International Civil Aviation Organization

Thirty-Sixth Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/36)

Bangkok, Thailand, 24 to 26 November 2025

Agenda Item 3: **Performance Framework for Regional Air Navigation Planning and Implementation**

3.2: **ATM**

ATM/SG/13 OUTCOMES

(Presented by ATM/SG Chair)

SUMMARY

This paper provides a summary of the key outcomes from the Thirteenth Meeting of the Air Traffic Management Sub-Group (ATM/SG/13) and its contributory bodies. One Draft Conclusion and four Draft Decisions are presented for consideration by APANPIRG/36.

Strategic Objectives:

- *A:* ***Safety*** *– Enhance global civil aviation safety*
- *B:* ***Air Navigation Capacity and Efficiency*** *— Increase the capacity and improve the efficiency of the global aviation system*
- *E:* ***Environmental Protection*** *— Minimize the adverse environment effects of civil aviation activities.*

1. INTRODUCTION

1.1 The Thirteenth Meeting of the Air Traffic Management Sub-Group (ATM/SG/13) of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) was held from 25 to 29 August 2025 at the Grand Copthorne Waterfront Hotel, Singapore.

1.2 The Meeting was attended by 131 registered participants from 24 States, two Special Administrative Regions of China and five International and Air Traffic Management-related Organizations, including Australia, Bangladesh, Bhutan, Cambodia, China, Hong Kong China, Macao China, Fiji, India, Indonesia, Japan, Lao People's Democratic Republic (PDR), Malaysia, Maldives, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, the United Kingdom, the United States, Viet Nam, CANSO, IATA, IFALPA, IFATCA and ICAO.

1.3 The ATM Sub-Group met as a plenary throughout the Meeting. The working language of the Meeting was English for all documentation and this Report. A total of 58 Working Papers (WPs), 12 Information Papers (IPs), one flimsy and eight presentations were considered by the Meeting.

1.4 The full ATM/SG/13 meeting report and all associated papers and presentations are available on the ICAO Asia/Pacific (APAC) Regional Office website at:

https://www.icao.int/APAC/meetingdocs?fid=576

1.5 Mr. Kuah Kong Beng, Director (Special Project), Civil Aviation Authority of Singapore presided over the ATM/SG/13 meeting as Sub-Group Chair.

1.6 **DISCLAIMER**: The presentation of material in this report does not imply the expression of any opinion whatsoever on the part of ICAO, APANPIRG or the ATM Sub-Group of APANPIRG concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries

2. DISCUSSION

Summary of Discussion

2.1 ATMSG/13 reviewed progress on air traffic management (ATM) implementation, considered the work of related Sub-Groups and Ad Hoc Groups, and developed draft decisions and conclusions for APANPIRG's consideration.

Regional ATM Progress and Coordination

2.2 The Meeting reviewed regional progress on ATM initiatives in accordance with the *Asia/Pacific Seamless ANS Plan* and the *Global Air Navigation Plan* (GANP). It was noted that traffic levels continued to recover in the post-pandemic period, increasing the demand for efficiency and coordination across the region.

2.3 The Meeting reaffirmed the importance of collaboration among APANPIRG contributory bodies, including the ATFM/SG, SAIOSEACG and related Ad Hoc Groups, to ensure harmonised implementation and information sharing.

2.4 The Meeting concluded that close coordination among the Sub-Groups and Ad Hoc Groups remained essential to achieving harmonised ATM implementation throughout the APAC region.

Ad Hoc Group Activities

2.5 Updates were provided on the activities of several Ad Hoc Groups established under ATM/SG.

a) The Procedures for GNSS and Data Link Disruption Ad Hoc Group finalised its Terms of Reference (ToR). It was clarified that operational mitigation measures would be addressed by this group, while technical issues would remain under the CNS SG.

b) The APAC Data Analytics Group Ad Hoc Group (DAG) analysed data from 18 airports across eight States using eight GANP-aligned KPIs on capacity, efficiency, and predictability. The analysis showed strong links between performance and infrastructure, emphasising balanced optimisation. The DAG plans to add three new KPIs and conduct cross-boundary studies from 2026.

c) The APAC FF-ICE Ad Hoc Group, established in 2023 to enhance regional understanding and implementation of FF-ICE/R1, held its second workshop in March 2025. The group was developing a draft Regional FF-ICE/R1

Implementation Framework covering technical, operational, and monitoring aspects. Key topics included FF-ICE/R1 services, flight plan submission, translation services, and implementation timelines.

2.6 The Meeting supported the continuation of these Ad Hoc Groups and encouraged States and organizations to actively participate and share their expertise.

