

International Civil Aviation Organization

The Seventh Meeting of the Asia/Pacific Aeronautical Information Services – Aeronautical Information Management Implementation Task Force (AAITF/7)

Ha Noi, Viet Nam, 13 – 16 March 2012

Agenda Item 2: Review Outcomes of Related Meetings

ASIA/PACIFIC MEETING OUTCOMES RELATED TO AIS-AIM

(Presented by the Secretariat)

SUMMARY

This paper presents information on Asia/Pacific meeting outcomes related to Aeronautical information Services and Aeronautical Information Management (AIS-AIM).

This paper relates to –

Strategic Objectives:

- A: Safety Enhance global civil aviation safety
- C: Environmental Protection and Sustainable Development of Air Transport Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment

Global Plan Initiatives:

- GPI-12 Functional integration of ground systems with airborne systems
- GPI-18 Aeronautical information
- GPI-20 WGS-84

1. INTRODUCTION

- 1.1 The Twenty-First Meeting of the APANPIRG Air Traffic Management/Aeronautical Information Services/Search and Rescue Sub-Group (ATM/AIS/SAR/SG/21) was held at Bangkok, Thailand from 27 June to 01 July 2011.
- 1.2 The Twenty Second Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/22) was held in Bangkok, Thailand from 5 to 9 September 2011.
- 1.3 The First Meeting of the ICAO Asia/Pacific Seamless ATM Planning Group (APSAPG/1) was held in Bangkok, Thailand from 31 January to 3 February 2012.

2. DISCUSSION

2.1 The ATM/AIS/SAR/SG/21 meeting discussed the following AIS-AIM related matters.

Timeliness of AIS Promulgation affecting Global Databases (WP20)

- 5.1 IATA highlighted that promulgation of AIS changes that require update of the various aviation databases critical to safe operations must be made in a timely manner to ensure current information is available to all aviation stakeholders. IATA stressed that it was imperative to consider the consequences of publishing important static aeronautical data such as aerodrome locations by NOTAM, instead of using an appropriate AIRAC cycle. Japan supported the IATA perspective and suggested that this item should be dealt with more thoroughly in the next AAITF.
- 5.2 A recent issue at an APAC aerodrome had caused some negative consequences for airline systems. The Chairman noted that what might seem like a small aeronautical data change could have a global effect on other systems, and urged States to comply with appropriate aeronautical promulgation standards.
- 5.3 The United States noted the increasing capability and use of 'live' aeronautical data using web-centric systems. The new AIM Quality Manual, Training Manual and proposed PANS-AIM document are expected to provide guidance to States on appropriate quality systems that support the critical nature of aeronautical data and information.

United States Progress in Transitioning From AIS to AIM (WP/33)

- 5.4 The United States described their progress from AIS toward AIM envisioned by the Next Generation Air Transportation System (NextGen). This paper was a very valuable exposé of the very real AIM transition implementation issues facing even developed States.
- 5.5 The United States underlined the importance of a quality system that assured the veracity of aeronautical data and information, but did not believe that it was necessary for a standard to be prescriptive like ISO (International Standards Organisation). All that was required was evidence of a documented quality procedure. The tendency to over-prepare the quality management system should be avoided.
- 5.6 Hong Kong, China asked about the development of the Flight Information Exchange Model (FIXM), and was advised that this was not being considered by the AIS-AIMSG at this time.
- 5.7 The United States was concerned the limited resources available within the Air Navigation Bureau (ANB) may impede progress, creating a situation where technical capabilities outpace ICAO SARPs. The Chairman expressed gratification to the United States for their support to ICAO in this field.
- 2.2 The matter of AIS changes adversely affecting global databases was expected to be further discussed in AAITF/7/WP02 and WP08.

