

**Twenty Third Meeting of the
Informal South Pacific ATS Co-ordinating Group (ISPACG/23)**

Santiago, Chile, 26-27 March 2009

Agenda Item 3: Review Relevant Work Conducted Since ISPACG/23

**AIS UPDATE
FROM THE AIS IMPLEMENTATION TASK FORCE AND
THE FIRST MEETING OF THE AIS-AIM STUDY GROUP**

Submitted by ICAO Asia and Pacific Regional Office

SUMMARY

The third meeting of the AIS Implementation Task Force (AITF/3, June 2008) was held in Singapore. The first meeting of the Aeronautical Information Services-Aeronautical Information Management Study Group (AIS-AIMSG) was held at ICAO Headquarters in Montréal, Canada from 2 to 4 December 2008. This paper summarizes the important issues raised and discussed at AITF/3 and the subsequent first meeting of AIS-AIMSG.

1. INTRODUCTION

- 1.1 AITF/3 was held at in Singapore from 20 to 22 June 2008 back-to back with the Global AIM Congress that was held from 17-19 June 2008. The first meeting of the Aeronautical Information Services-Aeronautical Information Management Study Group (AIS-AIMSG) was held at the ICAO Headquarters in Montréal, Canada, from 2 to 4 December 2008.

2. DISCUSSION

Review of AITF Terms of Reference (TOR)

- 2.1 AITF/3 was of view that the TOR and the name of the Task Force should be changed to reflect the transition from AIS to AIM. The 18th meeting of the ATM/AIS/SAR Sub-group (ATM/AIS/SAR/18, July 2008) agreed that the TOR be amended and the name of the Task Force be changed to the AIS-AIM Implementation Task Force (AAITF).

Establishment of the AIS-AIMSG and Dissolution of the AISMAPSG and the ADMSG

- 2.2 The Air Navigation Commission (ANC) agreed, in view of the complexity of the issues involved in the transition from AIS to AIM, that a new study group be established to assist the Secretariat in progressing the work programme. It was considered that establishment of a new study group would show commitment by ICAO to address the recommendations of the Global AIS Congress while providing current expertise, global participation and transparency in the development of AIM-related provisions.
- 2.3 It was suggested that the new study group be named the AIS-AIM Study Group (AIS-AIMSG) to indicate its involvement with the transition from AIS to AIM and so as not to cause confusion with the Accident Investigation Methodology Study Group (AIMSG). In line with the work programme, it was proposed that the AIS-AIMSG be tasked with assisting the Secretariat with the development of a global strategy/roadmap for the transition from AIS to AIM and to prepare new AIM-related standard and recommended practices (SARPs) and guidance material. As a result of the establishment of the AIS-AIMSG, the existing AISMAPSG and ADMSG were dissolved.

Review of Air Navigation Deficiencies in the AIS Field and Proposed Action Plan

Preliminary Examination of Actions

- 2.4 AITF/3 agreed that the draft letters would be a useful tool and might be useful in attracting remedial actions to improve the AIS outcomes in their States. Particularly, a consistent theme throughout the meeting days was adherence to AIRAC notification provisions. A proposed action for the Chairman to invite an industry participant to assist this Region to score its adherence to AIRAC was supported by the Task Force. The scoreboard would serve two major purposes – firstly, it would provide valuable data to indicate the true extent of the problem and trend analysis as improvement strategies are implemented; and secondly, a tool for directly identifying circumstances where AIRAC notification periods have not been met so that the root causes can be examined and solutions found, thus providing a learning and continuous improvement benefit. A full investigation for applicability of Eurocontrol tools for the self-measurement of AIS Key Performance Indicators and Checklist is an open task for the Task Force.

Review of Euro OPADD (Operating Procedures for AIS Dynamic Data) Edition 2.1

- 2.5 The meeting recalled that the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) had adopted the EUROCONTROL Operating Procedures for AIS Dynamic Data (OPADD) as guidance material for the Asia/Pacific Regions, continuing the practice of harmonizing with NOTAM operating procedures in the Regions with those of the European States and fostering global harmonisation. Subsequently, Edition 2.1 of the OPADD had become available.

