



ICAO

International Civil Aviation Organization

Sixteenth Meeting of the Asia/Pacific Air Traffic Flow Management and Airport Collaborative Decision-Making Steering Group (ATFM & A-CDM/SG/16)

Bangkok, Thailand, 06 – 10 April 2026

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

ENHANCING REGIONAL ATFM COORDINATION THROUGH REGIONAL COLLABORATIVE OPERATIONAL MECHANISM (RECOM)

(Presented by China, Hong Kong China and Singapore)

SUMMARY

This paper presents the Regional Collaborative Operational Mechanism (RECOM), a voluntary initiative proposed by States and Administrations under the Asia-Pacific ANSP Committee (AAC) to enhance coordination among existing sub-regional ATFM mechanisms in the Asia-Pacific region. It outlines the operational rationale, structural concept, ongoing implementation, and future integration of regional collaborative arrangements. RECOM is intended to harmonize existing sub-regional ATFM mechanisms.

1. INTRODUCTION

1.1 Over the past decade, the Asia-Pacific region has made significant progress in implementing cross-border ATFM operations through several sub-regional collaborative mechanisms, including Asia Pacific Cross Border Multi-Nodal ATFM Collaboration (AMNAC), North Asia Regional ATFM Harmonization Group (NARAHG) and other coordination platforms. These mechanisms have improved transparency, strengthened operational predictability, and facilitated more harmonized implementation of cross-border ATFM measures.

1.2 Notwithstanding these achievements, the scale and complexity of traffic flows in the Asia-Pacific region (APAC) have continued to evolve. Traffic levels have exceeded pre-pandemic levels, route structures have become denser, and the operational environment has grown increasingly interdependent. As traffic traverses across the region, they might be subjected to different ATM measures that are implemented on different collaborative mechanisms with varying modes of operations. The need for enhanced cross-sub-regional situational awareness and coordination has become more salient .

1.3 In parallel, it is observed that various ATFM-related coordination meetings have gradually increased across the region to cater for discussion of operational topics across different sub-regional collaborative mechanisms. While these mechanisms provide valuable platforms, they may also lead to duplicative efforts and increased coordination burden. There is therefore an opportunity to streamline these meetings into an open operationally-focused and inclusive coordination platform to concentrate expertise and improve efficiency.

1.4 In this context, RECOM as a voluntary initiative by States/Administrations has been proposed to enhance coordination across sub-regional ATFM platforms while preserving existing governance arrangements and respecting the rights of States/Administration to discharge their air navigation services responsibilities.

2. DISCUSSION

Emerging Challenges

2.1 The establishment of ATFM collaboration groups since 2014 represented a major milestone in APAC, enabling the transition from isolated point-to-point coordination toward a distributed, network-oriented operational model. Over time, this approach significantly improved transparency and alignment of ATFM measures issued and regional communication.

2.2 However, the operational environment in 2026 reflects a higher level of complexity. Increased traffic density, more long-haul flights, and frequent large-scale weather deviations (LSWD) have created scenarios in which ATFM measures implemented by one ATFM unit may generate cascading impacts across multiple downstream FIRs. Multiple capacity constraints in various FIRs illustrate the systemic interdependence of the regional network.

2.3 While sub-regional mechanisms remain effective within their respective scopes, certain coordination challenges now extend beyond individual sub-regional boundaries. In particular, delayed awareness of upstream measures, duplication of restrictions affecting common traffic flows, and difficulty in aligning implementation timing across coordination clusters may reduce overall network efficiency.

2.4 These developments do not suggest shortcomings in existing mechanisms, but rather reflect the need for the regional network to further evolve, with stronger sub-regional coordination.

Concept Design of RECOM

2.5 RECOM, Regional Collaborative Operational Mechanism is designed to enhance coordination among sub-regional collaborative mechanisms. It is not intended to replace any existing ATFM collaboration concept and mechanism nor to act as a centralized decision-making authority.

2.6 The RECOM concept is guided by several core principles: voluntary participation; full respect for the rights of States/Administrations to carry out their air navigation services responsibilities to make relevant operational decisions; distributed coordination rather than centralized control; transparency of operational information; and a pragmatic, operationally driven implementation approach.

