



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

RELATED MEETINGS OUTCOMES

(Presented by the Secretariat)

SUMMARY

This paper reviews the outcomes of ICAO Asia/Pacific meetings related to the Asia/Pacific Region Air Traffic Flow Management Steering Group.

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 18th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/18) was held in Bangkok, Thailand, from 3 to 7 September 2007.

1.2 The ICAO Air Traffic Flow Management (ATFM) Seminar and Workshop were held in Fukuoka, Japan, from 7 to 9 October 2008.

1.3 The 20th Meeting of the ICAO Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/20) was held in Bangkok, Thailand, from 7 to 11 September 2009.

1.4 The 1st Meeting of the Air Traffic Flow Management Steering Group (ATFM/SG/1) was held in Tokyo, Japan, from 8 to 10 December 2010.

1.5 The 24th Meeting of APANPIRG (APANPIRG/24) was held in Bangkok, Thailand, from 24 to 26 June 2013.

1.6 The outcomes of these Asia/Pacific meetings, conducted over a period of 6 years, may provide important context to the ongoing work of the ATFM/SG.

2. DISCUSSION

APANPIRG/18

2.1 APANPIRG/18 noted that regional development of ATFM had recently been added to its list of Key Priorities. Recognizing the need to actively endorse ATFM activities in the region, ***Conclusion 18/7 – Conduct Regional ATFM Seminar*** was adopted to enable parties experienced in the provision of ATFM to share knowledge and provide guidance to less experienced States, with the expectation that it would lead to wider implementation of ATFM regionally:

ATFM Seminar and Workshop

2.2 Consequently, an ATFM seminar was held in October 2008. Recognizing that the ATFM seminar would provide an opportunity to influence regional ATFM planning. A workshop was included in the program by the ICAO Regional Office to allow the opportunity for recommendations to come forward. Following further consideration by APANPIRG/19 (Bangkok, Thailand, 1 to 5 September 2008) the Seminar/Workshop was tasked with identifying and recommending appropriate regional objectives such as:

- Development of a high level ATFM Concept of Operations for the Region;
- Enhancement of the draft ATFM Communications Manual;
- Develop mechanisms for data gathering, collation and sharing;
- Review activities of the Bay of Bengal ATFM Task Force;
- raising awareness of ICAO provisions regarding ATFM;
- enhancing coordination and cooperation between ATFM providers and users in the Asia and Pacific Regions; and
- identifying regional initiatives to optimize ATFM activities in order to gain the maximum benefits for all users.

2.3 Outcomes and recommendations arising from the Seminar/Workshop were:

ATFM Seminar/Workshop Outcome 1:

That the preparation of an Asia/Pacific Regional ATFM Concept of Operations was a significant body of work that would need to be undertaken collaboratively between States over a period of time.

ATFM Seminar/Workshop Outcome 2:

The ATFM Seminar/Workshop recognized that there would be significant benefit in having a regional oversight capability of some kind, in the form of a high level ATFM Steering/Focus Group, to begin to analyze regional data and traffic flows and make recommendations with the objective of ensuring the harmonization/coordination of regional ATFM implementation plans.

ATFM Seminar/Workshop Outcome 3:

That accurate and timely static and dynamic data be continuously available to support ATFM implementation planning and ongoing ATFM operations.

ATFM Seminar/Workshop Recommendation 1:

That the present arrangements for annual month of December traffic sampling by all States for airspace safety analysis enabled by APANPIRG Conclusion 16/4 be expanded to enable this data to also be used, under authority of the ICAO Asia/Pacific Regional Office, for airspace planning and implementation purposes.

ATFM Seminar/Workshop Recommendation 2:

Recognizing that the sharing of dynamic data between adjacent ANSPs on a continuous and real time basis was a key requirement in realizing ATFM benefits, regional strategies be developed with the objective of implementing formalized data sharing arrangements with relevant parties within, and between, States.

ATFM Seminar/Workshop Recommendation 3:

That guidance material in the ICAO ATS Planning Manual (Doc 9426) be reviewed and utilized as the basis for development of Sector capacity assessments.

ATFM Seminar/Workshop Outcome 4:

That the concept of a web based 'virtual ATFMU' along the lines of the US ATSCC example at <www.fly.faa.gov> showed merit for providing a 'one-stop-shop' of regional ATFM matters.

ATFM Seminar/Workshop Recommendation 4:

That the draft ATFM Communications Handbook for the Asia/Pacific Region be advanced through the normal ICAO processes with the objective of gaining APANPIRG approval as a regional guidance material.

ATFM Seminar/Workshop Recommendation 5:

That the ICAO regional Secretariat provides all material associated with the ATFM Seminar/Workshop to the ICAO Headquarters Secretariat for consideration in the ICAO HQ ATFM work programme scheduled during 2009/2010.

ATFM Seminar/Workshop Outcome 5:

That IATA clearly expressed their preference for accelerated implementation of recognized structural airspace capacity increasing measures (RVSM, PBN, flexible use of airspace, use of more effective ATC procedures) in preference to use of ATFM. However, IATA recognizes that structural improvements will take time and accepts that use of traffic management and ATFM procedures in some circumstances is warranted.

ATFM Seminar/Workshop Outcome 6:

That significant regional ATFM knowledge and experience lies with Australia, Japan, Thailand and United States and that access to and use of this expertise will be beneficial to other States of the Asia/Pacific region.

