

International Civil Aviation Organization

The Second Meeting of the Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG/2)

Hong Kong, China, 1 - 4 October 2013

Agenda Item 2: Review Outcomes of Related Meetings

REVISED TERMS OF REFERENCE FOR THE AIR TRAFFIC FLOW MANAGEMENT STEERING GROUP (ATFM/SG)

(Presented by the Secretariat)

SUMMARY

This paper proposes revised Terms of Reference for the ATFM/SG, consequent to the development of global ATFM guidance material and relevant outcomes of related meetings.

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-6 Air traffic flow management

1. INTRODUCTION

- 1.1 The Terms of Reference (TOR) of the ATFM/SG were developed by its 1st meeting (ATFM/SG/1, Tokyo, Japan, 08 10 December 2010), as directed by the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG).
- 1.2 Since ATFM/SG/1 there have been a number of developments impacting upon the TOR, including the development of global ATFM guidance material and a number of ATFM-related Conclusions being adopted by APANPIRG. Accordingly, this paper proposes revised TOR for ATFM/SG.

2. DISCUSSION

2.1 The 20th Meeting of APANPIRG (APANPIRG/20, Bangkok, Thailand, 7 to 11 September 2009) recognized that the ATFM Seminar conducted in October, 2008 provided the opportunity to influence regional ATFM planning. The ATFM Seminar had included a workshop component, the output of which was a series of outcomes and recommendations considered by APANPIRG. The following Conclusions were subsequently adopted:

Conclusion 20/11 - ATFM Steering Group and Concept of Operations

That a regional ATFM Steering Group be constituted and tasked with preparing an Asia/Pacific Regional ATFM Concept of Operations based on analysis of regional data and traffic flows. The ATFM Steering Group should consider the outcomes and recommendations from the October 2008 ATFM Seminar/Workshop (Fukuoka, Japan) and information about the CAR/SAM ATFM Project contained in IP/3 to APANPIRG/20 as guidance in deriving its Objectives and Terms of Reference.

Conclusion 20/12 - Adopt ATFM Communications Manual

That the Air Traffic Flow Management (ATFM) Communications Handbook for the Asia/Pacific Region, as shown in Appendix B to the APANPIRG/20 Report on Agenda Item 3.2, be adopted and circulated as regional guidance material.

- The TOR (**Attachment A**) and ATFM Concept of Operations developed by ATFM/SG/1 were subsequently adopted by APANPIRG/22 (Bangkok, Thailand, 5 to 9 September 2011). The *Air Traffic Flow Management (ATFM) Communications Handbook for the Asia/Pacific Region* and the *Asia/Pacific ATFM Regional Concept of Operations* are available on the ICAO website at http://www.icao.int/APAC/Pages/edocs.aspx.
- 2.3 Since the ATFM/SG/1 meeting global guidance material for ATFM has been developed and collated in the draft *Manual on Collaborative Air Traffic Flow Management* (Doc 9971). This document is now in its final draft form and, subject to final editing, is expected to be adopted by Council during 4th quarter 2013. The manual includes relevant material from the abovementioned Asia/Pacific Region ATFM documents, and the *ATS Planning Manual* (Doc 9426).
- 2.4 The 24th Meeting of APANPIRG (APANPIRG/24, Bangkok, Thailand, 24 26 June 2013) adopted the following ATFM-related Conclusions:

Conclusion 24/13: Air Traffic Flow Management Capacity Assessments

That States be urged to establish capacity assessment and adjustment mechanisms, and regular review for all aerodromes and ATC sectors where traffic demand is expected to reach capacity, or is experiencing traffic congestion, and to report the assessment outcomes to the Asia/Pacific Regional Office prior to 1 May 2014.

Conclusion 24/14: Air Traffic Flow Management Information Sharing

That States, where ATFM processes are in place, including within adjacent airspace, be urged to share information, which may include:

- a) capacity assessment: including factors of interest affecting capacity, such as special use airspace status, runway closures and weather information;
- b) traffic demand information: which may include flight schedules, flight plan, repetitive flight plan data as well as associated surveillance updates of flight status; and
- c) ATFM Daily Plan.

Conclusion 24/15: Asia/Pacific ATFM Steering Group

That, States participate in, and support the Asia/Pacific ATFM Steering Group to develop a common Regional ATFM framework, which addresses ATFM implementation and ATFM operational issues in the Asia/Pacific region.

