



*International Civil Aviation Organization*

**The Ninth Meeting of the Asia/Pacific Aeronautical Information Services –  
Aeronautical Information Management Implementation Task Force (AAITF/9)**

Pattaya, Thailand, 24 – 27 June 2014

---

**Agenda Item 2: Review Outcomes of Related Meetings**

**ICAO AIS-AIMSG PROGRESS**

(Presented by the Secretariat)

**SUMMARY**

This paper presents a summary of the results of the Eighth and Ninth Meetings of the ICAO AIS-AIM Study Group and related comments concerning its activities.

**1. INTRODUCTION**

1.1 Since the Eighth Meeting of the AIS-AIM Implementation Task Force (AAITF/8) from 6-10 May 2013 there have been two meetings of the Aeronautical Information Services-Aeronautical Information Management Study Group (AIS-AIMSG) and three AIS-AIMSG Ad-hoc Group meetings on AIM Development and Aeronautical Charting. The frequency of meetings has been increased to progress the work of the SG to rewrite Annex 15 and develop a new PANS-AIM. The eighth meeting of the AIS-AIMSG was held at the International Civil Aviation Organization (ICAO) Headquarters in Montréal, Canada, from 4 to 8 November 2013. The ninth meeting the AIS-AIMSG was held at the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) Annex in Tokyo, Japan, from 21 to 25 April 2014.

1.2 The full AIS-AIMSG/8 and AIS-AIMSG/9 Summary of Discussions and the supporting study notes (SNs), information papers (IPs) and presentations are under the AIS-AIMSG web page for meetings: <http://www.icao.int/safety/ais-aimsg/Lists/Meetings/AllItems.aspx>.

1.3 SG/8 and SG/9 and the Ad-hoc Group meetings were heavily focused on the drafting of Chapters 3, 4, 5 and 6 of Annex 15 and PANS-AIM. Task Force members should refer to the Summaries of Discussion to review the detailed discussions on each of these Chapters. This paper is a summary of the results of the AIS-AIMSG/8 and 9 meetings.

**2. DISCUSSION AND COMMENTS ON THE AIS-AIMSG/8&9**

General

2.1 At SG/8, the Secretary underlined that guidance material will be delivered soon to the ICAO editorial section for review, with priority given to the AIS Manual, Doc 8126, to be followed by the Quality Manual and the Training Manual (in that order). Further, the Secretary informed the meeting that the Aeronautical Chart manual, Doc 8697 will be delivered shortly for editorial and translation. The group highlighted the need for the guidance material to be published in time whilst recognizing the workload of the ICAO Secretariat. The Chairman raised the point of looking for alternative means of guidance material (reference to industry guidance) in case the situation did not improve shortly.

2.2 At SG/9 it was further reported that recent different contacts between Study Group members and the ICAO secretariat indicated that guidance material is being delivered soon to the ICAO editorial section, for review, for the AIS Manual (Doc 8126), the Quality Manual (Doc 9839), the Training Manual (Doc 9991) and the Aeronautical Chart manual (Doc 8697). The Training Manual is currently being extended with additional information from other sources.

2.3 The work plan of the AIS-AIMSG has been reviewed with particular attention given to Amendment 38 to Annex 15 and PANS-AIM. The meeting confirmed that it would have as an objective a planned applicability date for the new amendment to Annex 15 to be November 2016, but that the actual date may be delayed considering the effort still required to produce a mature proposal.

#### Review and Status of Current Work

##### Status of Work Programme and Review of Follow-Up Action Items

2.4 SG/9 noted that through State Letter AN 2/2.3-14/20 States had been informed of the adoption of amendment 38 to Annex 15 with a planned application date of November 2014. Amendment 38 arises from the work of the Instrument Flight Procedures Panel (IFPP) relating 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. The objective of the amendment to the Standards and Recommended Practices (SARPs) relates to improving safety of PBN routes, improved clarification of SBAS and GBAS information as well as associated publication resolution and integrity classification values.

