2 The meeting was further briefed that whilst Annex 4 and Annex 15 detail the SARPs for the provision of charts and AIS respectively, the following State responsibilities are highlighted:

Each Contracting State should:

- a) Arrange for the implementation of a quality management system for aeronautical information and chart services. The quality management system should include the necessary policies, processes and procedures, including those for the use of metadata, to ensure and verify that aeronautical data is traceable throughout the aeronautical information data chain from origin to distribution to the next intended user. As part of the quality management system, arrangements should be made for the signature of letters of agreement with data originators to manage the aeronautical information data chain;

- b) Ensure Human Factors are considered;
- c) Ensure adherence to the AIRAC System;
- d) Ensure that the aeronautical information/data to be exchanged with States is published as an Integrated Aeronautical Information Package (i.e. Aeronautical Information Publication (AIP), including amendment service, AIP Supplements, NOTAM, pre-flight information bulletins (PIB), Aeronautical Information Circulars (AIC), checklists and list of valid NOTAM) in accordance Table B0-DATM 3-4-3 Arrange for the provision of an electronic AIP (e-AIP) in accordance with the requirements of Annex 15;
- e) Comply with WGS 84 requirements;
- f) Introduce automation enabling digital data exchange with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services;
- g) Ensure that pre-flight information is provided at all aerodromes/heliports normally used for international air operation, in accordance with the requirements of Annex 15, using Automated pre-flight information systems for the supply of aeronautical information/data for self-briefing, flight planning and flight information service;
- h) Arrange for the provision of post-flight information;
- i) Arrange for the provision of required electronic Terrain and Obstacle Data (e-TOD), in accordance with the requirements of Annex 15; and
- j) Arrange for the production and publication of necessary aeronautical charts in accordance with Annex 4 provisions and regional agreements.

5.3 Finally the meeting endorsed the new format of B0-DATM Enablers/Tables in order to provide information to be populated and included in a Proposal for inclusion in Volume III of AFI e-ANP/FASID : (Table B0-DATM 3-1 to Table B0-DATM 3-4-3) at **Appendix-F**.

Agenda Item 6: Review of the National Plans submitted by States in accordance with the Roadmap for the transition from AIS to AIM and a review of the current status in the AFI Region as per state circular letter ref. T 2/7-0295 dated 13 May 2014.

6.1 The APIRG/19 meeting was apprised of the latest developments related to AIM and reiterated the need for the Consolidation of Conclusions and Decisions from APIRG/18 and 17 Meeting Reports pertaining to the AIS-AIM Transition processes as per APIRG/19 Decision 19/01.

6.2 As a follow-up action of the APIRG/19 Conclusion 19/40, the ICAO WACAF Office, through State Letter Ref. T 2/7-0295 dated 13 May 2014, requested all AFI States to complete/update the questionnaire related to National Plans for the transition from AIS to AIM and send it back to the AFI Regional Offices of Dakar and Nairobi by 7 June 2014, with an update presented at **Appendix-G**.

6.3 Finally the meeting outlined the need for a strategic transition from AIS to AIM and presented the results of the survey carried out as per Appendix 3.5 D of the APIRG/19 Report

circulated under State Letter Ref. T 2/7-0295 dated 13 May 2014. The meeting noted the content of the survey and agreed that the information be reflected in the Global Air Navigation Report to be published in 2015.

Agenda Item 7: Review of the Report of the First Working Group Meeting on the implementation of ANC Rec. 3/8 (c).

7.1 Under this Agenda Item, the meeting was presented with the report of the First Working Group Meeting on the implementation of ANC Rec. 3/8 (c) held in Dakar, Senegal from 13-14 October 2014 and its deliberations by the meeting, resulted with endorsement of the attached list of Draft Conclusions and Recommendations **Appendix-A** to this report

Agenda Item 8: Aeronautical Information and data assembly, exchange, and promulgation:

- a) **NOTAM Proliferation in the AFI Region.**
- b) **Change proposals to ICAO AIS Provisions on NOTAM Distribution.**

8.1 The meeting noted that due to lack of any other mechanism to uniformly distribute information to Flight operations and ATM personnel, the NOTAM system has grown to provide a wide variety of information beyond changes to promulgated reference information (for the most part charts) and airspace hazards. This “information creep” has been exacerbated by an increase in air navigation infrastructure to be reported as well as an overall increase in demand on the ATM system. As a result the NOTAM system conveys a very wide range of operationally relevant information at ever increasing volumes.