2.7 RECOM aims to enhance visibility of planned measures and traffic flow expectations so that participants may be better positioned to assess potential network interactions before implementation. Serving as a communication platform, RECOM enables the participating parties to better understand differing operational approaches adopted across sub-regions in APAC. For instance, the two working groups, AMNAC and NARAHG, having adopted different approaches to implement traffic management for cross-border flights may require alignment at the information-sharing level to support more effective traffic management.

2.8 It is important to emphasize that RECOM will continue to operate within a distributed, multi-nodal framework, building upon existing operational concepts. This allows different sub-regions to retain their operational characteristics in accordance with their needs while exploring more adaptive coordination approaches.

2.9 Operational insights and outcomes derived from RECOM- initiated activities may be shared with relevant ICAO groups, including the ATFM Concept Design Ad-hoc Group, and reported to ICAO meetings as appropriate. This ensures alignment with ongoing regional developments and existing ICAO frameworks.

Operational Scope and Expected Benefits

2.10 RECOM seeks to harmonize potential conflicts arising from different ATFM measures which affect common traffic flows, thereby promote improved synchronization of ATFM measures across affected FIRs, and enhance cross-border ATFM operations.

2.11 In scenarios involving large-scale rerouting or severe weather deviations, having a broader visibility of the traffic situation in the APAC may enable participating States/Administrations, airlines, and other stakeholders to anticipate capacity impacts beyond their area of responsibility. This harmonized platform would then contribute to improved network resilience and reduced operational uncertainty.

2.12 By providing a shared coordination platform across sub-regions, RECOM may also help reduce duplication of restrictions, limit unintended cascading effects of local measures, and improve predictability for airspace users.

Establishing Coordination Calls as Operational Enabler of RECOM

2.13 Coordination calls serves as the initial step towards supporting the concept of RECOM . Termed as Traffic Flow Coordination Calls (TFCCs), these serve as a structured video-based coordination mechanism that enables participating States and Administrations to conduct regular, real-time operational discussions and collaboration. Through the TFCCs, stakeholders can exchange information on traffic demand, meteorological impacts, and planned ATFM measures, thereby facilitating more timely and coordinated decision-making across borders.

2.14 Weekly TFCCs trials on 15 September 2025 among ANSP from China, Hong Kong China and Singapore, where the three parties took turns to host. The next phase of trials saw the coordination mechanism transiting to daily sessions from 9 February 2026, supplemented by event-triggered calls which had been implemented for the first time on 30 December 2025.

2.15 These regular coordination sessions followed a structured agenda that includes meteorological information sharing, operational briefings on planned ATFM measures, collaborative consultation regarding potential network interactions, and post-operations analysis (POA) identify gaps for continuous improvement.

2.16 Importantly, these coordination calls also serve as an avenue for all participants to identify the type, level of detail, and timeliness of information that needs to be shared on a routine basis. Through continued operational use, participating States/Administrations and stakeholders can better determine what information is most relevant to support collaborative decision-making, thereby helping to define the minimum information required at the regional level to support a common situational picture and effective cross-border coordination.

2.17 Participation in the coordination calls has progressively expanded, reflecting practical value perceived by participating States/Administrations. The growth of participation demonstrates that the initiative responds to operational needs rather than institutional design.

2.18 While current participation primarily involves ANSPs, broader stakeholder engagement may be explored in future phases. Subject to appropriate arrangements, the inclusion of relevant stakeholders such as airspace users could enhance transparency and improve shared situational awareness.

Future Harmonization of Regional ATFM Collaborative Mechanism

2.19 RECOM aims to extend its scope to a broader regional level and harmonize ATFM operations in APAC.

2.20 Looking ahead at the strategic level, there is an opportunity to further enhance efficiency and reduce coordination costs by progressively integrating regional ATFM collaborative mechanisms, e.g. consolidating ATFM coordination meetings. Such an approach could support more efficient use of resources, strengthen alignment among stakeholders, and provide a uniform platform for discussing cross-border ATFM issues at the regional level.

Future Plans for RECOM

2.21 The next phase of RECOM could entail conduct of meeting on a regular basis. This evolution would remain fully voluntary and flexible, allowing States and Administrations to participate based on operational needs, while progressively supporting a more integrated and efficient regional collaboration structure.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) recognize RECOM as a voluntary initiative launched among ANSPs, as initiated in AAC meetings;
- c) provide views on enhancing sub-regional ATFM coordination, including the potential consolidation of multiple coordination meetings in the APAC;
- d) encourage States/Administrations to look for ways to realize RECOM;
- e) discuss any relevant matters as appropriate.

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