



International Civil Aviation Organization

The Sixth Meeting of the Aeronautical Information Services – Aeronautical Information Management Implementation Task Force (AAITF/6)

Bangkok, Thailand 15 to 17 March 2011

Agenda Item 5: Review of Recent ICAO Developments and Deliberations in Regard of the Work of the Aeronautical Information Services-Aeronautical Information Management Study Group (AIS-AIMSG)

**Summary of Discussion of the Third meeting of AIS-AIMSG
(Montreal, Canada, 9 to 12 November 2010)**

(Presented by Japan)

SUMMARY

This paper briefs the summary of the discussion of the third meeting of AIS-AIMSG ,which was held at ICAO HQ in Montreal from 9 to 12 November 2010.

1 INTRODUCTION

1.1 The third meeting of the Aeronautical Information Services-Aeronautical Information Management Study Group (AIS-AIMSG) was held at the International Civil Aviation Organization (ICAO) Headquarters in Montréal, Canada, from 9 to 12 November 2010. The full Summary of Discussions and the supporting study notes (SNs), information papers (IPs) are under the AIS-AIMSG web page for meetings:

<http://www2.icao.int/en/ais-aimsg/Lists/Meetings/AllItems.aspx>

1.2 Twenty (20) participants attended the third meeting. There were nineteen (19) study notes and three (3) information papers issued for the meeting. Mr. Paul Bosman acted as Chairman of the meeting. The meeting was served by the Secretary of the AIS-AIMSG, Michael Hohm, TO/AINF, MET/AIM, of the Air Navigation Bureau(ANB) who was assisted by David Lewtas, C/AINF, MET/AIM.

2 SUMMARY OF DISCUSSIONS

2.1 INCLUDING AIM IN ANNEX 15

2.1.1 New definitions related to AIM

2.1.1.1 In accordance with AIS-AIMSG Action agreed 2/1, the meeting was presented with rational for the consideration of twenty (20) definitions for Annex15, Amendment 37 which the group reviewed and took action.

Action agreed 3/1 Inclusion in Annex 15 of new definition related to AIM

Twelve (12) proposed definitions were accepted and the others eight (8) definitions were either not accepted or required further development.

2.1.2 Amendments 37 and 38 development

2.1.2.1 The group considered the draft Annex 15, Amendment 37 and Amendment 38 documents. With regard to draft Annex 15 Amendment 37 the following was agreed:

- a) to add potential revisions relating to electronic terrain and obstacle data (eTOD) and aerodrome mapping data bases (AMDB);
- b) to prioritise development of SARPs; and
- c) the need for mature provisions linked to the AIS to AIM Roadmap.

2.1.2.2 With regard to draft Annex 15, Amendment 38 the following needs were agreed:

- a) the need for a mature draft for presentation to the planned AIS-AIM Divisional Meeting in 2014;
- b) to develop a substantive chapter on digital services that would be expected to expand in the future; and
- c) to incorporate a requirement to enable digital data exchange (AICM/AIXM).

Action agreed 3/2 — Amendments 37 and 38 development

- a) that the Secretariat as a priority, review the draft Amendments 37 and 38 material and provide comments back to the ad-hoc group; and
- b) that the Secretariat investigate the usage of a SharePoint site to facilitate collaborative development of the amendment material.

Action agreed 3/3 — Amendments 37 and 38 development

- a) that the ad-hoc group create a timeline incorporating all forthcoming major events and milestones for annex updates; and
- b) that the ad-hoc group produce an updated draft Amendment 37 for the next meeting.

2.1.3 DIGITAL AIM SERVICES GUIDANCE MATERIAL

2.1.3.1 The group considered AIS-AIMSG/3-SN/18 which addressed the Action agreed 2/5 b) —including AIM in Annex 15 for development of relevant guidance material concerning AIM digital data services.

2.1.3.2 The AIS-AIMSG/3 reviewed two proposed outlines for the future major restructure of *Aeronautical Information Services Manual* (Doc 8126). One was based on draft Amendment 37 and the other on draft Amendment 38.