8.2 The meeting was briefed that this information can be broken down into 3 principle categories:

- a) changes to published information including advance information not yet published;
- b) meta-information concerning elements of published information providing “status and condition” of ANS infrastructure; and
- c) other information not published by other means.

8.3 The meeting also noted that availability of the NOTAM system and the ease of using it as a means of information dissemination have allowed a considerable increase of information made available. This is the widely acknowledged “NOTAM proliferation” issue which, while not new, is reaching levels where safety is becoming compromised. The proliferation of NOTAM and the ability to parse relevant information from the large volumes of information disseminated has been posited as a factor in a few accident investigations.

8.4 The meeting was briefed about two principle mechanisms to mitigate the effect of large volumes of NOTAM information as follows:

- a) The first is to control what is distributed. This has been accomplished by specifications that in addition to what must be disseminated by NOTAM, also specify what must not be disseminated. This has been bolstered by an increasing awareness of the importance of AIRAC compliance to encourage less “update” material. Notwithstanding,

whether because of poor planning or poor coordination and communication between ANS actors and agencies, The NOTAM system continues to contain a significant amount of information that should otherwise be promulgated by AIRAC.

b) The second mitigation technique has been to improve the user's ability to parse relevant information. An early method of doing this has been through the use of the "NOTAM selection code". The NOTAM selection code is a method that allows NOTAM to be selected on the basis of code grouping that are machine readable. While this helps some operators immensely in filtering NOTAM information and assists in the preparation of PIB, the system still relies on a presupposition by the NOTAM system as to what NOTAMS will be of interest for specific users. Despite the use of the NSC, an air operator will still generate a considerable volume of NOTAM to digest for flights in denser or highly developed airspace. The advent of Digital NOTAM promises to provide a significant increase in the ability to filter information as well as improved mechanisms for information display.

8.5 The meeting was informed that the current system of NOTAM is not sustainable for the long term in its current form and function at least for the following reasons:

a) The system has grown considerably over the original function of providing a "Notice to Airmen". The evolving ATM system is increasingly integrated and requiring information management which meets the needs of all ATM actors and users;

b) The NOTAM system is still conceptually at least, a "bulletin board system". Emerging information requirements demonstrate that there is a need to make information available which is "discoverable" as well as information that is directed to a specific recipient (addressable);

c) There are a multitude of information channels which must be integrated by the user to acquire awareness flight-critical conditions. Increasingly this is failing to take advantage of modern information management techniques and failing to provide optimum situational awareness;

d) A system designed for teletype distribution is not optimized for graphical display or integration with other information;

e) The NOTAM system will need to evolve under the emerging SWIM concepts; and

f) The current NOTAM system does not allow for critical updates to the FMS data.

8.6 The meeting acknowledged that while the ultimate evolution of the NOTAM system has been noted, the limitations of the current system should be taken into account as the ICAO AIS-AIM Study Group is considering the development of Annex 15 new chapters 5 and 6. In this connection, the overall relationship of update frequency (AIRAC notification); role and application of the NOTAM selection code; promulgation of large datasets; role, function, and form of the AIP, future disposition of the Integrated Aeronautical Information Package (IAIP); and PIB/integrated briefing would be considered together in order to optimize the delivery of aeronautical information as per the proposal presented by the Chairperson of the ICAO AIS-AIM Study Group at **Appendix-H**.

8.7 Finally, the meeting considered the issues raised in the development of Annex 15 chapters 5 and 6 as well as the proposed PANS-AIM as presented at **Appendix-I**.

Agenda Item 9: Global/Regional developments related to AIM and SWIM.