APANPIRG/20

2.4 Responding to the 6 outcomes and 5 recommendations of the ATFM Seminar/Workshop, APANPIRG/20 adopted the following ATFM related conclusions:

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.*

Conclusion 20/13 – Conduct Regional ATFM Survey

*That a survey of Asia/Pacific States be conducted based on the questionnaire at **Appendix C** to the APANPIRG/20 Report on Agenda Item 3.2, with the objective of benchmarking the current status of Air Traffic Flow Management (ATFM) activities in the Asia/Pacific Region.*

ATFM/SG/1

2.5 Outcomes of the 1st meeting of the ATFM/SG included:

- Terms of Reference (TOR) for the Steering Group;
- Development and subsequent promulgation of the *Asia/Pacific Regional ATFM Concept of Operations*;
- Review of the *ATFM Communications Handbook for the Asia/Pacific Region*¹;

¹ The guidance material provided in the *Asia/Pacific Regional ATFM Concept of Operations* and the *ATFM Communications Handbook for the Asia/Pacific Region* has been incorporated in the *Asia/Pacific Seamless ATM Plan* (adopted by APANPIRG/24), and in the final draft version of the *ICAO Manual on Collaborative Air Traffic Flow Management (ICAO Doc 9971)*, which is expected to be adopted by the Council of ICAO during 4th Quarter 2013.

- 2.6 The meeting broadly discussed the current Status of ATFM initiatives including:
- The Bay of Bengal Cooperative Air Traffic Flow Management System (BOBCAT). Thailand was operating the BOBCAT slot management system used on Major Traffic Flow (MTF) AR-4 to alleviate traffic loading though Afghanistan Airspace;
 - State request for ATFM/SG guidance in ATFM implementation;
 - Australia’s utilization of a Required Time of Arrival scheme;
 - The United States and Japan’s formalized ATFM teleconference for managing North Pacific routes, and the future involvement of Russia in ATFM coordination with the USA;
 - Philippines’ plan for initial implementation of an airport/aerodrome ATFM for Manila, concentrating on scheduled domestic arrival and departure flights;
 - Hong Kong, China’s ATFM procedures, principally used during the typhoon season.

2.7 The meeting considered that each of the MTF should have ATFM planning regardless of traffic density, to cater for contingency operations in addition to traffic loading. IATA suggested to the meeting that it may be better to concentrate on sub-regional strategies that focused on MTF, rather than a detailed regional ATFM concept which may be difficult to achieve.

2.8 ATFM priorities were discussed, and the meeting did not agree with references to a first-come-first-served basis for prioritization of traffic, as there were many instances where priorities based on economic necessity were in place, e.g. scheduled passenger carrying jets having priority over smaller non-scheduled aircraft).

2.9 The meeting agreed that civil/military coordination was a key enabler to effective ATFM, as was a common language for expressing ATFM measures. It was also noted that aerodrome operators had a role to play in ATFM Collaborative Decision Making (CDM).

2.10 The ATFM/SG/1 meeting closed with no outstanding tasks. Notwithstanding the uncertainty of whether it was necessary for the Steering Group to meet again, the TOR² developed by the meeting included the development and maintenance of the aforementioned Regional ATFM concept and communications documents, encouragement and development of mechanisms for ATFM data gathering, collation and sharing, support for the development of integrated sub-regional ATFM systems, and development of CDM processes.

² The Terms of Reference for ATFM/SG are further discussed in ATFM/SG/2 Working Paper 03.

APANPIRG/24

2.11 IATA's views on the focus of ATFM in the Asia/Pacific Regions were considered by the APANPIRG/24 meeting, including the relatively small FIRs in South East Asia and the corresponding low flight transit times, often in the order of 10 to 20 minutes, and the effects on other FIRs of any ATFM measures or procedures applied. Flow management in the region had until recently been based on local actions restricting volumes rather than a wider network view that optimized available capacity on a sub-regional basis. Network-based ATFM was a key element in ASBU Block Zero, which was identified as a critical element in the Asia/Pacific Seamless ATM Plan.

2.12 It was noted that a centralized ATFM Unit (ATFM) approach was not practical for the Asia/Pacific Region at this time, and a more pragmatic approach would be to concentrate on and support sub-regional multi-State programs.

2.13 The collaborative effort by Hong Kong China, Singapore and Thailand to develop a sub-regional ATFM concept was also considered by the meeting. Recognizing the need to research and develop a CDM/ATFM concept that could be implemented at a sub-regional level, a sub-regional ATFM concept comprised of independent virtual CDM/ATFM nodes supported by interconnected information sharing framework had been developed.

2.14 The ATFM Small Working Group (SWG) discussions at the Combined 3rd Meeting of the South Asia/Indian Ocean ATM Coordination Group and 20th Meeting of the South-East Asia ATS Coordination Group (SAIOCG/3 and SEACG/20, Bangkok, Thailand, 12 – 22 February 2013) resulted in the adoption by APANPIRG/24 of several ATFM-related Conclusions regarding ATFM flow management capacity assessments and information sharing, and the re-convening of the ATFM/SG:

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.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the ATFM-related outcomes of ICAO Asia/Pacific Region meetings, and in particular the recurring nature of the central topics discussed during the course of these meetings;
- b) also note the Conclusions adopted by APANPIRG/24, and the resultant tasks for States and the ATFM/SG; and
- c) discuss any relevant matters as appropriate.

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