2.5 It was noted that the amendment 38 does not contain in Table A7-2 the inclusion of the resolution and integrity classification of ‘GBAS reference point ellipsoid height’ and ‘LTP/FTP ellipsoid height’. In an earlier email correspondence between the Chairman and the Secretary indicated that this could be handled during the PANS-AIM drafting.

#### AIM Processes and Requirements

##### Annex 15 Material

2.6 SG/9 was presented with AIS-AIMSG/9-SN/6 dealing with the use of the terms “Integrated Aeronautical Information Package” (IAIP) and “Aeronautical Information Products” (AI products) and with proposals for the new Annex 15 and PANS-AIM. It was noted that today, in the draft of the new Annex 15 and of the PANS-AIM, the situation with regards to the use of “Integrated Aeronautical Information Package” (IAIP) and “Aeronautical Information Service Product” (AIS product) is subjective. Moreover, none of these terms refer to digital aeronautical data and information, which is unfortunate in the framework of the transition to AIM. It was observed further that the notion of the IAIP as a package does not really fit in an AIM environment anymore.

2.7 It was proposed not to use IAIP anymore in the new Annex 15 and PANS-AIM and to define “AI products” so that they include the different elements of the IAIP as well as the digital data sets that are further described in the product related chapters of Annex 15 and PANS-AIM. The meeting noted that the removal of the definition of IAIP would have an impact on many national regulations which use this term. Notwithstanding, in consideration of the whole transition from AIS to AIM, which is the purpose of the work of the AIS to AIM study group, will have a number of similar impacts.

2.8 The group agreed on the following definition of “AI product”:

*Aeronautical data and aeronautical information provided either as digital data sets or as a standardized package of predefined presentation in paper or electronic media. Aeronautical information products include:*

- *Aeronautical Information Publication (AIP), including Amendments and Supplements*
- *Aeronautical Information Circulars (AIC)*
- *Aeronautical charts*
- *NOTAM*
- *Monthly plain-language list [later deleted]*
- *Digital data sets.*

*PANS-AIM Material*

2.9 SG/8 was presented with the initial draft of Chapter 2 (*General requirements for the provision of aeronautical data and aeronautical information*) of the PANS-AIM.

2.10 The proposed Chapter 2 of PANS AIM includes texts identified in Doc 8126 as suitable for PANS-AIM and it is composed of the following sections: 1) Responsibilities, 2) Functions 3) Exchange of aeronautical data and aeronautical information. Initial sections on copyright and cost recovery were removed. Other 4 sections were proposed to the group for discussion, including:

- 1) certification requirements;
- 2) any other new responsibility especially touching on data integrators and end users but more importantly supported by Annex 15;
- 3) AIM System Capacity; and
- 4) Technical orientation, status and establishment.

2.11 The group confirmed to assign a lower priority to the development of Chapter 2 of PANS-AIM, due to the significant amount of work that still needs to be done in relation to Annex 15 and PANS AIM. The only topic that required action is the definition of provisions for SLA formal arrangements.

2.12 SG/8 was presented with an initial draft of Chapter 3 of PANS AIM. The content of Chapter 3 of PANS AIM was proposed to include:

- 3.1 AIM principles;
- 3.2 Data and information acquisition, verification and validation;
- 3.3 Information Security;
- 3.4 Resolution, accuracy and scalability considerations;

- 3.5 Handling procedures and processes;
- 3.6 Metadata processes;
- 3.7 Data protection technique;
- 3.8 Use of automation for information integration and assembly;
- 3.9 AIM quality management processes and procedures;
- 3.10 Human Factors; and
- 3.11 Safety Management.

2.13 SG/9 was presented with AIS-AIMSG/9-SN/8 concerning Service Level Agreement (SLA) Agreements for the Provision of Aeronautical Data and Aeronautical Information. The Study Note amplified the requirement for formal arrangement for the provision of aeronautical data and aeronautical information. The paper presented the objective of such agreements and proposed some of the elements to be addressed by the formal arrangement.