ICAO Special Implementation Project

- 2.6 ICAO Special Implementation Project (SIPs) are established under a special budget of the ICAO Assembly and are designed to assist States in overcoming problems of implementation, which may have significant adverse effects on the safety, regularity, or efficiency of international civil aviation. Arising from proposals prepared by the Regional Office, the AIS Automation/eTOD Seminar/Workshop SIP has been approved by ICAO Council. Therefore, the purpose of the approved SIP is to conduct a combined workshop/seminar for States in the Asia/Pacific Regions to address issues related to AIS automation and eTOD implementation. The combined workshop/seminar was conducted on 23 and 24 February 2009 in Narita, Japan, with the assistance from Japan Civil Aviation Bureau (JCAB) and EUROCONTROL.

Static Data Procedures (SDP) in Japan

- 2.7 Japan described that the SDP in Japan presents some model SDP to meet the new AIS requirements of ICAO. The information presented by Japan was considered relevant to the Task Force, and in particular those States implementing quality procedures and processes. The work by EUROCONTROL in the development of SDP was noted to be an additional resource for the participants. Detailed information is available from:
http://www.eurocontrol.int/aim/public/standard_page/qm_sdp.html
http://www.eurocontrol.int/aim/public/standard_page/qm_dataintegrity.html

Future date-time in NOTAMC and NOTAMR

- 2.8 As the relevant Annex 15 amendment enabling use of future date-time became effective from November 2007, AITF/3 and ATM/AIS/SAR/SG/18 noted concerns from States as to what actions should be taken by States in the intervening period 2007 to 2010, specifically whether or not the future date-time should be used for NOTAMC and NOTAMR from November 2007 until the Annex 15 provision had been reviewed in accordance with the 2010 target date established by the ANC. Consequently, APANPIRG/19 adopted the following conclusion:

Conclusion 19/12 – Future Date-time for NOTAMC and NOTAMR

Recognizing that the concerns raised in APANPIRG Conclusion 18/14 relating to use of future date-time in NOTAMC and NOTAMR have been included in the Air Navigation Commission work programme for formal resolution by 2010, States be encouraged to use relevant guidance material in the Aeronautical Information Services Manual (Doc 8126) and the Asia/Pacific Operating Procedures for AIS Dynamic Data (OPADD) in the application of Annex 15 SARPs.

- 2.9 More recently, this issue was raised at the first meeting of AIS-AIMSG (December 2008, Montreal). The Group noted that this created a situation in which the recipient could not discern whether the NOTAM to be replaced must be replaced immediately or if it remained valid until the date/time that appears in Item B).

- 2.10 Accordingly, the Regional Office issued a State letter AP-ATM0001 on 5 January 2009 and invited States not to use future effective-time in NOTAMC and NOTAMR.

3. THE FIRST MEETING OF AIS-AIMSG

AIS to AIM Transition Roadmap

- 3.1 The group discussed how the roadmap for the transition would be distributed to States. Subsequent to consideration of the roadmap by the ANC in February 2009, it was intended that the roadmap be placed on the ICAO public website in English. At the same time, the roadmap should be sent for translation in ICAO languages for future inclusion on the ICAO public website.

Annex Amendment Proposals

Annex Amendment — Terrain and Obstacle Data and Airport Mapping Data Bases

- 3.2 The group considered that it would be appropriate to tie the recommendations for the generation of aerodrome mapping data (AMDB) to provisions related to eTOD in Chapter 10 of Annex 15, especially since Area 3 requirements were closely linked to the AMDB requirements. It was proposed to make the provision of AMDB non-mandatory.
- 3.3 It was considered that changes to Annex 15 may involve insertion of a new paragraph in Chapter 10 of Annex 15 to explain the objectives, the link to eTOD and reference the specifications of Annex 14 - *Aerodromes*. Meanwhile, changes to Annex 4 may relate to the insertion of a reference in Chapter 13 (Aerodrome Chart) which would refer to the specifications in Annex 14. **Action agreed 1/4 — Aerodrome mapping databases** was agreed by the group.
- 3.4 The group noted that Amendment 33 to Annex 15 introduced requirements for States to provide terrain and obstacle data. The group also noted that given constraining time frames (2008-2010), the lack of resources and survey equipment, fragmented responsibilities, ambiguities in requirements and the costs for compliance, the requirements had caused significant concern in States and raised the possibility of a lack of compliance. The group also noted the possibility that a possible outcome of the consultation with Contracting States would be that the applicability date of the eTOD provisions in Annex 15, Chapter 10 might be delayed. The matter of informing States as soon as possible was considered of such importance in view of the financial implications related to the implementation of eTOD, that the group volunteered to assist, in any way possible (i.e. through their respective website, AIS Agora, the eTOD Discussion Forum and through their participation in other groups) to raise awareness of the possible changes.