- 2.3 APANPIRG/22 discussed the following AIS-AIM related matters.
 - 3.2.18 The SG meeting was presented with the outcomes of the AAITF/6, held at Bangkok, from 15 to 17 March 2011. The AAITF/6 had reviewed their TOR and proposed a minor amendment in terminology to implement Quality 'Management' Systems.
 - 3.2.19 The AAITF noted that the AIS-AIMSG were reviewing the Electronic Terrain and Obstacle Data (eTOD) SARPs, as these currently placed 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 had significant liability issues, as it was only the end user that understands the context in which they will use the data and the impact of obstacles on their operations. In particular there were issues with Area 2 and 3 data standards, regarding the lack of operational purpose.
 - 3.2.20 AAITF/6 determined that a survey should be conducted to gain a better understanding of the current status of AIM implementation of States. The results were presented to the Sub-Group to indicate survey's progress, but were intended to be analyzed by AAITF/7.
 - 3.2.21 The AAITF agreed to a table based on the three stages of the Roadmap implementation plan and updated by States to give an overall indication of States' progress towards transition from AIS to AIM and to identify regional deficiencies.
 - 3.2.22 The Sub-Group agreed to the following Decision:

ATM/AIS/SAR Sub-Group Decision 21/1 – AAIF Terms of Reference

That the AAITF TOR be amended by amending c) to read: 'assist States to implement Quality Management Systems for aeronautical information in an expeditious manner', to reflect the changes introduced in Amendment 36 to Annex 15.

3.2.23 The meeting agreed to the following Conclusion:

Conclusion 22/2 – AIM Transition Table

That, the ICAO APAC Regional Office maintains the AIM Transition Table as a means of tracking State transition to AIM, and to provide current details on AIM capability for interoperability, by publishing the State AIS – AIM Transition Table at Appendix B to Report on Agenda item 3.2 on the APAC web site.

- 2.4 The AIM Transition Table was notified by a State Letter dated 27 September 2011, reference T 3/10.0 AP122/11 (ATM). The Table has subsequently been placed on the ICAO APAC website and updated accordingly when new information on AIM progress has been received from States. The current version is appended to this paper as **Attachment 1**.
- 2.5 States should note that the ICAO Asia/Pacific Regional Office no longer requires the submission of paper amendments to State AIP if the state has implemented element P11 Electronic AIP.
- 2.6 APSAPG was intended to facilitate the implementation of a 'seamless' Asia/Pacific environment; in effect promoting the most harmonized and inter-operable procedures, systems and airspace possible. APSAPG recognized the importance of AIM to this process.

2.7 The APSAPG/1 meeting noted there were three main areas which required the development of Seamless ATM principles: People, Facilities, and Technology and Information. Under these headings, a total of 48 draft Seamless ATM Principles were being considered by the APSAPG, including the following related to AIM development:

People

Cultural and Political Background

• Education and implementation of non-punitive reporting and continuous SMS improvement systems.

Aviation Regulations, Standards and Procedures

• Harmonised regional or sub-regional rules and guidelines, modelled on the Pacific application of common regulations incorporated by reference into local legislation.

Facilities

Aerodromes

• Planning and coordination with local authorities to take into account noise, obstacles, airport and PBN development issues.

ATS Units

- Collaboration by ANSPs for evaluation and procurement of ATM facilities.
- The use of automation, satellite-based systems and remote facilities to provide Seamless ATM services

Technology and Information

Aeronautical Data

- Early implementation of AIM (including SWIM) for advanced States.
- Use of 'champion' States, seminars/workshops, special projects and combined resources for less developed States.
- Cooperative development and use of aeronautical databases such as the European Aeronautical Database (EAD).
- Development of information for political decision-makers on the importance of AIM.
- Regulation of aeronautical data and its quality, to ensure interoperable operations.

ATM Systems

• Inter-facility Flight Data Processing System capability.

ATM Modernisation Projects

- Inter-regional cooperation between ATM modernisation projects.
- A focus on simpler universal technologies for earliest deployment and best cost benefits, using a staged implementation.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note the information contained in this paper;
 - b) update the AIM Transition Table; and
 - c) discuss any relevant matters as appropriate.