2.14 It was considered that any new provisions (provisions not moved from Annex 15) need to be carefully looked at. As a rule of thumb, it was considered that new provisions not already sourced from existing Annex 15 specifications, should be initiated as recommendations (using the operative verb “should”) unless the need for a globally harmonised approach is considered essential. The same care needs to be taken before lifting material from guidance documentation to the PANS.

2.15 It was agreed that the provisions in the PANS-AIM should be as much as possible exclusive to AIM and lengthy and generic (e.g. QMS) provisions are to be avoided as not seen to be of added value.

#### Aeronautical Data and Information Scope and Collection

##### Annex 15 Chapter 4 Development

2.16 SG/8 was presented with AIS-AIMSG/8-SN/4 which presented a revised draft of Chapter 4 of Annex 15 and provided some insight into how the level of detail was derived along with the guiding principles, the specific content, and issues requiring further deliberations. Specific issues with regard to each of the categories of aeronautical data and aeronautical information contained in Chapter 4 were presented to the group and discussed.

2.17 The meeting reviewed AIS-AIMSG/8-SN/14 which provided a status report of the IFPP/IWG involvement for IFPD data sets. Coordination with the IFPP Secretary resulted in the advice that a Job Card is needed for this activity for the IWG/IFPP. The Job Card will be drafted by IWG/IFPP based on a sample provided by the SG.

2.18 SG/9 was presented with AIS-AIMSG/9-SN/12. SN/12 summarised, that a quick research of PANS-OPS (Doc 8168), Volume II, by IFPP/IWG showed ambiguous wording for data origination requirements. PANS-OPS uses the word “promulgate” for providing data from the Procedure Designer to the AIS Organisation. IWG will further review this in the Summer Meeting, Paris, France, 7 – 11 July 2014.

2.19 The IFPP SG member searched all Annexes (1 to 19) for the words “AIP, Chart, publish, promulgate, Annex 4, and Annex 15”, to identify an indication whether any reference exists in the Annexes which might imply a provision for data promulgation to AIS according to Annex 4 or 15. The PANS have not been searched so far. The search revealed that the 19 Annexes consist of 25 volumes and 21 of them are dealing in one way or the other with data origination/promulgation requirements to the AIS Organisation. In this regard it was observed that some Annexes deal in only very general terms with origination/promulgation requirements through stating that differences to the ICAO SARPs and PANS shall be published according to Annex 15. A few other Annexes, for example Annex 14 – Aerodromes, deal with very detailed origination/promulgation requirements. The discussion resulted that a detailed list of data origination/promulgation from the Annexes and PANS is needed to link them to Origination Groups and to enhance consistency between Annex 4, Annex 15 and “Data Origination Annexes”.

2.20 Consensus was reached on the use of the following terms for usage in Annex 15 and PANS-AIM:

- a) The main actors in the aeronautical data chain are ‘Data Originator’, ‘AIS Organisation’ and ‘Next Intended User’.
- b) The Data originators (only for usage in Data Catalogue) at the high level further break down to ‘ANSPs’, ‘Aerodrome Operators’, ‘Surveyors’, ‘Airspace/Procedure Designers’ and ‘Others’.
- c) Overall an AIS organisation ‘Provides’ data and information. This is further broken down as ‘Publish’ for Paper and/or Electronic products AND ‘Provide’ for Digital data sets. Further the terms ‘Distribute’ (for when the AIS Organisation provides the product itself) or ‘Made available’ (for when reference is made to through a service or by another organisation e.g. for Terrain data) are used.
- d) The term ‘promulgate’ will not be further used in Annex 15 and PANS-AIM. The term ‘collect’ is to be used for the process getting data from data originators.
- e) ‘Data exchange points’ are the points where data is exchanged between Data originators and AIS Organisation or between an AIS Organisation and the Next Intended User.
- f) The terms ‘Downstream’ and ‘Upstream’ were not considered required for usage in the Annex and/or PANS-AIM.
- g) The term ‘Authoritative Source’ is considered to be useful when describing overall aeronautical data chain processes and procedures. However, in the Annex 15 document the term is not considered to be required. It is proposed to include a reference from the PANS AIM formal arrangements section to EUROCAE/RTCA documentation further detailing the Authoritative Source.