Annex Amendment — AICM/AIXM

- 3.5 It was recalled that important tasks of the group were to develop SARPs and guidance material related to the provision of a standard AICM and standard AIXM to enable the global exchange of data in digital format, and to define a means to allow the further evolution of these models in a managed and supportable manner.

Annex Amendment — eAIP

- 3.6 The group stressed clear provisions and guidance were necessary to prevent proliferation of eAIP formats. It was noted that a standard look and feel would simplify access by users. **Action agreed 1/7 — Draft Amendment 36 to Annex 15: Electronic AIP (eAIP)** action was agreed.

Annex Amendment — Quality

- 3.7 The group reviewed a draft proposal to amend Annex 15. The problem of an ISO 9000 accredited certification was addressed by maintaining, as a Recommended Practice, the certification element of the provision.
- 3.8 The group discussed the proposal to upgrade existing paragraph 3.6.5 to a Standard. Concern was expressed that since no specific action was identified, States would not be capable of demonstrating measurable improvements. While it was recognized that some States may encounter difficulties introducing automation enabling digital data exchange, it was noted that the Standard would allow them to introduce this in a progressive manner. Furthermore, the Standard would fully support the objectives of the roadmap and serve as a key enabling provision for the transition to AIM.

Annex Amendment — Miscellaneous

- 3.9 The current Standard in Annex 15 related to the NOTAM format allows for a future date to be inserted in Item B) (date/time) in NOTAMR (replacing). The group noted that this created a situation in which the recipient could not discern whether the NOTAM to be replaced must be replaced immediately or if it remained valid until the date/time that appears in Item B). A simple solution to the issue was agreed by the group as proposed in **Action agreed 1/10 — Draft Amendment 36 to Annex 15: NOTAM date and time.**
- 3.10 The group discussed the problem of postponement of effective dates of major and significant changes and the consequences on efficient operations and safety. Acknowledging that the text of the Recommended Practice would be reviewed by the Secretary, the group agreed to take **Action agreed 1/12 — Draft Amendment 36 to Annex 15: AIRAC late postponement.**

Guidance Material

Guidance Material — AICM/AIXM

- 3.11 The group learned that some of the guidance material to support the implementation of AIXM as a standard data exchange model was already well advanced, in particular on issues related to the data catalogue. The group agreed to **Action agreed 1/15 — Guidance material on AIXM.**
- 3.12 The group discussed the restructuring of Annex 15 to accommodate the introduction of AIM. It was suggested that Annex 15 be divided into two parts, one dealing with the existing provisions and the other with the future AIM provisions. This would align with the consolidation phase of the roadmap. Another option considered was to group all existing and future data quality requirements into a new chapter while all current AIS documents would be regrouped into a single chapter. A new chapter for AIM digital services would be developed. It was agreed that these options be considered by an ad-hoc group.

Guidance Material — eAIP

- 3.13 The group discussed the importance of providing States with appropriate guidance material that would ensure a harmonized approach to development of eAIPs, particularly with respect to the use of databases to derive the eAIP content. The group agreed that such material should be included in Doc 8126 and aligned with the existing guidance on AIP, specifically to the DONLON Specimen AIP. It was noted that the guidance material should not be predicated on specific technology. It was also noted that the guidance material should indicate that it would be one of many means for producing an eAIP. The group agreed to **Action agreed 1/18 — Guidance material on electronic AIP (eAIP).**

Guidance Material — Quality

- 3.14 The group noted that Annex 15, paragraph 3.2.1 required that each State shall take all necessary measures to introduce a properly organized quality system containing procedures, processes and resources necessary to implement quality management at each function stage of an aeronautical information service. Annexes 4, 11 and 14 also contained provisions related to the quality of aeronautical information. The group considered that guidance material for an AIS quality manual was required as soon as possible to support the consistent implementation of quality systems in accordance with the abovementioned Annex provision.
- 3.15 The point was raised that, in order to meet the requirements in Annex 15 related to data integrity, States would also require clear guidance on the means to measure integrity throughout the data supply chain. It was noted that while work was underway on data assurance levels, the results of this work would not necessarily resolve this issue.