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State AIS AIM Transition Table

Phase 1

P-03 — AIRAC adherence monitoring

P-04 — Monitoring of States' differences to Annex 4 and Annex 15

P-05 — WGS-84 implementation

P-17 — Quality

Phase 2

P-01 — Data quality monitoring

P-02 — Data integrity monitoring

P-06 — Integrated aeronautical information database

P-07 — Unique identifiers

P-08 — Aeronautical information conceptual model

P-11 — Electronic AIP

P-13 — Terrain

P-14 — Obstacles

P-15 — Aerodrome mapping

Phase 3

P-09 — Aeronautical data exchange

P-10 — Communication networks

P-12 — Aeronautical information briefing

P-16 —Training

P-18 — Agreements with data originators

P-19 — Interoperability with meteorological products

P-20 — Electronic aeronautical charts

P-21 — Digital NOTAM

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Date Last Amended: 14 March 2012

| | Phase 1 Consolidation | | | | Phase 2 Going Digital | | | | | | | | Phase 3 Information Management | | | | | | | | |
|-------------------|-----------------------|------|------|------|-----------------------|------|------|------|------|------|------|------|--------------------------------|------|------|------|------|-----|------|------|------|
| | P-03 | P-04 | P-05 | P-17 | P-01 | P-02 | P-06 | P-07 | P-08 | P-11 | P-13 | P-14 | P-15 | P-09 | P-10 | P-12 | P-16 | | P-19 | P-20 | P-21 |
| Afghanistan | | | | | | | | | | Link | | | | | | | | | | | |
| Australia | ٧ | ٧ | ٧ | 90% | 80% | ٧ | ٧ | ٧ | 60% | Link | ٧ | 75% | | | | 10% | 60% | | | 90% | 5% |
| Bangladesh | | | | | | | | | | Link | | | | | | | | | | | |
| Bhutan | | | | | | | | | | Link | | | | | | | | | | | |
| Brunei Darussalam | | | | | | | | | | | | | | | | | | | | | |
| Cambodia | V | ٧ | ٧ | | | | | | | | | | | | | | | | | | |
| China | ٧ | ٧ | ٧ | ٧ | | | | | | | | | | | | | ٧ | | | V | |
| Hong Kong, China | ٧ | ٧ | V | ٧ | V | ٧ | | | | Link | | | | | | | | | | | |
| Macao, China | ٧ | ٧ | V | ٧ | | | | | | Link | | | | | | | | | | | |
| Cook Islands | | | | | | | | | | | | | | | | | | | | | |
| DPR Korea | | | | | | | | | | | | | | | | | | | | | |
| Fiji | ٧ | ٧ | ٧ | | | | ٧ | ٧ | | Link | | ٧ | ٧ | | ٧ | ٧ | ٧ | | | | |
| India | ٧ | ٧ | ٧ | ٧ | ٧ | ٧ | ٧ | ٧ | ٧ | Link | | ٧ | | | | | | | | | |
| Indonesia | ٧ | ٧ | ٧ | | 50% | 50% | 20% | | | 50% | | | | | 80% | | 60% | 20% | 10% | 20% | |
| Japan | ٧ | ٧ | ٧ | ٧ | 80% | 80% | ٧ | ٧ | | Link | 20% | 20% | | 20% | 20% | 60% | 80% | ٧ | | 20% | 20% |
| Kiribati | | | | | | | | | | | | | | | | | | | | | |
| Lao PDR | V | ٧ | 25% | | | | | | | | | | | | | | | | | | |
| Malaysia | ٧ | ٧ | V | | | | | | | Link | | | | | | | | | | | |
| Maldives | | | - | | | | | | | Link | | | | | | | | | | | |
| Marshall Islands | | | | | | | | | | | | | | | | | | | | | |
| Micronesia | | | | | | | | | | | | | | | | | | | | | |
| Mongolia | √ | ٧ | V | V | 80% | 80% | 30% | ٧ | ٧ | Link | 10% | 10% | | 60% | 10% | 50% | 90% | ٧ | | | |
| Myanmar | ٧ | ٧ | ٧ | | | | 20% | | | Link | 20% | 20% | | | | 10% | | | | 25% | |
| Nauru | | | | | | | | | | | | | | | | | | | | | |
| Nepal | | | | | | | | | | | | | | | | | | | | | |
| New Zealand | √ | V | V | V | V | ٧ | V | ٧ | 75% | Link | V | 80% | 15% | 80% | | | | | | | |
| Niue (NZ) | | | | | | | | | | | | | | | | | | | | | |
| Pakistan | √ | V | V | | | | | | | Link | | ٧ | | ٧ | ٧ | V | | ٧ | | | V |
| Palau | | | | | | | | | | Link | | | | | | | | | | | |
| Papua New Guinea | √ | V | V | 90% | | | | ٧ | | | | | | | | 10% | | | | | |
| Philippines | ٧ | ٧ | 40% | V | ٧ | ٧ | ٧ | | | Link | | | | | | | | | | | |
| Republic of Korea | ٧ | ٧ | ٧ | V | 80% | | | | | Link | | | | | | | | | | 40% | 90% |
| Samoa | | | | | | | | | | Link | | | | | | | | | | | |
| Singapore | V | ٧ | ٧ | ٧ | ٧ | | | | | Link | | | | ٧ | ٧ | ٧ | | | | V | |
| Solomon Islands | | | | | | | | | | | | | | | | | | | | | |
| Sri Lanka | ٧ | ٧ | 90% | 90% | | | | | | Link | | | | | 10% | 25% | 15% | 25% | | | |
| Thailand | ٧ | ٧ | 80% | 10% | | | | | | 20% | | | | | | | | | | | |
| Timor Leste | | | | | | | | | | Link | | | | | | | | | | | |
| Tonga | | | | | | | | | | Link | | | | | | | | | | | |
| Vanuatu | | | | | | | | | | Link | | | | | | | | | | | |
| Viet Nam | V | V | V | 25% | 50% | 50% | 50% | | V | | | | | V | V | | 70% | 50% | | | |
| USA ¹ | ٧ | | | √ | √ | | ٧ | ٧ | ٧ | Link | V | ٧ | V | ٧ | ٧ | | | | | V | V |
| | | | | | | _ | | | | | | | | | | | | | | | |