2.21 SG/9 noted that while Amendment 37 to Annex 15 provided strengthened provisions on data origination to AIS (e.g. 2.1.5, 2.2.6 and 3.2), additional provisions are considered required for Annex 15 Chapter 2 and PANS-AIM Chapter 3 (e.g. para 3.2). The meeting agreed to propose new provisions in order to strengthen the relationship between data originators and AIS organisations, especially with regards to the actions to be carried out when erroneous data is detected. A definition of “data originator” will also be determined.

Development of Material for Inclusion in the PANS AIM

2.22 SG/8 was presented with AIS-AIMSG/8-SN/5 which presented the initial draft of Chapter 4 of PANS AIM and provided some insight into how the level of detail was derived along with the guiding principles, the specific content and issues requiring further deliberations. It was noted that the guiding principle behind Chapter 4 of PANS AIM is to amplify the standards and recommended practices and in particular to complement Chapter 4 of draft amendment 38 to Annex 15.

2.23 SG/8 reviewed AIS-AIMSG/8-SN/15. This study note summarised ideas for a data catalogue as the foundation of the Aeronautical Data and Information Scope and Requirements in PANS-AIM Chapter 4. The meeting discussed the usefulness of this table and its possible location in PANS AIM, rather than in Annex 15. This table also plays a temporary important role as a support to the development of Annex 15 and PANS AIM. The meeting agreed on the way forward by using this approach for further work to prepare a Data Catalogue for Aeronautical Data and Information as part of PANS-AIM Data and Information Scope Requirements. The group also noted that further discussion was needed in order to agree on the titles and on the boundary between what goes into PANS AIM and what goes into Annex 15.

2.24 The Draft Annex 15 Chapter 3 that has been prepared remains in alignment with amendment 37 with the exception of the proposal made at the Ad Hoc Group/9 to include 3.9 Safety Management System. In this regard, the Chairman expressed the view that Annex 15 should not attempt to provide new provisions in relation to safety management systems because they are already available in Annex 19. It would be possible though to reference Annex 19 in Chapter 3 of Annex 15. The group acknowledged the comments of the Chairman, but pointed out that a simple reference to Annex 19 might not be enough. It is fundamental to understand whether and how Annex 19 is appropriately applicable to AIM and which is the relationship between Safety Management System requirements and AIM requirements.

2.25 It was noted that the compilation of all data quality values and their associated metadata attributes into a single set of tables replacing information published in the relevant Annexes provides an opportunity for improvement and so avoid the publication of any inconsistent data requirements. As part of this improvement, consideration should also be given to reviewing and aligning the publication resolution to that of the accuracy requirements, to ensure that accuracy levels are appropriate for their intended purpose, and to ensure that publication resolution requirements are not driving a demand for unnecessarily high accuracy levels.

2.26 The collation of all metadata and publication requirements into a single set of tables within the new PANS-AIM was discussed and raised the issue whether the metadata requirements and tables in the associated Annexes needed to be duplicated. The group concluded that a single data table will be created, but it will split into two parts, one related to the data specifications at the source (accuracy requirements) and the other related to the data product specifications (resolution).

2.27 SG/9 was presented with AIS-AIMSG/9-SN/11 concerning the Data Catalogue for aeronautical data and information as intended to be part of PANS-AIM data and information scope requirements. A first draft of the Data Catalogue was provided to the meeting with respect to the following categories:

- Aerodromes
- Airspaces
- Navigation Aids

- 
- Instrument Flight Procedures (from IFPP/IWG)
  - ATS Route

2.28 The meeting discussed how to deal with Aerodrome Mapping Data vs. current Aerodrome Data. The notion was expressed that it would be best to incorporate AMDB Data features into the Data Catalogue. The many discussions on the exact content of the Data Catalogue demonstrated that although significant progress has been made more work was required and the meeting concluded that the subject would be further discussed in the Ad-hoc Group on AIM Development Meeting in Lisbon. A final proposal would be prepared in this ad-hoc meeting for final review in the plenary AIS-AIMSG/10 meeting.