9.1 The meeting noted that the AIS-AIM SG introduced some changes with amendment 36 to Annex 15 in 2010. However, the broader task of re-aligning Annex 15 with AIM principles and practices received its first real implementation with the recent adoption of Amendment 37.

9.2 The meeting was briefed that in the course of defining the elements that would make up the changes required for Annex 15 to move to an AIM operational focus, several observations were made. Firstly, that Annex 15 contained a mixture of performance related SARPs, prescriptive SARPs and SARPs that were related to a set of practices that might be best outlined in a PANS document. A good example is NOTAM. The NOTAM system is described in Annex 15 completed with formats and detailed requirements. This is in contrast to the ICAO flight plan which is addressed in PANS-ATM (Doc 4444).

9.3 The meeting noted that the material in Appendix 1 of Annex 15 detailing the AIP template is also another practice that could be more appropriately located in PANS. Another aspect where Annex 15 differed from other annexes was that Chapter 1 did not follow the usual practice of providing definitions, but contained text that introduced the Annex. That text in itself was neither SARP nor guidance, nor was it presented as a Note. Of concern also was that the SARPs which contained a mixture of provisions that were intended to be applicable to the AIM service provider as well as provisions that were applicable to the State without delegation. The distinction has been more apparent with continued evolution of ATM related services migrating to commercialized entities and away from direct State provision.

9.4 The meeting was further briefed that in reviewing Annex 15 with the intention of aligning it with AIM practices, it's to be highlighted in accordance with ICAO Assembly Resolution A36-13 resolves that: "SARPs and PANS shall be drafted in clear, simple and concise language. SARPs shall consist of broad, mature and stable provisions specifying functional and performance requirements that provide for the requisite levels of safety, efficiency and interoperability. Supporting technical specifications, when developed by ICAO, shall be placed in separate documents to the extent possible."

9.5 In considering the foregoing, the meeting noted that the following issues were determined:

a) Changes to Annex 15 should be designed to be in compliance with Assembly Resolution A36-13.

b) There was a significant gap between material in Doc 8126 Aeronautical Information Services Manual and Annex 15. Doc 8126 is regarded by many AIS organizations as an operational document rather than a guidance document portraying "best practices".

c) The application phrase that some provisions begin with: "States shall ensure..." (Or equivalent) should be considered redundant since the Annex itself is addressed to States. However, the devolution of service provision to other entities coupled with the practice in some States to incorporate Annex 15 as a regulation has made this complicated.

d) The structure of Annex 15 was largely based on a “product focus” and the transition to AIM would require a service orientation would require a significant reworking of the Annex. Accordingly, a strategy to redevelop Annex 15 was developed that entailed:

e) Developing a restructured Annex 15 in 2 phases, for implementation across 2 amendments;

i) Development of a PANS-AIM; and

ii) Reworking DOC 8126 to provide “best practices” guidance on SARP implementation along with guidance on AIM organization development;

9.6 The meeting was further briefed on the difference on the Publication of an Annex vs. PANS as follows:

	DOCUMENT	FUNCTION AND CONTENT	PRIMARY AUDIENCE
State Provisions What?	Annex 15	Requirements and performance specifications	States
Ops Provisions How to?	PANS-AIM	Procedures, processes, formats, technical specifications	States and service delivery organizations
Explanatory Text	AIS (AIM) MANUAL	Best practices; guidance on application and implementation	Service delivery organizations

9.7 The meeting was briefed that work related to the restructuring of Annex 15 would include revisiting the best way to deliver validated operational functions and eliminating archaic requirements as per the new Draft Annex 15 at **Appendix - J**.

9.8 The meeting was further briefed that Amendment 37 was developed in accordance with the development strategy above that emerged with the progression of the work of the AIS-AIMSG. The Amendment itself is the first part of the 2 part process to thoroughly restructure the Annex. The first 3 chapters were restructured as follows:

- Chapter 1 General.
- Chapter 2 Responsibilities and Functions.
- Chapter 3 Aeronautical Information Management.

