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Fifteenth Meeting of the Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG/15)

Bangkok, Thailand, 28 April – 02 May 2025

Agenda Item 6: Regional ATFM Framework, A-CDM Plan and related Guidance Material

**OUTCOMES FROM THE SPECIAL TOPIC MEETING
ON THE FUTURE OF ASIA-PACIFIC ATFM**

(Presented by Hong Kong China, Singapore, Thailand, and CANSO)

SUMMARY

This paper presents a summary of discussion during the Special Topic Meeting (STM) on the Future of Asia-Pacific Air Traffic Flow Management (ATFM) on 13 – 14 March 2025 in Bangkok, Thailand. The STM was held as a forum to discuss how the existing regional ATFM concept and procedures could be improved by and integrated with new ATM concepts and capabilities. The result of the discussion could form the basis for a review of the regional ATFM concept of operations.

1. INTRODUCTION

1.1 Over the years, many States/Administrations in the region have collaborated in the development and implementation of a successful regional ATFM concept of operations, as exemplified by the regular application of the Distributed Multi-Nodal ATFM Network Concept and associated procedures in the region's operational environment and in the consistently growing adoption of ATFM by States/Administrations.

1.2 However, the current regional ATFM concept of operations has not been reviewed for close to a decade while operational and technical landscape in the region has been changing recently. Increasing complexity in the Asia-Pacific airspace has been observed, and operational challenges in the current regional ATFM model have become apparent. Ongoing modernization of ATM concepts with advance capabilities such as SWIM, FF-ICE, and TBO would also undoubtedly impact the way ATFM is to be operated in the region.

1.3 Recognizing the need for a review of the regional ATFM concept of operation to address the existing challenges and prepare for the changing landscape, a part of the core team of Asia-Pacific Cross-Border Multi-Nodal ATFM Collaboration (AMNAC) comprising Hong Kong China, Singapore, Thailand, and CANSO convened in Bangkok on 13 – 14 March 2025 for a **Special Topic Meeting on the Future of Asia-Pacific ATFM** to discuss how the current ATFM operations could be improved and brainstorm ideas on what a revised ATFM concept of operations for the region could look like.

1.4 This working paper summarizes outcomes from the Special Topic Meeting for discussion by the ATFM/SG.

2. DISCUSSION

Meeting Arrangement

2.1 The STM was conducted as a workshop to discuss how existing regional ATFM concept and procedures could be improved and integrated with technological advancements and new concepts. The meeting was participated by ATFM subject matter experts (SMEs) from the ANSPs of Hong Kong China, Singapore, Thailand as well as CANSO. The ANSP of China and IATA were also invited but sent their apologies for being unable to send delegates to the meeting.

2.2 During the workshop, hands-on brainstorming activities with sticky notes and flip charts were utilized. The charts and notes were digitized and can be viewed online via [this Miro Board link](#).

Key Outcomes

2.3 The workshop began with a review of the current ATFM operations in the Asia-Pacific region, based on the *Distributed Multi-Nodal ATFM Network Concept* and the Common Operating Procedures of the *Asia-Pacific Cross-Border Multi-Nodal ATFM Collaboration (AMNAC)* initiative. The review resulted in a set of elements that were functioning well (“What Works”) and elements that could be improved or changed (“What Doesn’t Work”). This is summarized in **Table 1**.

