



International Civil Aviation Organization
Western and Central African Office

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
(APIRG)**

**Fourteenth Meeting of the Air Traffic Management/Aeronautical Information
Management/Search and Rescue Sub-Group (ATM/AIM/SAR SG/14)
(Dakar, Senegal, 11 to 14 May 2015)**

**Agenda Item 3: Status of implementation of the Sub-Group work programme and
related Task Forces/Working Groups as assigned by APIRG**

3.3 Aeronautical Information Management

(Presented by the Secretariat)

SUMMARY

This Paper presents information on the outcome of the Third Meeting of the APIRG AFI AIM Implementation Task Force (AFI AIM TF/3) held in Dakar, Senegal from 15-17 October 2014.

This Paper invites discussions on :

AIM related outcomes of other meetings; 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;

REFERENCES:

APIRG/EO Report.
APIRG/19Report
AFI AIM Implementation Task Force/3 – Report of Third Meeting (Dakar, Senegal 15-17 October 2015)
12th Air Navigation Conference Report

This Working Paper is related to Strategic Objectives: **A, D& E**

1. INTRODUCTION

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 2015. 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).

1.2 The meeting was attended by 30 participants from 13 AFI Region ICAO Contracting States, 1 International organization (ASECNA) and 1 Company from Industry, Thales.

2. DISCUSSION

AFI Region AIM related outcomes of other meetings

2.1 The Secretariat presented information on meeting outcomes related to

Aeronautical Information Services and Aeronautical Information Management in the AFI Region from the following meetings:

- a) The Nineteenth Meeting of the AFI Planning and Implementation Regional Group (APIRG/19);
- b) The extraordinary meeting of APIRG held in Lusaka, Zambia from 10-11 July 2014
- c) The 12th Air Navigation Conference (AN-Conf/12); and
- d) Ninth and Tenth Meetings of the AIS-AIM Study Group (AIS-AIMSG/9 and AIS-AIMSG/10).

Status of implementation of the ICAO requirements in the AIM field in the AFI Region (deficiencies).

2.2 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-B**.

Performance Framework for AIM Implementation in the AFI Region

2.3 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- C**.

2.4 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 at **Appendix-D**

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

2.5 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 at **Appendix-E**.

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

2.6 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 at **Appendix-F**. and agreed that the information be reflected in the Global Air Navigation Report to be published in 2015.

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

2.7 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 at **Appendix-A**.

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.

2.8 The meeting was informed that the current system of NOTAM is not sustainable for the long term in its current form and function since 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 i.e.: a system designed for teletype distribution is not optimized for graphical display or integration with other information; the NOTAM system will need to evolve under the emerging SWIM concepts; and the current NOTAM system does not allow for critical updates to the FMS data.

Global/Regional developments related to AIM and SWIM

2.9 The meeting noted the information provided on the development of Amendment 38 to Annex 15, PANS-AIM Document, AIS Manual, and follow-up on Global AIS/AIM developments that are ongoing within framework of the ICAO AIS-AIMSG at: <http://www2.icao.int/en/ais-aimsg/>.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information provided in this working paper;
- b) note the AIS-AIM related transition outcomes in the Region;
- c) discuss
 - i.) regional AIS-AIM Transition progress;
 - ii.) contents of the Draft e-ANP per **Appendix-C**
 - iii.) the development of National ASBU implementation Plan as per **Appendix-D**
- iv.) B0-DATM Enablers/Table of 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-E**.
- v.) the contents of the survey at **Appendices; F, G, H** and agreed that the information be reflected in the Global Air Navigation Report to be published in 2015.
- vi.) strategies to promote the profile of AIS/AIM within States and ANSPs, and to ensure the necessary organizational focus and resources are applied to AIM implementation
- d) review and note the attached list of Draft Conclusions and Recommendations at **Appendix-A** emanating from the report of the First Working Group Meeting on the implementation of ANC Rec. 3/8 (c);



APPENDIX-A

| DRAFT CONCLUSIONS AND RECOMMENDATIONS OF THE AIM TF MEETING HELD IN DAKAR: 15-17 OCT 2014 | | | | |
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| 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 Centralized 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 | | | |
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| 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 | A Sub WG Leader : Kenya Members : Nigeria, South Africa, Zimbabwe |
| | 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 | |

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| 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. | | | |
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| | 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 | |

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| | 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 | | | |

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| 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> | | | |