9.9 The meeting further noted that Amendment 38 to Annex 15 and Amendment 58 to Annex 4 as at **Appendices K and L**, respectively, as part of work of the ICAO Instrument Flight Procedures Panel (IFPP), were adopted by the Council at the fourth meeting of its 201st Session on 3 March 2014. The Amendments are mainly related to procedure design criteria and charting requirements to support Performance-Based Navigation (PBN) as well as helicopter Point-in-Space (PinS) approach and departure operations

9.10 Furthermore, the meeting noted that in addition to the foregoing, the focus of amendment 39 and beyond will be to complete the restructuring of Annex 15. With this in mind, work is currently focused on developing 3 new chapters. The new chapters 4, 5 and 6 are intended to replace the existing chapters 4-11. It was noted that a concurrent development activity with the work on amendment 39 is the development of a new PANS-AIM document. Since PANS primarily consist of material related to the standardization of how something is to be done, material such as product specifications, standard procedures, and protocols are ideal material for promulgation as PANS:

- a) Appendix 1 of Annex 15 concerning the formatting of an AIP;
- b) Appendices 2, 3, 5, and 6 of Annex 15 and material from Doc 8126 concerning NOTAM, SNOWTAM, and ASHTAM; and
- c) Material from Doc 8126 concerning AIC and AIRAC where it is desirable to elevate the material to a status beyond guidance.
- d) Quality management practices and data handling to achieve integrity requirements

9.11 Additionally, it was noted that PANS-AIM would provide a vehicle for expanded and/or new specifications for e-TOD and data exchange where it was found desirable to have a level of standardization but the material was too detailed or not appropriate for inclusion in annex 15 as a SARP. It is intended that the new PANS-AIM will be the main reference for AIS operational personnel.

9.12 With the implementation of the future amendment 39, the total revision and restructure of Annex 15 will be complete. The emphasis will be on performance oriented SARPs that primarily outline the role, scope, and functions of Aeronautical Information Services from a digitally- enabled, network-centered and service-oriented information management perspective. Additionally, a new PANS-AIM will provide a document focused on the procedures and practices necessary for the day to day management and delivery of the aeronautical information services. Revisions to Doc 8126 will focus on the development and organization of an AIS organization from an AIM perspective and contain guidance on best practices for use in meeting the requirements of the SARPs and PANS. This should provide a solid foundation for future developments commensurate with the Global Air Navigation Plan. Finally noted to the information provided on the development of Amendment 38 to

Annex 15 at Appendix-K , PANS-AIM and AIS Manual and follow-up Global AIS/AIM developments that are ongoing within framework of the ICAO AIS-AIMSG : <http://www2.icao.int/en/ais-aimsg/>.



APPENDIX-A

DRAFT CONCLUSIONS AND RECOMMENDATIONS OF THE AIM TF MEETING HELD IN DAKAR: 15-17 OCT 2014				
DRAFT CONCLUSIONS		SUGGESTED FOLLOW-UP ACTION		
		ICAO	STATES	RMKS
1	Common Understanding on ANC 12 Rec. 3/8 (c).			
	That States to note, the AFI-CAD concept of implementing Centralised AIS databases adequately meets the ANC 12 Rec.3/8(c)	Make Follow up	Note and Agree	
2	Inter-operable Systems and Data			
	To ensure compatibility of the various versions of AIXM databases (AIXM 4.5, AIXM 5.1), integration of the different aeronautical data domains (MET, ATM, etc.) and in the interest of facilitating a system wide information management (SWIM), the implementation of ASBU B0-DAIM element on AIXM in the AFI region should be well coordinated.	Coordinate	Undertake Action	
3	NOTAM Proliferation			
3/1	Based on NOTAM survey and feedback from AIM Task Force, the problem of NOTAM proliferation is not prominent in the AFI region. The proposal to change the NOTAM identification field from the current four digits to five digits will therefore result to high cost investments in NOTAM system upgrades with no direct benefit to the AFI region. Concerned regions should therefore be compelled to fully adhere to the requirements of Annex 15 and or establish other cost effective means such as those covered under Recommendation 8 hereto.		Note and Agree	