#### ETOD and AMDB

2.29 SG/9 was verbally briefed that during the third meeting of the Aerodrome Panel (AP3), the guidance jointly developed by AIS-AIM SG and AOSWG on determination of aerodromes eligible for collection of aerodrome mapping data features was agreed, and pending minor editorial corrections, will be included in Attachment A to Annex 14, Volume I.

#### Information Services

##### *Annex 15 Chapter 5 Development*

2.30 SG/8 was presented with AIS-AIMSG/8-SN/6. As a result it was decided Chapter 5 would be better be situated after Chapter 6. The meeting also considered that Chapter 5 and 6 should be swapped in sequence (at the end of the process) for the logics of the text flow.

2.31 SG/8 was presented with AIS-AIMSG/8-SN/10 which presented the current draft of Annex 15 Chapter 6 as developed for Amendment 38. The study note provided some background about the development of Chapter 6, as well as the main topics discussed at the last Ad-hoc Group meetings. The list of open points needed to be addressed by the Study Group was also presented.

2.32 The meeting recognised an issue with respect to the provision of digital data services which might occur in the provision of data sets including complete data set (as defined in Chapter 4) and/or thematic baseline data (AIP data set, terrain and obstacle data set, AMDB, IFDP, etc). The meeting noted that for some States, a single data set would be easier for providers to implement and less costly on industry to fund. Conversely, a single data set could be too far reaching and may in practice be made of different data sets (e.g. AIP data, terrain data, obstacle data). A single data set might decrease the accessibility and require the users to filter out a lot of unnecessary data. Furthermore the continuity with existing Annex 15 provisions (eTOD, AMDB) would also be difficult to be maintained.

2.33 The meeting noted that thematic data sets would better fit the needs of individual users and that it would be easier for them to get data of immediate interest. Furthermore, updates to the data sets would be more relevant per theme than globally. Thematic data sets would also be in line with a scaled approach, where some data sets can be already handled as a “shall” (according to the current SARPs) and others could be handled as “should” first to be then upgraded to “shall”. The meeting also recognized that thematic data sets would put more constraints on providers, as multiple data sets would need to be released every AIRAC cycle, and would generate more costs on the industry.

2.34 The meeting concluded to keep only the following datasets: Aeronautical/AIP, Terrain, Obstacle and AMDB. The provisions about the applicability for terrain, obstacle and AMDB would remain unchanged from current provisions. The group also decided that overlaps/duplications or cross-references between these data sets are allowed. For instance a navaid can also be an obstacle. So a navaid can be either in the aeronautical/AIP dataset or in the obstacle dataset; or it can be in only one of the two datasets and there is a cross-reference in the other dataset.

2.35 The group had difficulty reaching consensus with respect to the definition of the content of the aeronautical/AIP data set and in relation of what “shall” be provided and “should” be provided. The group concluded with a proposition that would detail that:

1) *The Aeronautical/AIP data set shall be provided.*

given that,

2) *the Aeronautical / AIP data set shall include data outlined in Chapter 4 subparagraph xx*

3) *The Aeronautical / AIP data set should include data outlined in Chapter 4 subparagraph xx*

2.36 In terms of terrain and obstacle datasets, the group decided that the collection requirements move from Chapter 10 to Chapter 4 and PANS AIM and the provision requirements move from Chapter 10 to Chapter 6 (now Chapter 5) and PANS AIM. Furthermore the provisions concerning terrain and obstacles will be split into groups concerning terrain and obstacles separately.