- 3.16 The group noted that the fundamental structure of the *Manual on the Quality Management System for the Provision of Meteorological Service to International Air Navigation* (Doc 9873) was suitable as a framework for development, since it was based on ISO 9000. Members were also encouraged to provide examples of national quality manuals currently in use in the AIS field.

Guidance Material — Miscellaneous

OPADD

- 3.17 The group noted that the EUROCONTROL document *Operating Procedures for AIS Dynamic Data (OPADD)* contained European Civil Aviation Conference (ECAC) States' approved guidelines for the handling of dynamic data. The scope of the OPADD details were mainly procedures related to NOTAM. It also covered examples of SNOWTAM and ASHTAM as well as specific guidance for harmonization of these messages. The group learned that a new version of this document was under preparation as OPADD 3.0 which would, for the first time, contain a chapter presenting guidelines covering the retrieval and provision of pre-flight information bulletins (PIB). The group considered that this represented valuable guidance material for States and accordingly agreed to the following action:

Action agreed 1/22 — Guidance material on NOTAM

AIRAC

- 3.18 The group discussed possible improvements to guidance material related to the timely provision of aeronautical information and other methods to improve the adherence with AIRAC in States' AIS. Accordingly the group agreed to **Action agreed 1/24 — Frequently asked questions (FAQ) on AIRAC adherence, Action agreed 1/25 — Evaluation of pTracker Tool and Action agreed 1/26 — Guidance material on AIRAC adherence.**

AIS Data Process (ADP) and Static Data Procedures (SDP)

- 3.19 The group was briefed on the availability of EUROCONTROL documentation related to AIS Data Process and Static Data Procedures. Several members had already used this documentation and found it an excellent basis on which to base the development of their own internal processes and procedures. It was therefore agreed that these documents would be valuable information to provide as guidance material related to quality. The group agreed to **Action agreed 1/29 — Data process and procedures in the AIS quality manual and Action agreed 1/30 — Identify data process and procedures that would be required for the provision of new datasets.**

Aeronautical Chart Manual (Doc 8697)

- 3.20 The group considered that Doc 8697 represented valuable guidance material for States and that improvements to the charts, which were based on the DONLON Specimen AIP, would result in parallel improvements to Doc 8126. Accordingly, the group agreed to **Action agreed 1/31 — Aeronautical Chart Manual (Doc 8697)**.

Legal and Institutional Issues

- 3.21 The group considered that it was important to establish the minimum regulatory requirements for data provision by States, and that these requirements should be clearly distinguishable from commercial value-added products or services. The current scope of core data necessary for safe, regular and efficient air transport was defined by the integrated aeronautical information package, but the future scope needed to be clearly identified. Any expansion of the core data set should be justified by the need to serve agreed requirements.

Interoperability with Meteorological Products and Services

- 3.22 In order to ensure a harmonized and consistent development of key mutual components of AIS and MET data models, the group considered that World Meteorological Organization (WMO) be invited to nominate a member to the group. It was noted that, at this stage of AIM development, WMO experts would not necessarily have to attend AIS-AIMSG meetings, but be included in the group with a view to maintaining and open dialog. In addition, the group deemed that the Secretary of the AIS-AIMSG and the Secretaries of the ICAO MET study groups and operations groups should regularly consult one another on developments. Accordingly the meeting agreed to **Action agreed 1/33 — Expertise on the inclusion of meteorological information in the data-centric environment**.

4. ACTION BY THE MEETING

- 4.1 The meeting is invited to:
- a) note the activities and summary of significant points of AITF/3 and the first meeting of AIS-AIMSG as reported in this paper;
 - b) note that a SIP addressing eTOD and AIS automation was conducted by ICAO, assisted by JCAB and Eurocontrol, in Tokyo, Japan on 23 and 24 February 2009;
 - c) note the Regional Office issued a State letter AP-ATM0001 on 5 January 2009 and invited States not to use future effective-time in NOTAMC and NOTAMR;



- d) note that subsequent to consideration of the roadmap by the ANC in February 2009, it was intended that the roadmap be placed on the ICAO public website in English;
- e) note that Annex amendments and guidance material amendments/creation were proposed by AIS-AIMSG; and
- f) note that AIS-AIMSG recognized that AIS-AIMSG and MET should regularly consult each other on developments;

.....