2.1.3.3 The group also considered the following alternatives for the new Doc 8126 and possibly a new digital *Aim Services Manual*. Doc 8126 could be divided into two volumes with the content of Volume 2 to be primarily about AIP content and preparation:

- a) Annex 15, Appendix 1, Contents of Aeronautical Information Publication (AIP);
- b) Doc 8126, Chapter 5 — Aeronautical Information Publication (AIP), Appendix Explanatory notes on the Specimen AIP;
- c) Doc 8126, Chapter 10. Preparation of original copy, reproduction and distribution; and
- d) the Specimen AIP.

Note. — Elements of Doc 8126 may also become part of a PANS-AIM.

2.1.3.4 The alternative is to have a separate Digital AIM Services document that would include the chapters, sections or appendices that concern performance driven processes, information management, digital data services, guidance on use of the internet and web services; guidance on data

link (if required); electronic terrain and obstacle data; safety management; security management; and possibly contents from an updated Chapter 9. Organization of an automated aeronautical information services system from Doc 8126.

2.1.3.5 The group agreed that the need for two volumes of Doc 8126 was not considered a priority and that the document should be kept together for now.

Action agreed 3/6 —Guidance material

That the Secretariat provide feedback to the ad-hoc group by 1 February 2011 on the development of the proposed guidance material in AIS-AIMSG-SN/18.

2.2 POSSIBLE DEVELOPMENT OF A PANS-AIM

2.2.1 The group was informed by the Secretariat of the role of the PANS and their position and relevance in the hierarchy of ICAO documents. Specifically, it was conveyed to the group that the PANS for the most part comprise material:

- a) which may eventually become standards when it has achieved the maturity and stability necessary for adoption as such;
- b) considered too detailed for SARPs; and
- c) amplifying the basic principles contained in corresponding SARPs to assist in their application.

2.2.2 The group agreed that the current establishment of AIS and AIM related provisions and guidance in Annex 15 and Doc 8126 did not allow for the promulgation of specifications that were detailed and prescriptive in nature and intended for wide spread global adoption. Moreover, the group was of the opinion that the adoption of a PANS-AIM document would give greater visibility to the global shift from traditional AIS to AIM.

2.2.3 After much discussion, the group was of the opinion that a PANS-AIM would provide the following benefits:

- a) provide increased application of the material in Doc 8126 related to integrated aeronautical information package (IAIP) where increased harmonisation is desirable and considered of particular importance in fostering interoperability and the transition to AIM;
- b) reduce the provisions in Annex 15 by transferring material that is of a technical or procedural nature. This would allow an Annex 15 more focussed on performance requirements;
- c) increased implementation of standard procedures would result from the need to publish differences from PANS (in AIP);
- d) full State review in update process; and
- e) provide a means to promulgate AIM related provisions that may not be suitable for Annex 15 and raise the global awareness of AIM.

2.2.4 The group concluded that there was support for the development of a PANS-AIM subject to a review of the initial draft to be provided by the Secretariat. The group asked that the initial draft of the document structure have particular emphasis on the content elements intended to be incorporated. Specifically the additional elements which detail AIM processes and procedures should be identified.

Action agreed 3/7 — PANS-AIM Development draft

That the Secretariat provide an initial content outline and document draft to the group by 25 March 2011.

2.2.5 The group was informed that under the most optimistic scenario, a PANS-AIM document could not be made applicable earlier than 2015 with 2016 being the most likely target.

2.3 INFORMATION ON NEXTGEN AND SESAR

2.3.1 The group noted information regarding Information Management and System-wide Information Management (SWIM) in NEXTGEN and SESAR.

Action agreed 3/8 — Information on NextGen and SESAR

- a) that all group members are invited to present to the next AIS-AIMSG/4 the results of work on SWIM with an aeronautical information focus; and
- b) that the Secretariat determines the level of coordination with respect to SWIM needed within ICAO and report to AIS-AIMSG/4.