2.37 The meeting discussed proposed text to be included that would outline a Service Level Agreement (SLA) between the AIS provider and the users of aeronautical information, particularly for the exchange of data sets. After discussion, the meeting proposed the following text to be included in Annex 15 paragraph 2.3.1:

“Formal arrangements should be established between those parties providing aeronautical information on behalf of the States and their users in relation to the provision of the service”.

*“Note.- Guidance material on such formal arrangements may be found in...”*

2.38 SG/9 reviewed the following and worked into the proposed Annex 15 – Chapter 5:

- a) Inclusion of AI products and deletion of IAIP references as proposed by AISAIMSG/9/-SN/6 and discussed by the meeting;
- b) The current Annex 15 – Chapter 10 provision requirements were integrated with the terrain and obstacle data sets provisions;
- c) The new AIP data set was included as a recommendation (in its entirety or in parts);
- d) The AMDB dataset should be provided where data is available;
- e) The current Annex 15 – Chapter 8 - Pre-flight information service provisions were edited and included. The provision of a PIB remains as an option (in a note);



- 
- f) The current Annex 15 – Chapter 8 - Post-flight information provisions were incorporated as a service without changing the existing text; and
  - g) Overall consistency editing.

#### Development of Material for Inclusion in the PANS AIM

2.39 SG/8 was presented with AIS-AIMSG/8-SN/10 which presented the current draft of Chapter 6 (“*Procedures for the Provision of AIM products and services*”) as developed for PANS AIM.

#### Temporality and Distribution

##### Annex 15 Chapter 6 Development

2.40 SG/8 was presented with AIS-AIMSG/8-SN/6 which presented the current draft of Chapter 5 (“*Temporality and Distribution*”) as developed for Amendment 38. The options proposed considered the work done to date for the content and structure of chapters 4 (data scope) and 6 (products and services), both for the Annex 15 and for the PANS-AIM. The initial ideas associated with the development of the content of the future Chapter 5 explored three options.

2.41 The group decided that Option 2 is the one preferred as a starting point and will be subject to detailed review. Option 2 was that Chapter 5 will contain aeronautical information update, with the focus on products. This will result in including the current AIRAC requirements and details on how to update each product/service. Following this principle Chapter 5 would be better be situated after Chapter 6. The meeting also considered that Chapter 5 and 6 should be swapped in sequence (at the end of the process) for the logics of the text flow.

2.42 The meeting was presented with the current issues associated with the AIRAC cycle and but did not reach any conclusions on a way forward:

1. The problem of FMS data that need to be pre-processed and for which the 28 days advance notice is required;
2. The idea of an increased frequency of AIRAC cycle dates (every 14 days) was not included yet in Chapter 5 due to the lack of clear benefits identified; and
3. The existing paragraph 6.2.1 needs to be changed to provisions stating that the information shall be received 28 days in advance of the effective date

2.43 SG/9 was presented with AIS-AIMSG/9-SN/4 describing change proposals to ICAO AIS provisions on NOTAM distribution. The study note, which identifies constraints in current ICAO SARPS related to NOTAM distribution, as compared with today’s user requirements. These constraints had been identified through work done by the Eurocontrol AI Operations Sub-group and focus on NOTAM information for briefing purposes and concern:

1. The difficulties encountered by end users who require access to the information needed for the complete operation from one briefing location, including information for cross-border destinations regarded as domestic aerodromes or military aerodromes. Some of these difficulties are related to NOTAM that are limited to domestic distribution or internationally only provided to neighbouring States and unavailability of English translations for the content of such NOTAM; and

2. NOTAM numbering and series management, in the context of the increase of the numbers of NOTAM published by many States and the risk of number rollover when limited number of 9999 messages per series.

2.44 It was agreed that the Study Group members would further comment on the changes proposed in this Study Note and if no significant comments were received or if the comments show consensus on certain aspects, then the Ad-hoc Group that is drafting the new Annex and PANS-AIM content may integrate these proposals. In case of major comments/concerns, a discussion in the plenary would be scheduled at one of the following meetings.