% means the percentage progress towards achievement of the element

¹ Includes American Samoa, Guam, Johnston, Kingman, Midway, Mariana, Palmyra, Wake

 $^{^{\}rm 2}$ Includes French Polynesia, New Caledonia, Wallis and Futuna Islands

E-AIP Internet Addresses

| E-AIP Internet Addresses | |
|---------------------------------|--|
| Afghanistan | http://www.motca.gov.af/ |
| Australia | http://www.airservicesaustralia.com/ |
| Bangladesh | http://www.caab.gov.bd/adinfo/adinfo0.html |
| Bhutan | http://www.dca.gov.bt/aip |
| Brunei Darussalam | |
| Cambodia | |
| China | |
| Hong Kong, China | http://www.hkatc.gov.hk |
| Macao, China | http://www.aacm.gov.mo |
| Cook Islands | |
| DPR Korea | |
| Fiji | |
| India | http://www.aai.aero/public_notices/AIP_INDIA_MAIN.jsp |
| Indonesia | |
| Japan | https://aisjapan.mlit.go.jp |
| Kiribati | |
| Lao PDR | |
| Malaysia | http://aip.dca.gov.my/ |
| Maldives | http://www.aviainfo.gov.mv |
| Marshall Islands | |
| Micronesia | |
| Mongolia | |
| Myanmar | http://www.ais.gov.mm |
| Nauru | |
| Nepal | |
| New Zealand | http://www.aip.net.nz/ |
| Niue (NZ) | |
| Pakistan | |
| Palau | http://www.faa.gov/air_traffic/publications/atpubs/AIP/aip.pdf |
| Papua New Guinea | |
| Philippines | http://ats.caap.gov.ph |
| Republic of Korea | E-AIP Republic of Korea http://ais.casa.go.kr/eAIPRoot/Operations/history-en-GB.html |
| Samoa | |
| Singapore | |
| Solomon Islands | |
| Sri Lanka | http://www.airport.lk/AIS/AIP%20frameset.htm |
| Thailand | |
| Timor Leste | http://www.gov.east-timor.org/CAA/index.html |
| Tonga | |
| Vanuatu | http://www.airports.vu/Pilots%20&%20Aircraft%20Operators/aip.htm |
| Viet Nam | |
| USA | http://www.faa.gov/air_traffic/publications/atpubs/AIP/aip.pdf |
| France (Wallis et Futuna, Iles) | E-AIP France |
| (French Polynesia) | |
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