2.4 CONSIDERATION OF THE MET COMPONENT

2.4.1 The group reviewed AIS-AIMSG/3-SN/9 - Eyjafjallajökull Volcanic Ash Event -Lessons Learned and Proposals for new Guidance, which provided information on a post-analysis undertaken by EUROCONTROL to collect the experiences made by AIS organisations related to the Eyjafjallajökull eruption in April and May 2010. It included considerations of new guidance in ICAO documents on aeronautical information publication related to volcanic ash. The group discussed the limitations of including volcanic ash data in the “E field” of NOTAM, the variations in how volcanic ash information is disseminated and the development of NOTAM template guidance, the global use of ASHTAM vs NOTAM, and potential multi FIR NOTAM. From information provided during discussion it was concluded that on a global basis there appears to be no widespread usage of ASHTAM and NOTAM is the preferred format for aeronautical information dissemination related to volcanic ash.

Action agreed 3/9 — Aeronautical information dissemination related to volcanic ash

- a) that the ad-hoc group develop, for Doc 8126, NOTAM templates related to the operational impact and limited access of airspace and routes affected by the volcanic ash and submit draft proposals to the AIS-AIMSG/4;
- b) that the member provide the AIS-AIMSG/4 with a survey of users views on the use of ASHTAM vs NOTAM;
- c) that the member provide the Secretariat statistics on global ASHTAM promulgation;

Action agreed 3/10 — Aeronautical information dissemination related to volcanic ash

- a) the Secretariat contact the States issuing ASHTAM seeking their views as to the need for ASHTAM; and
- b) that the Secretariat inform the International Volcanic Ash Task Force (IVATF) on AIS-AIMSG activities in this regard.

2.5 AIS-MET DATA LINK SERVICES

2.5.1 It was noted that the next deliverables of the joint RTCA SC-206/EUROCAE WG-76 AIS and MET Data Link Committee are expected soon. The group noted that the earliest likely amendment to Annex 15 on this item would be for Amendment 38.

Action agreed 3/11 — Access to AIS and MET Data Link Committee documentation

That the member acting as liaison to the committee provide to the study group a reference to where the deliverables can be found once finalised.

2.6 INTEGRATED BRIEFING

2.6.1 The group was presented with AIS-AIMSG/3-SN/19 which was prepared in response and at the request of the AIS-AIMSG/1-SN/18 which calls for the development of Guidance Material on Integrated Briefing. The group noted that in many regions of the world, pre-flight activities for the briefing of AIS, NOTAM, MET and flight plan activities can take place over multiple systems and occur in different physical locations. The item for consideration by the group was how this could be consolidated into one complete system giving access to required information and allowing the access to flight planning and whether this needed to be described in a new ICAO Annex or other document.

2.6.2 It was observed by the group that many of the desired functions put forth in the paper were already available in some States but that there was no universal application of this functionality. Moreover, it was discussed whether this was an item for expanded SARPs or whether this was an issue of implementation to be covered in the planning and implementation regional groups (PIRGS) and through the identification of deficiencies. On the matter of sufficient guidance, it was noted that there are already related provisions in Annex 15 and the *Manual on Coordination between Air Traffic Services, Aeronautical Information Services and Aeronautical Meteorological Services* (Doc 9377) covers coordination of information between ATS, AIS, and MET.

2.6.3 It was considered by the group that while there may be related guidance, it should be investigated as to whether the current provisions need to be updated and/or expanded.

Action agreed 3/12 — Review of provisions related to Integrated Briefing

That an ad-hoc group and the Secretariat undertake to review Annex 15, and Docs 8126 and 9377 with a view to determine the level of provisions and guidance applicable to the provision of integrated briefings as envisioned in the study note and report back to the group whether existing provisions and guidance should be updated.

2.7 LEGAL AND INSTITUTIONAL ISSUES

2.7.1 AIS-AIMSG members were urged to provide their respective State's policy on legal and institutional issues to the ad-hoc group as only one had been received.

Action agreed 3/13 — Examples of State policies on legal and institutional issues

That members endeavour to acquire information on their respective State's policy on legal and institutional issues and provide this to the ad-hoc group rapporteur by 15 January 2011.

Action agreed 3/14 — Coordination with AEP-ANSEP

That the ad-hoc group consider developing a plan for coordination between the AIS-AIMSG and the AEP-ANSEP (Airport Economics Panel and Air Navigation Services Economics Panel) by 1 March 2011.

Action agreed 3/15 — Guidance material on legal and institutional issues

That the ad-hoc group prepare an amendment to the *Roadmap for the Transition from AIS to AIM* to incorporate guidance, in coordination with the CANSO AIM Working Group, on legal and institutional issues by 31 July 2011.