4	Planning and implementation of AIM			
	That States ensure that the planning and implementation of AIM in the region, is coherent and compatible with the developments in adjacent regions, and that it is carried out within the framework of the ATM Operational Concept, the Global Air Navigation Plan			
RECOMMENDATIONS		SUGGESTED FOLLOW-UP ACTION		
		ICAO	STATES	RMKS
	AIM Personnel Certification in the AFI Region			
2/1	Develop AIS/AIM competency standards and monitoring mechanisms to ensure competency of AIM personnel through initial and periodic assessments as per ICAO Annex 15 para 3.7.4 requirement.	Coordinate and evaluate adequacy	Undertake Action	<i>A Sub WG Leader : Kenya Members : Nigeria, South Africa, Zimbabwe</i>
	Availability of AIM guidance Materials			
3/1	Make use of the AIM guidance materials developed by the AIS-AIM SG as early editions ahead of official approval by the ANC/Council.	Avail guidance materials	Undertake Action	
	Monitoring Transition from AIS-AIM			
4/1	Maintain AIS-AIM implementation status through regular updates to the regional offices in Dakar and Nairobi or directly onto the website.	Coordinate	Undertake Action	
4/2	ESAF and WACAF region offices establish a mechanism to ensure correctness of the Status implementation reports from states.	Undertake Action	Note	
4/3	Establish a common understanding on the requirement of each of the 21 steps in the roadmap.	Coordinate for Action	Undertake Action	A Sub WG Leader: South Africa, Nigeria, Angola,

				ASECNA, Kenya
4/4	Identify and make follow up on individual letters to States that are behind implementation schedule.	Undertake Action	Note	
4/5	ICAO to consider the services of a regional AIM officer within the ESAF region to enhance the transition from AIS-AIM as highlighted in the ICAO global Air Navigation report 2014.	Undertake Action		
	ASBU B0-DAIM			
5/1	Align National AIM implementation plans with the AFI Region Air Navigation Strategy objectives/priorities and performance targets related to AIM as per Appendix---.	Monitor	Undertake Action	
5/2	Consider adopting a new ANRF for implementing and monitoring AIM training.	Note	Undertake Action	
5/3	That States ensure for each ASBU B0-DAIM elements, at a minimum: a) identifies the operational benefit; b) determine the necessary procedures; c) nominate the required technology; d) develop the business case; and e) Propose a preliminary strategy for regulatory approval.			
	AIM Training			
6/1	Conduct AIM Training by making better use of forums, symposiums, workshops, meetings, online training and other activities to support collaboration and harmonization of best practices and technology.	Coordinate	Note and Agree	Negotiated training on AIXM available for IFAIMA member States at various EAD

				training centres.(See Appendix
6/2	Exchange of experiences from AFI States (ASECNA, Egypt, Kenya, and South Africa) where such databases have already been implemented through among others Familiarization visits.		Note and undertake action	
	AFI-CAD Concept			
7/1	Adopt and support the AFI-CAD Concept expressed in the business plan with four proposed centralised AIS database centres: Dakar(WACAF), Kenya(EA), Southern African States (South Africa) and North Africa(?) .	Note and follow up	Note and Agree	
7/2	Ensure interoperability between the four centralised databases and that interoperability tests during the implementation phase are carried out in accordance with V-Model test provided as appendix xxxx	Monitor	Undertake Action	
7/3	Develop in consultation with the database hosts and participating states, service level agreements covering availability, data quality requirements, cost recovery aspects and other terms of engagement.	Coordinate	Undertake Action	
7/4	States are encouraged to join the endorsed regional Databases as enablers for the transition from AIS-AIM to Support: e-AIP Production; charting production; NOTAM management and Integrated pre-flight briefing.	Coordinate	Note and agree	
7/5	AFI-CAD Regional Database Service Providers (Hosts) with support from Industry be committed to offer appropriate training to AIM personnel to develop and advance skills in order to collaborate and lead the change in their respective States.	Monitor	Note and undertake action	
7/6	Transition from AIS-AIM in the AFI Region will benefit if a robust communication infrastructure exist, hence the need to develop guidance material that communicates the minimum infrastructure requirements both for the host and user states	Coordinate	Note and undertake action	
8	NOTAM Proliferation			