#### NOTAM Proliferation

2.45 SG/9 was presented with AIS-AIMSG/9-SN/3 which provided the (European Air Navigation Planning Group) EANPG paper prepared by EUROCONTROL containing the analysis of the factors that contribute to the increase in NOTAM numbers and the approaches used by the States to eliminate bad practices contributing to excessive publication of unnecessary or irrelevant NOTAM.

2.46 The meeting reviewed the information contained in the study note derived from the European AIS Database providing an overview of the International NOTAM trends for the period 2006-2013 in which it could be observed that the number of NOTAM keeps on increasing significantly worldwide. The meeting observed that the major reason for the increase in the number of NOTAM in Europe is ‘natural growth’, reflecting the fact that operationally significant events either happen more often or were not considered operationally significant before.

2.47 Apart from the ‘natural growth’, the other reasons considered to contribute to the excessive publication of unnecessary or irrelevant NOTAM include:

- Excessive publication of long - term and permanent NOTAM and the lengthy transfer of such NOTAM into the AIP;
- Insufficient knowledge on the part of originators regarding the circumstances that require a NOTAM, and of the deadlines for publishing this information via amendments to AIP;
- Long cycles for AIP amendment publication lead to increased NOTAM for the “in between Time” and corrections to submitted NOTAM;
- The use of NOTAM to re-notify information already published in AIP, AIC or SUP; and
- The use of several NOTAM to address a single subject matter i.e. multiple closures of taxiways at the same airport.

2.48 Good practices, possibly reusable in other regions and countries, aiming to reduce the number of NOTAM include:

- Awareness campaign with originators on strict application of Annex 15 para. 5.1.1.1 - 5.1.1.3 requirements;
- Ensuring adequate oversight of the NOTAM origination and publication process;
- Establishment of a NOTAM Review Group with the objective of ‘conducting a review of national NOTAM in order to enhance the effectiveness of aeronautical information’; and

- 
- Critically looking at NOTAM published for dangerous areas activity time, lanterns, balloons and fireworks and permanent information.

#### Other Business

2.49 SG/8 was presented with AIS-AIMSG/8-SN/17. This study note provided a status report of the Ad-Hoc Group on Aeronautical Charting. The Study Note underlined that the Aeronautical Charting from its contents and further development is not in the main scope and of the AIS-AIMSG currently. However, Annex 4 is very closely linked to Annex 15 and the AIP. Therefore charting aspects are still taken into consideration when the restructuring of Annex 15 and the new edition of PANS-AIM takes place, both for Aeronautical Data and Information Scope and Information Services.

2.50 The group noted that in the future it might be necessary to consider the human factors associated with electronic display of charts. Industry has already progressed a lot in regard to this subject.

2.51 SG/9 was presented with a description of SESAR's progress on SWIM Outreach through the organisation of SESAR SWIM Masterclass and Global Demonstration activities as well as information on recent ICAO initiatives in the area of SWIM (ICAO SWIM Concept and IM Panel) involving SESAR and many other global participants.

2.52 It was highlighted that the objective of the SESAR SWIM Master Class events is to accelerate the uptake of SWIM and to increase the awareness of SWIM at a global scale. During last year's second edition, more ATM data providers entered the game, offering ATM Service or Application development teams a wider scope of data and services to exploit in their SWIM-enabled applications or web-services. In total 64 international teams participated actively learning, developing and / or demonstrating their SWIM-enabled services and applications.

2.53 SG/9 was informed that a SESAR SWIM Master Class 2014 edition is planned for May-November 2014 as well as that global coordination has been initiated recently by SESAR to engage in SWIM global demonstrations between various parts of the world such as USA, Canada, Australia, China, Japan, Singapore, etc. The idea is to align, synchronise and connect between different demonstration activities organised in different regions between the end of 2014 and end 2016. It was noted that participants from across the global ATM community are being actively invited to both events as an ATM information provider, an ATM information consumer and/or observer.