- 2.5 APANPIRG/24 also adopted the *Asia/Pacific Seamless ATM Plan*, which:
 - incorporates and builds upon the Asia/Pacific Air Traffic Flow Management (ATFM) Concept of Operations;
 - endorses the Aviation System Block Upgrade (ASBU) Block 0 Element **B0-NOPS** (*Network Flow Management*) as highest priority *Critical ASBU Upgrades*, which should be accorded the highest priority in terms of the earliest implementation and required resources;
 - recommends the implementation of a range of ATFM-related ASBU Block-0 and Block-1 upgrades:
 - references Global Plan Initiatives (GPI) 13 (*Aerodrome Design and Management*) and 14 (*Runway Operations*), and data sharing arrangements to facilitate Collaborative Decision-Making (CDM);
 - specifies implementation of ATFM incorporating CDM to enhance capacity, as part of the Preferred ATM Service Levels (PASL) Phase 1, with expected implementation by 12 November 2015;
 - discusses research and future development possibilities including Sub-Regional ATFM; and
 - includes among its Seamless ATM Principles Sub-Regional ATFM based on system-wide CDM (ATM Coordination) and Collaborative development of CDM, ATFM, A/MAN and D/MAN support tools (ATM Systems and Safety Nets);

The Seamless ATM Plan is also available on the ICAO website at http://www.icao.int/APAC/Pages/edocs.aspx,

2.6 Noting the subsuming of ATFM-relevant provisions of global and Asia/Pacific Region-specific documents into the draft Doc 9971, the Conclusions adopted by APANPIRG 24 and its adoption of the Seamless ATM Plan, the revised TOR for ATFM/SG are proposed (**Attachment B**), with the following explanatory notes.

Paragraph 1

- Reference to the ATS Planning Manual (Doc 9426) is replaced by reference to the Manual on Collaborative Air Traffic Flow Management (Doc 9971);
- Reference to Major Traffic Flows (MTF) has been replaced with a more clear and better targeted description of airspace considerations for ATFM;
- Reference to the Seamless ATM Plan and its provisions for structural airspace capacity measures replaces the former wording; and

• The requirement to develop a Concept of Operations is replaced by the requirement to develop an ATFM framework addressing ATFM implementation and operational issues, as required by APANPIRG Conclusion 24/15.

Paragraph 2 (old)

• Deleted due to the supersession of the ATFM Communications Handbook for the Asia/Pacific Region by Doc 9971;

Paragraph 2 (old paragraph 3)

• Incorporates APANPIRG Conclusions 24/13 and 24/14, with some rewording to clarify the expected output of the Group;

Paragraph 3 (old paragraph 4)

• Adds reference to the Seamless ATM plan.

Paragraphs 4, 5 and 6

- Re-numbered old paragraphs 5, 6 and 7. The reporting requirement in the new paragraph 6 is changed to reflect the re-named ATM Sub-Group.
- 2.7 A clean copy of the proposed TOR is appended at **Attachment C**.
- 2.8 The proposed TOR, once agreed, should provide guidance for the ongoing work of the Group, including that conducted at ATFM/SG/2, pending their adoption by APANPIRG/25 in September 2014. The meeting is therefore invited to consider the following Draft Decision:

Draft Decision: ATFM/SG Terms of Reference

That, the proposed Terms of Reference appended at Attachment 3 are adopted for the Asia/Pacific ATFM Steering Group.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to
 - a) note the information contained in this paper;
 - b) discuss and amend where required the proposed TOR;
 - c) agree to the Draft Decision; and
 - d) agree that the proposed TOR, as amended, provide the direction for the ongoing work of ATFM/SG pending their approval by APANPIRG.

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Current Terms of Reference

AIR TRAFFIC FLOW MANAGEMENT STEERING GROUP (ATFMSG)

- 1. Having considered the ATS Planning Manual (Doc 9426), regional air traffic data and the Major Traffic Flows, and noting that recognized structural airspace capacity increasing measures have preference to use of ATFM, develop an Asia/Pacific Regional ATFM Concept of Operations(including principles and objectives);
- 2. Review and update the *ATFM Communications Handbook for the Asia Pacific Region* until superseded by Global Material;
- 3. Encourage and develop mechanisms for ATFM data gathering, collation and sharing between States, International Organizations and ICAO;
- 4. Research suitable and regionally harmonized benchmarks for airport acceptance rates (AAR) and the throughput of airspace (sector capacity) which may vary depending on weather conditions, and associated technique, e.g. the ground-delay programme and miles/minutes-in-trail (MIT).
- 5. Review the safety and efficacy of ATFM systems in the Asia and Pacific Region, and make specific recommendations regarding ATFM, including any adjacent airspace affecting the Asia and Pacific Regions;
- 6. Encourage the development of an ATFM web site by Asia and Pacific Region States with significant experience in ATFM, which contains information on regional ATFM, including *inter alia*, real time flight delay data.