2.8 AIM OPERATIONAL CONCEPT

2.8.1 The group was presented with a briefing and presentation by the Secretary concerning the events and processes leading up to the current work on AIM. The presentation further outlined the role of the ATM Operational Concept and how it provided the stimulus and direction for a number of

developments, including the focus of the current work of the Air Traffic Management Requirements and Performance Panel (ATMRPP), the development of the flight and flow information for a collaborative environment (FF-ICE) concept. It was further explained to the group that since the FF-ICE concept dealt with a complimentary ATM information domain, it was an appropriate model to use to envision what an AIM operational concept could achieve and how it could be used to outline the acquisition, validation, collection, aggregation, and delivery of aeronautical information in a future system developed to meet the vision of the ATM Operational Concept. The presentation concluded with a proposal that the group consider developing an AIM Operational Concept as an opening adjunct a revised and updated AIS to AIM Roadmap document which could be presented to be published as an ICAO document.

2.8.2 The group agreed that the development of an operational concept and revised roadmap was worthwhile and necessary. The group was further of the opinion that such a concept should, among other elements, include the link to SWIM, a clear link between the roadmap and Annex 15 amendments, a clarification of some of the roadmap projects and a review of the associated project dates.

Action agreed 3/16 — AIM Operational Concept and Roadmap Development

That an ad-hoc group develop and propose a draft to the group.

2.9 GUIDANCE MATERIAL ON DIGITAL DATA EXCHANGE

2.9.1 The group considered AIS-AIMSG/3-SN/8 which presented a proposal for a change to SARPs and guidance material concerning the SNOWTAM format. The proposal resulted from European experience with a digital SNOWTAM trial with input from Stakeholders. The need for the proposal resulted from the observation that the guidance on the application of the SNOWTAM could be improved in the interests of greater harmonisation and improving the usability of the information.

2.9.2 The group was informed that the SNOWTAM format was also being reviewed by the Runway Friction Task Force and the Aerodromes Panel. As a consequence it was suggested that it would not be useful at this time to conduct a detailed review of the proposal within the group since similar provision may be under study by other groups.

2.9.3 It was noted that the Federal Aviation Administration (FAA) is currently looking at the issue reporting conditions and that this issue is currently being considered by the Take-Off and Landing Performance group of the Aviation Rule making Committee.

2.9.4 Accordingly, the group agreed that the proposal should be coordinated with the AGA Section in ICAO for consideration by the Aerodromes Panel and the Runway Friction Task Force in the hope that it could be reviewed and considered in conjunction with other initiatives.

Action agreed 3/17 — Coordination of Changes to SNOWTAM SARPs

That the Secretariat should:

- a) undertake to forward the proposal in AIS-AIMSG/3-SN/8 for consideration by the AGA Section and the Aerodromes Panel and Runway Friction Task Force; and
- b) report back to the group.

2.10 DATA PROCESSES AND PROCEDURES

2.10.1 The group was presented with AIS-AIMSG/3-SN/11 which outlined the progress made by the FAA and EUROCONTROL in the development of a technical specification for Digital NOTAM using AIXM version 5.1.

2.10.2 The group concluded that it was premature at this time to consider the specifications for inclusion in Annex 15 but that the concept of Digital NOTAM was supported and that some elements of the specification should be considered for inclusion in Amendment 38 of Annex 15 or another suitable document.

2.10.3 The group noted that the FAA and the European Organisation for the Safety of Air Navigation (EUROCONTROL) will continue to develop the specification and validate it through trials and pioneer implementations with initial operational availability from 2012. The group agreed that comments on the specification and its application should be sent through the AIXM Forum.

Action agreed 3/18 — Relationship of AIXM versions to Digital NOTAM

That the assigned member clarify the relationship of AIXM versions to Digital NOTAM requirements.

2.11 AIXM GOVERNANCE

2.11.1 The group was presented with AIS-AIMSG/3-SN/5 which outlined a proposal for a draft Aeronautical Information Exchange Model (AIXM) change management process proposal developed by the European Organisation for the Safety of Air Navigation (EUROCONTROL) and the Federal Aviation Administration (FAA) in consultation with the AIXM stakeholders.

