

International Civil Aviation Organization

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

INDUSTRY'S CONTRIBUTIONS TO REGIONAL ATFM

(Presented by CANSO)

SUMMARY

There are pain points in the way ATFM is done today. There is rising interest in the region to enhance the way ATFM is done. ATM technology companies can work with ANSPs to address some of the ATFM pain points and contribute collaboratively to the process of developing next generation ATFM in APAC. This paper presents opportunities for States to investigate cost efficient ATFM solutions through sharing of information and costs and to develop additional solutions to managing the growing traffic demands in the Asia Pacific.

1. INTRODUCTION

- 1.1 In recent years there have been efforts to better manage the air traffic in the Asia Pacific region. Several groups including ICAO and CANSO have been instrumental in setting up procedures and practices in the region to manage specific areas of congestion through some level of collaboration and shared traffic management initiatives. Whilst this has been beneficial on several levels including proving that States can share and cooperate across FIR boundaries, traffic density and technology changes are enabling additional concepts to be explored, and ATM technology companies can contribute to the process by working closely with ANSPs.
- 1.2 On the region's ATFM development, CANSO has raised the need for the region to start preparing for the next generation ATFM at the last APANPIRG meeting in November 2024. With the rising traffic and increased number of ATFM participants, there will be greater complexities. There is a convergence of technological possibilities, industry solutions, research interests for the next generation ATFM that can deliver quantitative and qualitative enhancements. The region should aspire to full participation from all regional members, and to a more joined-up regional ATFM network. This can be achieved with new digital technology, and the industry is ready to work collaboratively with ANSPs on this journey.

2. DISCUSSION

2.1 There are pain points in the current way ATFM is done in the region which can be addressed by solutions from the industry. Many APAC ATFM participants lack ATFM equipage. They are unable to calculate ATFM solutions for their local situations. They remain as observers or undertake ground delays in response from requests by other ANSPs. Apart from equipage, for those that participate fully, APAC ATFM is focused on local optimisation rather than regional optimisation. There can potentially be multiple ATFM solutions that contradict one another. There is no visibility of regional situations, and hence there does not exist yet a regional ATFM solution.

- 2.2 At the recent Asia Pacific Cross-Border Multi-Nodal ATFM Collaboration (AMNAC) meeting in March 2025, participants have shown a preparedness for next generation ATFM development, including forming various working groups to commence a review of the Concept of Operations (Con Ops) for APAC ATFM. The new version of APAC ATFM Con Ops will be developed taking into account, gained experience, technological advances and new business offerings by the industry that will facilitate changes to enhance these initiatives.
- 2.3 Recent discussion papers and presentations by Canso and industry partners have proposed several different options for solutions to the growing traffic demand and complexities in APAC. Industry providers of systems and data have developed wider ranging technology options and are creating new business models and opportunities for states to collaborate like never before.
- Cloud-based services allow costs to be reduced and shared in a different procurement and ongoing management model than had been previously available. When considering non safety critical services like ATFM and the requirement for greater collaboration between service providers, cloud based shared solutions make a lot of sense. Industry understands that changes to the way equipment and services are procured and used will take time to convince the relevant parties that this is an appropriate solution for them. Trials of the technology can be an effective way to build user confidence in these new solutions and models.
- 2.5 For example, two major providers in the ATFM world, Thales and Aireon are embarking on a technical trial of systems and surveillance that will offer ANSPs an opportunity to evaluate the latest technical advances and to build confidence that these advances will support current and future concept of operations in the region. This trial will support ANSP and vendor participation in the evaluation of what is possible with the new technologies and will foster a partnership between service providers and industry in the development of the next generation of ATFM practices in APAC.
- 2.6 This trial by Thales and Aireon is planned to operate from June to November 2025 and is offered free of charge to participating ANSPs. There will be a small data contribution required from the ANSPs to supply the local AFTN flight plans that will operate in the airspace chosen to run the trial in. If appropriate, there can be an interim report of the trial made to ICAO APAC ATM Subgroup later this year and a final report to this working group on completion of the trial.
- 2.7 CANSO is supportive of such initiatives by the industry as the development of the next generation of APAC ATFM can better be done with close partnership between ANSPs and the industry. Going beyond ATFM solutioning as a cloud service to individual ANSPs, the industry can also contribute to regional reconciliation of conflicting solutions and a more joined-up regional ATFM.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) consider the participation of the industry together with ANSPs in the next phase of the region's ATFM development,
 - b) encourage States to consider the opportunity to trial this offer by the industry and advise your intent to participate to CANSO,
 - c) take advantage of the outcomes of the trial to develop the next generation Con Ops for ATFM in APAC.

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