8/1	<p>That States to note the two mechanisms to mitigate the effect of large volumes of NOTAM information as follows:</p> <ul style="list-style-type: none"> a) The first is to control what is distributed which is accomplished by specifications to what must be disseminated by NOTAM, and specify what must not be disseminated. b) The second mitigation technique has been to improve the user's ability to parse relevant information through the use of the "NOTAM selection code 			
9	<p>Reporting of Deficiencies</p> <ul style="list-style-type: none"> a) Encourage States to adopt the APIRG approach on new guidance to reporting of deficiencies based on a reference for minimum reporting of SARPs requirements. b) Without prejudice to the definition of 'a deficiency' as approved by the Council, States, (Regulators and ANSPs), users (IATA, AFRAA, etc.), and professional organizations (IFALPA, IFATCA, IFATCA, etc.) c) in addition to reporting of any other deficiencies as defined by the Council. 			
10	<p>Regulatory frame work to support SLA</p>			
	<p>States are encouraged to develop regulatory framework to support SLA for data collection to ensure data integrity requirements are met.</p>			

**APPENDIX-B****First Working Group Meeting on the Implementation of 12th Air Navigation Conference (AN-Conf/12) Rec.3/8(c),****(Dakar, Senegal, 13 - 14 October 2014)****Third Meeting of the AFI Region AIM Implementation Task Force (ATM/AIM/SAR SG/13)****(Dakar, Senegal, 15 – 17 October 2014)**

#	STATES	NAMES	OFFICIAL TITLE/ DESIGNATION/ EMAIL/CONTACTS	MEETINGS
1.	ANGOLA	Adelia Fatima Antonio Alves Manuel NGIDA	Tel: +244 924 81 85 91 Email: inavic@inavic.gv.ao	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
2.		Daniel Joao DOS SANTOS	Tel: +244 222 33 59 36 Email: angida@enana.ao.com / adeliangida@yahoo.com.br	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
3.		José Dinis Reis RESENDES	Tel: +351 91 7000 911 Email: dinis.resendes@tecangol.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
4.		Manuel Oa Fonseca PONTES	Tel: +244 932 44 75 87 Email: mpontes@enana.ao.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
5.	CAPE VERDE	Alberto SILVA	Tel: +238 2611075	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>

#	STATES	NAMES	OFFICIAL TITLE/ DESIGNATION/ EMAIL/CONTACTS	MEETINGS
			Email: albertos@acivil.gov.cv	
6.	COTE D'IVOIRE	Jean Amani ALLA	Tel: +225 07 92 30 22 Email: allaamanijean@anac.ci / allaamanijean@yahoo.fr	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
7.		Sylvain N'ZEBO OI N'ZEBO	Tel: +225 21 58 00 47 Email: sylvainnzebo@anac.ci / snzebo@gmail.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
8.	GAMBIA	Sulayman J. JABANG	Tel: +220 4472190 Email: sjabang@gcaa.aero	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
9.		James S. COLE	Tel: +220 4472190 Email: jcole@gcaa.aero	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
10.	GHANA	Theresa Kailey AMARH-BOYE	Tel: +233 0302776171 Email: Tkailey2@yahoo.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
11.		Anthony Kwasi ACHEAMPONG	Tel: +233 0302 762950 Email: aacheampong@gcaa.com.gh	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
12.		Daniel MENSAH	Tel: +233 244635453	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>

