

Aeronautical Information Services – Aeronautical Information Management Study Group (AIS-AIMSG)

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AIXM/MET Information Exchange
Conference and Seminar
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12-14 May 2009

OVERVIEW

- ⇒ AIS-AIMSG origin and background
- ⇒ AIS-AIMSG/1
 - AIS to AIM Roadmap
 - Annex amendments
 - Guidance material
 - Legal and institutional issues
 - Interoperability with MET
- ⇒ AIS-AIMSG/2 and future work

Origin and background

- ⇒ **Air Navigation Commission Study Group**
- ⇒ **To assist the Secretariat to progress tasks associated with the AIS-AIM transition**
- ⇒ **Members act as independent experts**
- ⇒ **Formed September 2008 to support the AIS-AIM work program**
- ⇒ **15 members**
- ⇒ **www.icao.int/anb/aim**

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Tasks of the AIS-AIMSG

- ⇒ **Global strategy/roadmap**
- ⇒ **SARPs and guidance material to enable the global exchange of aeronautical information (models and their evolution)**
- ⇒ **SARPs and guidance material for the presentation of aeronautical information**
- ⇒ **Quality system- SARPs and guidance material**

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Tasks of the AIS-AIMSG

- ⇒ **Review of SARPs and guidance material for eTOD**
- ⇒ **Staffing and training for the transition from AIS-AIM – guidance and training material**
- ⇒ **Development of a work plan to consider legal and institutional issues raised during the Net-centric Symposium**

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- ⇒ **Montreal, 2- 4 December 2008**
- ⇒ **Agenda**
 - **Review of tasks**
 - **AIS-AIM transition roadmap**
 - **Annex amendment proposals**
 - **Guidance material**
 - **Legal and institutional issues**
 - **Interoperability with MET**
 - **Future work programme**

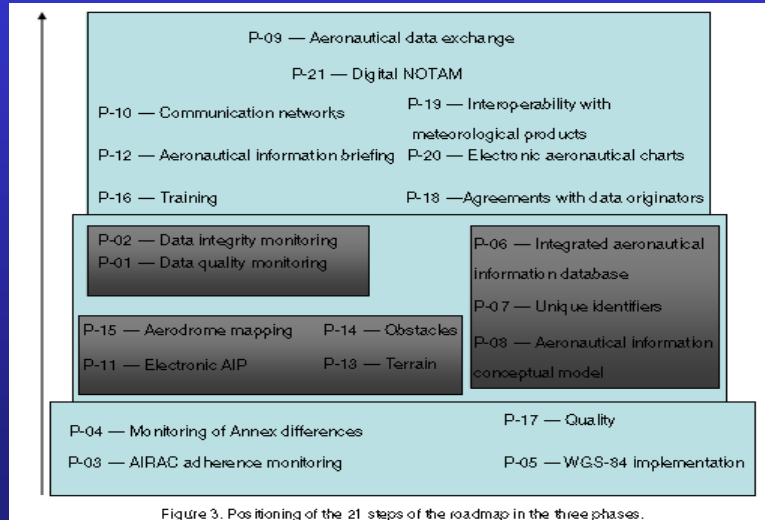
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6

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AIS-AIM transition roadmap



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AIS-AIM transition roadmap

⇒ Progress:

- Roadmap completed
- Noted by ANC, States informed
- Posted on ICAO NET and MET-AIM sites
- Sent for translation
- Living document that can be amended as the transition to AIM progresses

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Annex amendment proposals

- ⇒ **Action agreed 1/4 & 1/14 — Aerodrome mapping databases**
 - for consideration by AIS-AIMSG/2
- ⇒ **Action agreed 1/5 — Draft Amendment 36 to Annex 15: Electronic terrain and obstacle data**
 - Intended to reduce implementation difficulties associated with Annex 15, Chapter 10
 - ICAO State letter AN 2/2.2-09/13

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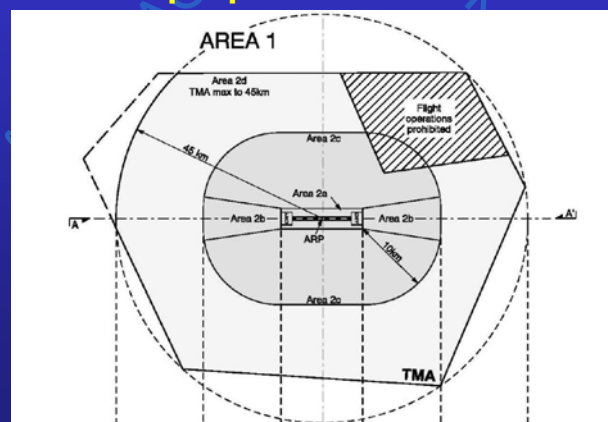
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Annex amendment proposals

- ⇒ **Area 2 draft proposal**



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Annex amendment proposals

- ⇒ Action agreed 1/6 — Draft Amendment 36 to Annex 15: Automation enabling digital data exchange
- ⇒ From ICAO State letter AN 2/2.2-09/13 :

3.6.5 Use of automation

Recommendation.— Automation in AIS enabling digital data exchange should be introduced with the objective of improving the speed, accuracy, quality, efficiency and cost-effectiveness of aeronautical information services.

Note.— Guidance material on an aeronautical conceptual and data exchange model for the development of databases and the establishment of data exchange services is contained in Doc 8126.

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Annex amendment proposals

- ⇒ Action agreed 1/7 — Electronic AIP (eAIP)

4.6 Electronic AIP (eAIP)

4.6.1 Recommendation.— The AIP, AIP Amendment, AIP Supplement and AIC should also be published in a format that allows for displaying on a computer screen and printing on paper.