2.11.2 The group expressed support for the proposal and expressed its view that a change management process was urgently needed in view of the increasingly wide adoption of AIXM.

2.11.3 Notwithstanding the support for a Configuration Control Board (CCB) expressed within the group, a number of issues were identified.

Action agreed 3/19 — ICAO consideration of AIXM CCB support

That the Secretariat address their role with respect to an AIXM CCB and how support to the establishment of a CCB may be expressed.

2.12 ELECTRONIC AIP (EAIP)

2.12.1 The Secretary noted that “the Sample eAIP” was in the review and editing process for inclusion in Amendment 3 to Doc 8126. The amendment is expected to be available in mid 2011. A member requested that a minor update to the document could be provided and the Secretary confirmed that this could be accommodated.

Action agreed 3/20 — Electronic AIP (eAIP)

That the assigned member provides the updated Sample eAIP to the Secretariat for review and inclusion in Doc 8126 by 15 January 2011.

2.13 DEVELOPMENT OF PROVISIONS FOR ANNEXES 4, 14 AND 15 RELATED TO AERODROME MAPPING

2.13.1 The group considered AIS-AIMSG/3-SN/2 - Provisions for Aerodrome Mapping Data in ICAO Annexes, which outlined the current status of work which is expected to result in proposed amendments to Annex 4 — *Aeronautical Charts*, Annex 14 — *Aerodromes*, Volume I — *Aerodrome Design and Operations*, Annex 15 — *Aeronautical Information Services* and the *Procedures for Air Navigation Services — ICAO Abbreviations and Codes* (Doc 8400, PANS-ABC) related to aerodrome mapping data.

2.13.2 The group reviewed the draft proposed amendments, discussed the issue of the applicability of fine versus medium data requirements and noted the next steps for review by the AIS-

AIMSG and coordination with the Aerodromes Panel (AP) Aerodromes Operations and Services Working Group to allow a proposal to be finalised for preliminary review by the Air Navigation Commission in the first quarter of 2012.

Action agreed 3/21 — Development of provisions for aerodrome mapping

- a) that the group provide comment on the proposal by 15 January 2011;
- b) that the ad-hoc group member review and harmonise the terminology and data accuracy/resolutions between the Annex 14 and 15 data quality appendices while taking into account EUROCAE/RTCA Committee WG44/SC217 guidance material, and relate fine data provisions to low visibility;
- c) that the assigned member
 1. check the appropriateness of the notes in the Annex 4 proposal and clarify the term “aerodromes regularly used by international civil aviation”; and
 2. send the revised proposal for comments by the group material by 15 February 2011.

2.14 GUIDANCE MATERIAL FOR AERODROME MAPPING

2.14.1 In accordance with Action agreed 2/12 —Follow-up on copyright permission from RTCA, the Secretariat reviewed the recent memorandum of understanding between ICAO and RTCA and informed that copyright of RTCA material for AMDB has not been waived for ICAO publication use. ICAO may provide references to RTCA documents as has been done in the past.

2.15 WORLD GEODETIC SYSTEM — 1984 (WGS-84) MANUAL (DOC9674)

2.15.1 The Secretariat informed that in accordance with Action agreed 2/15 the proposed text related to the use of coordinates transformation for inclusion in Amendment No. 1 to Doc 9674 had been reviewed and was incorporated into a draft amendment of Doc 9674. The document was in the editorial queue pending the development of guidance material on height reference systems in accordance with Action agreed 2/14.

Action agreed 3/22 — Guidance on the use of coordinates transformation

That an ad-hoc group provides guidance material on height reference systems for inclusion in Doc 9674 by 1 March.

2.16 AERONAUTICAL CHART MANUAL (DOC 8697)

2.16.1 The group considered AIS-AIMSG/3-SN/17 - Task regarding the Aeronautical Chart Manual (Doc 8697), which outlined the current status of work resulting Action agreed 2/16. The group noted coordination on this task with the Instrument Flight Procedure Panel Integration Working Group (IFPP-IWG) and the CANSO AIMWG/DG MAP.