#	STATES	NAMES	OFFICIAL TITLE/ DESIGNATION/ EMAIL/CONTACTS	MEETINGS
			Email: mdaniel@gcaa.com.gh / danmensa@yahoo.com	
13.		Fidelia KWEI-KUMAH	Tel: +233 264225704 Email: fkumah@gcaa.com.gh / fideliakweikumah@yahoo.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
14.	KENYA	Charity MUTHONI	Tel: +254 722 797968 Email: cmuthoni@kcaa.or.ke	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
15.		David O. ONDIEKI	Tel: +254 20 82 23 00 Email: dondieki@kcaa.or.ke / do.ondieki@gmail.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
16.	NIGER	Issa Ado ISSOUFOU	Tel: +227 20 72 32 67 / +227 94 63 13 39 Email: anacniger@hotmail.com / assaado_issoufou@yahoo.fr	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input type="checkbox"/>
17.	NIGERIA	Felix U. ANYANWU	Tel: +234 80 23 16 10 94 Email: fellymariae@yahoo.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
18.		Abdullah Mohammed WAZIRI	Tel: +234 80 27 26 41 20 Email: yassirenzo@yahoo.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input type="checkbox"/>
19.	SENEGAL	Assane BOUSSO	Tel: +221 77 813 49 46	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>

#	STATES	NAMES	OFFICIAL TITLE/ DESIGNATION/ EMAIL/CONTACTS	MEETINGS
			Email: abouso2006@hotmail.com	
20.	SOUTH AFRICA	François COETZEE	Tel: +27 11 607 1281 Email: francoisC@atns.co.za	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
21.		Raoul BESTER	Tel: +27 11 607 1248 Email: raoulB@atns.co.za	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
22.		Lindi-Lee KIRKMAN	Tel: +27 11 928 6523 Email: lindik@atns.co.za	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
23.	TANZANIA	Mbega GOMBERO	Tel: +255 22 2198100 Email: mgombero@tcaa.go.tz / mrgombero@yahoo.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
24.	UGANDA	Daniel BATEEZE	Tel: +256 704 899796 Email: dbateeze@caa.co.ug / danielbateeze@gmail.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
25.		Irene Lawoko ATTO	Tel: +256 757 830766 Email: iatto@caa.co.ug	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>
26.	ZIMBABWE	Eusebia CHOGUGUDZA	Tel: +263 772 423 375	ANC Impl. <input checked="" type="checkbox"/> AIM TF <input checked="" type="checkbox"/>

#	STATES	NAMES	OFFICIAL TITLE/ DESIGNATION/ EMAIL/CONTACTS	MEETINGS
			Email: eusebia@caaz.co.zw / maippdo@gmail.com	
ORGANIZATIONS				
27.	ASECNA	Athanase AHOUCAN	Tel: +221 33 868 16 23 Email: ahouanganath@asecna.org	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
28.		Ousseynou DIELE	Tel: +221 77 654 96 14 Email: dieleous@asecna.org	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input type="checkbox"/>
29.	ASECNA - CI	Henry Joel ONDZE	Tel: +225 21 27 71 71 Email: ondzehen@asecna.org	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
30.	THALES	Laurent BENGUIGUI	Tel: Email: laurent.benguigui@thalesgroup.com	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
31.	ICAO	George Baldeh	Tel: +221 33 869 24 05 Email: gbaldeh@icao.int	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
32.		Gaoussou KONATE	Tel: +221 33 869 24 02 Email: gkonate@icao.int	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>

#	STATES	NAMES	OFFICIAL TITLE/ DESIGNATION/ EMAIL/CONTACTS	MEETINGS
33.	ICAO	Akoa B. OKOSSI	Tel: +221 33 869 24 18 Email: aokossi@icao.int	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
34.		Francois-Xavier SALAMBANGA	Tel: +221 33 869 24 15 Email: fsalambanga@icao.int	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
35.		Romain EKOTO	Tel: +221 33 869 24 22 Email: rekoto@icao.int	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
36.		Ousman MANJANG	Tel: +221 33 869 24 06 Email: omanjang@icao.int	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
37.		Alassane DOLO	Tel: +221 33 869 24 14 Email: adolo@icao.int	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>
38.		Babacar M. KONE	Tel: +221 33 869 24 17 Email: bkone@icao.int	ANC Impl. <input checked="" type="checkbox"/> AIM TF . <input checked="" type="checkbox"/>

--- END ---