Table 1 - Outcomes from Review of Current Operations

	Clusters	Summary
What Works	Organization	Collaborative environment; flexible participation structure suitable for varying readiness levels
	Method	Ability to implement cross-border GDP
	Acceptability	Growing memberships through strong reputation of the AMNAC initiative
	Technologies	Flexibility in ATFM systems employed, and move toward automated message exchanges
What Doesn’t Work	Education	Gaps in awareness/education resulting in ANSPs obtaining systems that do not fit their needs
	Stakeholder Engagement	Insufficient stakeholder engagement resulting in misunderstanding among operational personnel
	Systems Integration	Lack of integration and connectedness among ATFM systems
	Enhanced Post-Ops Analysis	Disconnect between ATFM post-ops analysis results and capacity enhancement efforts in the region
	Cross-Border Conflicting ATFM Measures	Inability to reconcile conflicting ATFM measures and provide network-wide optimization
	Commitment and Accountability	Lack of commitment and accountability from member ANSPs and stakeholders
	ATFM Service Models	Gaps in adoption of ATFM from APAC States due to affordability of implementing ATFM services
	Support for Other ATFM Solutions	Primary focus on GDP and no procedures for other ATFM solutions
	CDM Methods and Technologies	Gaps in effective region-wide CDM and lack of common situational awareness

2.4 Following the previous discussion, participants worked to identify the most important elements that should be addressed by the new regional ATFM concept of operations. This resulted in a set of key vision statements and guiding principles that would form the basis for the new concept, along with the target of when they could be achieved by based on their complexity levels, technological enablers readiness, and priority levels. These are captured in **Table 2**.

Table 2 - Proposed Vision Statement / Guiding Principles

Areas	Vision Statements / Guiding Principles	“Achieve by” Target
CDM Methods and Technologies	The new ATFM ConOps should enable common situational awareness through timely sharing of information among stakeholders.	Short-Term 2028
ATFM Service Models	The new ATFM ConOps should allow maximum participation through ease of adoption.	Short-Term 2028
Commitment and Accountability	The new ATFM ConOps should include mechanism to ensure high level of commitment from stakeholders.	Short-Term 2028
Other ATFM Solutions	The new ATFM ConOps should work with future ATM operational concepts while providing flexibility of using different ATFM solutions.	Medium-Term 2032
Cross-Border Conflicting Measures	The new ATFM ConOps should reconcile or arbitrate cross-border conflicting ATFM solutions.	Medium-Term 2032
	The new ATFM ConOps should also facilitate regionally optimized ATFM solutions. (Long-term goal)	Long-Term 2035

2.5 From the vision statements / guiding principles, participants also discussed possible solutions to achieve the visions that had been selected. The solutions were discussed in terms of operational enablers, technological enablers, and strategic enablers. These initial solutions were captured in the digitized flip charts and could form a starting point for new regional ATFM concept discussion.

Next Steps

2.6 The meeting discussed about the mechanism to continue developing a new regional ATFM concept of operations. Several factors were considered, including executive support especially from Air Navigation Service Providers (ANSPs), regional coverage, commitment from States/Administrations, and flexibility in the working arrangement. The meeting also noted the information shared at the fourth meeting of the Asia and Pacific ANSP Committee (AAC/4) regarding the formation of the Next Generational ATFM Working Group comprising ANSPs of China, Indonesia, Japan, the Philippines, and Singapore, as well as CANSO.

2.7 In the end, the meeting agreed that an ad-hoc group would be proposed to be established under the ATFM/SG to progress on the review of the current version of the regional ATFM concept of operations and associated operational arrangements and procedures, and on the redesign of the concept leading to a new version of the document. The establishment of the groups with support of both the AAC and the ATFM/SG would enable the leveraging of strengths from both bodies.

2.8 It was recognized that both groups would need to be well-aligned and complementary in their objectives and their working arrangements should allow for close collaboration throughout the work. The meeting also acknowledged the need to pay attention to the Terms of Reference (TOR) of both groups in order to achieve this.

2.9 WP/14 to be presented discusses the proposal to establish an ATFM Concept Design Ad-Hoc Group under the ATFM/SG as aforementioned.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper,
- b) discuss the needs for a review of the regional ATFM concept of operations,
- c) review the outcomes of the STM, particularly the proposed basis for the revised regional ATFM concept of operations,
- d) share ideas on the future regional ATFM concept of operations, and
- e) discuss any relevant matters as appropriate.

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