The Group reports to the ATM/AIS/SAR Sub-Group.

7.

Proposed Terms of Reference

AIR TRAFFIC FLOW MANAGEMENT STEERING GROUP (ATFMSG)

- 1. Having considered the ATS Planning Manual (Doc 9426) relevant documents such as the Manual on Collaborative Air Traffic Flow Management (Doc 9971), regional air traffic data and the Major Traffic Flows Asia/Pacific Region city pairs and associated airspace and ATS routes experiencing the most significant traffic demand, and noting that recognized structural airspace capacity increasing measures have preference to use of ATFM the Asia/Pacific Seamless ATM Plan provisions for structural airspace capacity increasing measures, develop an Asia/Pacific Regional ATFM Concept of Operations(including principles and objectives) Framework which addresses ATFM implementation and ATFM operational issues in the Asia/Pacific Region;
- 1. Review and update the ATFM Communications Handbook for the Asia Pacific Region until superseded by Global Material;
- 2. Encourage and develop Identify, research and recommend appropriate guidance regarding:
 - a. capacity assessment and adjustment mechanisms;
 - b. regular review for all aerodromes and ATC sectors where traffic demand is expected to reach capacity, or is resulting in traffic congestion;
 - c. mechanisms for ATFM data gathering, collation and sharing between States, International Organizations and ICAO, which may include;
 - i. capacity assessments, including factors affecting capacity such as special use airspace status, runway closures and weather information;
 - ii. traffic demand information which may include flight schedules, flight plan data, repetitive flight plan data as well as associated surveillance updates of flight status;
 - iii. ATFM Daily Plan; and
 - iv. any other guidance relevant to the Regional ATFM Framework.
- 3. Taking into account the Asia/Pacific Seamless ATM Plan, Research suitable and regionally harmonized benchmarks for airport acceptance rates (AAR) and the throughput of airspace (sector capacity) which may vary depending on weather conditions, and associated technique, e.g. the ground-delay programme and miles/minutes-in-trail (MIT).
- 4. Review the safety and efficacy of ATFM systems in the Asia and Pacific Region, and make specific recommendations regarding ATFM, including any adjacent airspace affecting the Asia and Pacific Regions;
- 5. Encourage the development of an ATFM web site by Asia and Pacific Region States with significant experience in ATFM, which contains information on regional ATFM, including *inter alia*, real time flight delay data.

6.	The Group reports to the ATM /AIS/SAR Sub-Group.

Proposed Terms of Reference (Clean Copy)

AIR TRAFFIC FLOW MANAGEMENT STEERING GROUP (ATFMSG)

- Having considered relevant documents such as the Manual on Collaborative Air Traffic Flow Management (Doc 9971), regional air traffic data and the Asia/Pacific Region city pairs and associated airspace and ATS routes experiencing the most significant traffic demand, and noting the Asia/Pacific Seamless ATM Plan provisions for structural airspace capacity increasing measures, develop an Asia/Pacific Regional ATFM Framework which addresses ATFM implementation and ATFM operational issues in the Asia/Pacific Region;
- 2. Identify, research and recommend appropriate guidance regarding:
 - capacity assessment and adjustment mechanisms; a.
 - regular review for all aerodromes and ATC sectors where traffic demand is expected to reach capacity, or is resulting in traffic congestion;
 - mechanisms for ATFM data gathering, collation and sharing between States, International Organizations and ICAO, which may include;
 - i. capacity assessments, including factors affecting capacity such as special use airspace status, runway closures and weather information;
 - ii. traffic demand information which may include flight schedules, flight plan data, repetitive flight plan data as well as associated surveillance updates of flight status;
 - iii. ATFM Daily Plan; and
 - any other guidance relevant to the Regional ATFM Framework. iv.
- 3. Taking into account the Asia/Pacific Seamless ATM Plan, research suitable and regionally harmonized benchmarks for airport acceptance rates (AAR) and the throughput of airspace (sector capacity) which may vary depending on weather conditions, and associated technique, e.g. the ground-delay programme and miles/minutes-in-trail (MIT).
- Review the safety and efficacy of ATFM systems in the Asia and Pacific Region, and make 4. specific recommendations regarding ATFM, including any adjacent airspace affecting the Asia and Pacific Regions;
- 5. Encourage the development of an ATFM web site by Asia and Pacific Region States with a.

_	cant experience in ATFM, which contains information on regional ATFM, including <i>inter ali</i> ne flight delay data.
6.	The Group reports to the ATM Sub-Group.