2.16.2 CANSO support, with data compilation and chart production by the assigned member, has resulted in the completion of all the specimen charts in Doc 8697 in electronic form as well as additional charts such as RNAV and helicopter procedure chart examples and the World Aeronautical Chart — ICAO 1:1 000 000.

2.16.3 The group noted that further work remains in that the specimen charts should be reviewed by the IFPP IWG. In parallel the Secretariat should work on developing the associated chapter text and illustrations in line with the plan developed in AIS-AIMSG/2-SN/20. Priority should be given to updating the procedure chart chapters with the possibility of posting these on the ICAO web site and/or publication in a partial amendment/circular. It is expected that a complete new edition of the Doc 8697 would take a minimum of a year to finalise.

Action agreed 3/23 — Aeronautical Chart Manual (Doc 8697)

That the ad-hoc group continues developing the associated chapter text and illustrations in line with the plan developed in AIS-AIMSG/2-SN/20.

2.17 DATA INTEGRITY REQUIREMENTS

2.17.1 The group reviewed AIS-AIMSG-SN/13 which presented the work of an ad-hoc group formed during AIS-AIMSG/2 to clarify the means for measuring the integrity requirements stated in the SARPs and the need for guidance material.

2.17.2 The group observed that the current integrity values cannot be measured and there is debate as to the use of the values. It was surmised that the values could represent targets to be achieved or outline the need for defined data handling processes to be in place. Based on the observation that the integrity values could not be measured and thus there was no method of demonstrating compliance the group formed the position that the only use for the values was to categorise data into groups requiring specific requirements for processes involved with data handling.

2.17.3 The group agreed that in the development of Amendment 37, the numerical values should be removed from SARP material and consequential changes to other annexes identified. The integrity classifications would remain and introductory text explaining the relationship to the numerical values and the use of integrity classifications would be prepared by the Secretariat. The group understood that these actions will need to be coordinated within the Secretariat and that the views of other groups may need to be sought prior to completing this action.

Action agreed 3/24 — Data integrity requirements

That the Secretariat, in coordination with the group, prepare a proposed amendment for inclusion in Amendment 37 along with consequential amendments to other annexes, following coordination with other ICAO sections.

2.18 INCLUSION, IN THE AIS QUALITY MANUAL, OF QMS/SMS MODELS

2.18.1 The group considered AIS-AIMSG/3-SN/14 which was developed in response to Actions 2/17 and 2/18 from AIS-AIMSG/2 on the inclusion of safety management system (SMS) in the quality manual. The group was also informed on the intention of ICAO to form a new Annex to deal with safety management.

2.18.2 It was noted that SMS and quality management system (QMS) are complementary. SMS in many applications is implemented as an overarching process which is applied on an enterprise level throughout an organization. QMS is often applied at a lower level to achieve specific business outcomes.

2.18.3 While it was understood that SMS focuses on the safety, human and organizational aspects of an organization, QMS focuses on the products/services of an organization and predominately takes into account the satisfaction of the customer/end user.

2.18.4 The group noted that both QMS and SMS are subject to achieve the overall organization goals, however, once AIS organization intends to implement SMS, there are overlaps and potential conflicts with QMS.

2.18.5 The group expressed its difficulty understanding SMS as a process that would be applied in full and uniquely on an AIS unit (as opposed to an organization wide implementation). With this in mind, the group considered it premature to develop SMS related material for inclusion in Amendment 37 to Annex 15.

Action Agreed 3/25 — Inclusion of Appropriate SMS Elements in Quality Manual

That the ad-hoc group on the AIS quality manual develop draft material concerning the relationship of SMS and QMS for integration into the quality manual to be forwarded to the Secretariat by 15 January 2011.

2.19 AIS QUALITY MANUAL

2.19.1 The Secretary informed that the manual is undergoing review and will be finalized in the first half of 2011.

2.20 ELECTRONIC TERRAIN AND OBSTACLE DATA (ETOD)

2.20.1 The group considered AIS-AIMSG/3-SN/12 - Terrain and obstacle data, which provided an update on the progress of TOD implementation in Europe and the activities of EUROCONTROL in supporting European States. A EUROCONTROL TOD Working Group had identified a number of areas of uncertainty with Amendment 36 and has developed a draft TOD Manual which attempts to provide some clarification to these, to assist States in implementing TOD in a harmonized manner.