2.54 It was noted that through the ICAO ATMRPP (Air Traffic Management Requirements and Performance Panel) the ICAO SWIM Concept document is being agreed which establishes guidelines for information management enabling ATM service providers (ASPs) to ensure global interoperability. While standards will permit interoperability, this ICAO SWIM Concept does not prescribe, or expect, a single global implementation of SWIM.

2.55 The ICAO ATMRPP meeting which recently took place between 10 and 14 March reviewed the many comments provided by all relevant ICAO groups and panels. A final version is now in preparation and hand-over to ICAO for further publication is foreseen in the coming months.

2.56 The group was further informed that an ICAO Information Management (IM) Panel is being setup with the objective to develop a global and harmonised interoperable approach and elaborate on necessary concepts in order to ensure effective management of Information on a system-wide basis within the Air Navigation System.

2.57 A global approach on Information Management is essential to ensure global interoperability and standardisation across all data domains and to support activities such as FF-ICE, the evolution of MET towards digital information exchange and a NOTAM system review.

2.58 The SG discussed the potential impact of the IM Panel on the AIS-AIMSG and it was believed that the AIS-AIMSG would fall under the IM Panel until the SG would see its closure after which the Panel would further deal with the Annex 15 and associated material.

Future Work and Activities

2.59 Work progressed well during SG/8 and SG/9 and in the SG’s shared work environment drafts of all Annex 15 and PANS-AIM chapters now exist.

2.60 The SG noted the progress made on work items, and updated the timetable produced at SG/8 (**Table 1**):

Dates(s)/Timeframe		Event/Milestone	Work Deliverables
<b>2014</b>	13-15 May 2014	IFAIMA, Dubai	
	30 June – 4 July 2014	Ad-hoc meeting (Lisbon)	Draft of Annex 15 and PANS-AIM
	Q2/3 2014	Secretariat review & Publication of completed manuals	<ul style="list-style-type: none"> <li>○ AIS Manual Amdt3 Doc8126</li> <li>○ Quality Manual Doc9839</li> <li>○ Training Manual Doc9919</li> <li>○ AIM Concept</li> <li>○ eTOD/AMDB Manual Doc9881</li> <li>○ WGS-84 Manual (accuracy &amp; heighting) Doc9674</li> <li>○ Charting Manual update Doc8697</li> <li>○ Public Usage of the Internet Doc9855</li> <li>○ Updates to Doc 8400 PANS-ABC</li> </ul>
	10-14 November 2014	AIS-AIMSG/10 (Montreal)	Mature draft (by SG) Annex 15 & PANS-AIM
	February-March 2015	ANC review Annex 15 & PANS-AIM	
<b>2015</b>	<b>Optional</b> Pre-ANC or Post-ANC	Ad-hoc meeting or AIS-AIMSG/11 (both Montreal)	Depending on the maturity of the Annex15/PANS-AIM a final working or ANC comment review meeting may be required.  To be decided in Lisbon if any of these meetings is required.
	May 2015	IFAIMA	
	May 2015	ICAO BUDSS (Montreal)	
	Fall 2015	AIS-AIMSG/11 or 12 (Montreal)	Guidance material ? AOB ?
<b>2016</b>	??/2016	Second ANC review	

Dates(s)/Timeframe		Event/Milestone	Work Deliverables
	??/2016	AIS-AIMSG/12 or 13 (Nairobi-tentative)	
	TBD	New Annex 15 applicable & PANS-AIM introduced	Completion of AIS-AIMSG work program
	IM Symposium	Montreal	
2017	IM Divisional Meeting	Montreal	

**Table 1:** AIS-AIM Study Group Timetable

Next Meetings

2.61 The next Ad-Hoc Group meeting will be held from 30 June to 4 July in Lisbon, Portugal. AIS-AIMSG/10 will be held 10 to 14 November 2014 in Montréal, Canada.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

.....