Note 1.— This composite electronic document is named "Electronic AIP" (eAIP) and is based on a format that allows for digital data exchange.

Note 2.— Guidance material for the production and provision of the eAIP is contained in Doc 8126.

4.6.2 When provided, the information content of the eAIP and the structure of chapters, sections and sub-sections shall follow the content and structure of the paper AIP. The eAIP shall include files that allow for printing a paper AIP.

4.6.3 Recommendation.— When provided, the eAIP should be available on a physical distribution media (CD, DVD, etc.) and online on the Internet.

Note.— Guidance material on the use of the Internet is contained in Guidelines on the Use of the Public Internet for Aeronautical Applications (Doc 9855).

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Annex amendment proposals

- ⇒ **Action agreed 1/8 — Draft Amendment 36 to Annex 15: Quality**
 - Clarifies scope of QMS
 - One CRC for all integrity classifications
 - Upgrades provision of automated pre-flight briefing information systems to a Standard
 - Human factors considerations
 - Use of Metadata
 - AIRAC- clarifies applicability of major changes

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Annex amendment proposals

- ⇒ **Action agreed 1/13 — AIS-MET data link services**
 - Liaison established with the joint EUROCAE WG76/ RTCA SC 206 Committee regarding the possible inclusion in ICAO Annexes of high-level SARPs related to AIS-MET data link services
 - Report back to the group on developments at the AIS-AIMSG/2 meeting.

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Guidance material

- ⇒ **Action agreed 1/16 — Ad-hoc group on including AIM in Annex 15 SARPs**
 - restructuring of Annex 15 to introduce the notion of services and separate data from publications
 - develop a digital AIM services manual

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Evolution of the data exchange model

- ⇒ **Action agreed 1/17 — Future evolution of the data exchange model**
 - That the group act as the primary body for reviewing and endorsing the evolution of the model at the global level based on mature proposals emanating from regional and multi-national agreements.

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Guidance material

- ⇒ Action agreed 1/18 — Electronic AIP (eAIP)
- ⇒ Action agreed 1/19 — AIS training
- ⇒ Action agreed 1/20 — AIS quality manual
- ⇒ Action agreed 1/22 & 1/27 — NOTAM
- ⇒ Action agreed 1/23 — Integrated briefing
- ⇒ Action agreed 1/24 & 1/26 — AIRAC
- ⇒ Action agreed 1/25 — pTracker tool
- ⇒ Action agreed 1/31 — Aeronautical charts

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Legal and institutional issues

- ⇒ Action agreed 1/32 — Legal and institutional issues
- ⇒ Ad hoc group tasked with:
 - consolidating all available information related to cost recovery, copyright and liabilities for AIS; and
 - developing a list of current and future institutional and legal issues to be considered in the context of current AIS and future AIM.

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Interoperability with MET

- ⇒ Ongoing work related to NextGen and SESAR continued to develop the concept of associating meteorological information with the aeronautical information management framework.
- ⇒ Active consideration of the codes to be used for the exchange and dissemination of aeronautical MET information by WMO is underway
- ⇒ Likely that XML would be used to migrate to table-driven code forms.

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Interoperability with MET

- ⇒ Action agreed 1/33 — Expertise on the inclusion of meteorological information in the data-centric environment
 - Invitation to WMO to nominate a member to the group;
 - Coordination with the Secretaries of ICAO MET study groups and operations groups; and
 - members ensure that expertise be made available to them on the inclusion of MET information in the data-centric environment for the work of the group, as necessary.

Related MET work within ICAO

- ⇒ **Within the following projects:**
 - MET information to support ATM
 - Implementation of table-driven OPMET messages
- ⇒ **Two main issues:**
 - *What to be provided?*
 - *How is the information to be provided?*

Related MET work within ICAO

1. **What? 2009-2013**
 - Requirements for the MET support to ATM
 - Three groups involved:
 - ICAO ATMCP
 - ATM requirements
 - ICAO AMOFSG
 - overall requirements
 - WMO CAeM ET on New Terminal Forecasts
 - modern methodology (“ways and means”)
 - **completion by 2012**
 - ▶ **MET DIV Meeting (2013/2014) for endorsement**

Related MET work within ICAO

2. How? 2009-2019

➤ Two phases:

1. Replacement of alpha-numeric codes for OPMET by XML (2013-2019) (*not* by BUFR)
 - Pilot project 2009 (WMO)
 - endorsement of XML for OPMET by ANC 2010
 - finalization of “code tables” for XML 2010-2012
 - enabling clauses to use XML 2013 in Annex 3
 - endorsement of XML by the MET DIV Meeting (2013/14)
 - mandatory use of XML 2016/2019 in Annex 3

Related MET work within ICAO

2. Replacement of OPMET messages by OPMET data (2016-2019 and beyond)

- transition to the “net-centric environment”
- in line with aeronautical & MET info exchange models

➤ Involvement of:

- ICAO AMOFSG
 - Overall requirements
- ICAO AIS-AIMSG
 - Harmonization with AIM requirements
- WMO CBS/CAeM
 - Coding issues

AIS-AIMSG

Future work

- ⇒ AIS-AIMSG/2 : 10 to 13 November 2009
- ⇒ Follow-up list of 33 AIS-AIMSG/1 actions agreed (deliverables) is at : www.icao.int/anb/aim
- ⇒ 2009 - Annex 15 # 35, Annex 4 # 55
- ⇒ 2010 - Annex 15 # 36, Annex 4 # 56
- ⇒ 2013 - Annex 15 # 37, Annex 4 # 57
- ⇒ 2013/14 Divisional type meeting

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25



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