2.20.2 A summary of issues identified by the TOD Working Group are:

- a) the SARPs currently place the responsibility for determining which obstacles are hazards to air navigation on the State as the provider of the data, rather than on the users of the data. This is considered to have significant liability issues as it is only the end user that understands the context in which they will use the data and the impact of obstacles on their operations;
- b) the SARPs use the term “regularly used by international civil aviation” however, no definitive definition of this term is provided by ICAO. It is believed that a common definition would assist as this same phrase is used in several ICAO Annexes;
- c) it is unclear what terrain is to be surveyed to the Area 2 numerical requirements. The terrain requirements described in 10.1.5 refer to the obstacle data collection surfaces, whilst Figure A8-1 describes a different requirement. The Area 2 terrain data collected in accordance with paragraph 10.1.5 does not appear to serve any operational purpose;
- d) there is uncertainty about the surfaces to be applied for obstacle data collection in Area 2;
- e) Area 3 results in islands of data being collected which is of little operational use; and
- f) it is believed that Area 2 data is insufficient, in most cases, to meet the obstacle data requirements for Area 4 and that the note will result in a States not preparing the Area 4 obstacle datasets needed to replace the Precision Approach Terrain Chart.

2.20.3 The group considered that the remaining issues listed above could be clarified either in eTOD guidance or in Annex 15, Amendment 37

Action agreed 3/27 — Electronic terrain and obstacle data (eTOD)

That the ad-hoc group examine the issues raised by the TOD, resolve them as appropriate, and report to AIS-AIMSG/4.

2.21 AIM STAFF TRAINING GUIDANCE

2.21.1 The group considered AIS-AIMSG/3-SN/16 which reported on the progress being made on the development of an AIM Training Manual. It was reported that the approach being followed is to embody the competency based framework that ICAO has adopted for other training initiatives.

2.21.2 The group noted that the scope of the training manual would reflect the current provisions of Annex 15. There was concern expressed that an AIS Training Manual would be

historical and not be focussed on the needs connected with the move from AIS to AIM. It was considered by the group that regardless of title, AIM related components would be incorporated insofar as they related to meeting the provisions in the Annexes and guidance documents. It was further observed that the move to a competency based framework itself was evolutionary and fully supported the transition to AIM by identifying the required competencies that are distinct from the traditional provision of AIS.

Action agreed 3/29 — NGAPS outcome coordination

That the Secretariat undertake:

- a) to find out the outcomes of the NGAPS task force; and
- b) transmit then to the ad-hoc group.

Action agreed 3/30 — ICAO GREPECAS coordination

That the assigned member will undertake to provide contact details of a training expert previously involved with the effort undertaken by GREPECAS to develop AIS training materials.

Action agreed 3/31 — AIS Training Manual development

That the ad hoc group will develop the manual further and report back to the Study Group at the next meeting.

2.22 USE OF THE PUBLIC INTERNET FOR AERONAUTICAL APPLICATIONS

2.22.1 The group considered AIS-AIMSG/3-SN/10 which reported on European findings on the *Guidelines on the Use of the Public Internet for Aeronautical Applications* (Doc 9855). That paper discussed the results of a survey on the use of the public internet, security considerations, accreditation of public internet aviation service providers for AIS, time criticality, and the notion of ‘(non) operational use’ of the data in developing national policies for accessing information through Public Internet.

2.22.2 The group considered that the use of the public internet communication has made very significant improvements in AIS transmission and is often more available and reliable than other transmission means. The group supported the content of the paper and that more guidance should be developed for issues including determining an appropriate level of security, synchronisation of paper and internet products, and incorporating the use of the public internet in the data integrity process. The group indicated that they would be willing to contribute to assisting in an update of Doc 9855.

Action agreed 3/32 — Use of the Public Internet for Aeronautical Applications

That the Secretariat consider how to update the *Guidelines on the Use of the Public Internet for Aeronautical Applications* (Doc 9855) and report back to AIS-AIMSG/4.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the contents of this paper; and
- b) discuss the contents and provide comments to AIS-AIM SG member.

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