Air Traffic Flow Management (ATFM) and Airport Collaborative Decision Making (A-CDM)

2.7 The Meeting noted steady progress in multi-nodal ATFM operations, emphasising the need for interoperability, data sharing, and procedural harmonisation across flight information region (FIR) boundaries. Participants acknowledged the continuing role of A-CDM in supporting demand-capacity balancing and improving operational efficiency.

2.8 In connection with the discussions on A-CDM, a proposal was presented to amend the name of the group with a view to facilitating and expediting the implementation of A-CDM activities. It was proposed that the name of the ICAO Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG) be changed to the ICAO Asia/Pacific Air Traffic Flow Management and Airport Collaborative Decision-Making Steering Group (ATFM & A-CDM/SG).

Trajectory-Based Operations (TBO)

2.9 The Meeting discussed the regional progress of TBO implementation. Participants recognised that TBO enhances predictability, efficiency, and environmental performance through improved trajectory management and data exchange.

Contingency and Crisis Management

2.10 The Meeting reviewed the regional contingency planning framework and underlined the importance of maintaining compatibility across FIR boundaries. Coordination between civil and military entities and among adjacent States was emphasised to ensure the continuity of operations.

2.11 The Secretariat presented the status updates on Kabul FIR Contingency Operations. Recognising the need to enhance the airspace capacity to accommodate increased in traffic operating through Kabul FIR, the Kabul FIR Contingency Coordination Team (CCT) had agreed on a phased implementation of the revised Kabul FIR contingency arrangement. In addition, although it took place after the ATM/SG/13, the resumption of the BOBCAT ATFM procedures to support the Kabul FIR contingency arrangement commenced on 4 September.

2.12 The Meeting encouraged States to review and update their national contingency plans in accordance with the Asia/Pacific Regional ATM Contingency Plan, and to share lessons learned and best practices with the Regional Office.

Air Navigation Service Deficiencies

2.13 The Secretariat briefed the Meeting on the status of ATM-related deficiencies recorded under the APANPIRG framework. It was noted that some deficiencies remained unresolved due to pending updates from States.

2.14 The Meeting emphasised the importance of maintaining up-to-date information on deficiencies and ensuring that corrective actions were implemented and reported in a timely manner. Participants agreed that deficiencies provided a valuable indicator of regional implementation progress and highlighted areas requiring targeted assistance or coordination.

2.15 Furthermore, with respect to the deficiency in the area of Search and Rescue (SAR), a new element (SAR Performance Indicator) was added to the annual report beginning this year. Accordingly, for States that did not submit their reports, past data were utilised and adjusted to incorporate the new element. Consequently, the data for all States/Administrations, including those that did not make submissions this year, have been updated.

2.16 States/Administrations were encouraged to review their outstanding deficiencies related to ATM, ATFM, and contingency arrangements, and to coordinate with the ICAO APAC Office in updating the deficiency database prior to the next APANPIRG cycle.

Implementation of Project 30/10 in the Asia/Pacific Region

2.17 The Meeting was informed of the implementation of Project 30/10, which supports ***AN-Conf/14 Recommendation 3.1/1*** to enhance ATM efficiency through the application of reduced longitudinal separation minima. The project aimed to achieve measurable performance improvements within the next 10 years by harmonising regional procedures and technologies.

2.18 The Meeting agreed to establish the APAC Project 30/10 Task Force to develop a regional roadmap and action plan, including analysis of current separation minima, identification of operational enablers, and coordination with adjacent regions. States expressed support for a comprehensive approach addressing automation, equipage, training, and traffic complexity considerations.

Use of Digital Form for Status and Implementation Progress Report

2.19 The Meeting noted that the current reporting of ANS-related plans relied on Microsoft Excel forms submitted via email, which required extensive manual processing and was prone to human errors such as duplication and inconsistent formatting. This created inefficiencies and affected the accuracy of data analysis.

2.20 To improve data collection and streamline monitoring and reporting processes, the Meeting agreed the implementation of a digital reporting system using Microsoft Forms. The initiative aimed to enhance accuracy, consistency, and efficiency in regional reporting.

Advanced Air Mobility (AAM) and Emerging Technologies

2.21 The Meeting was updated on ICAO's ongoing efforts to promote the safe and efficient integration of Advanced Air Mobility (AAM). It was noted that the AAM 2026 Symposium, to be hosted in Bangkok, Thailand, would provide a key platform for promoting regional harmonisation and collaboration among stakeholders.

2.22 The Meeting noted ICAO's continued engagement with States and industry in supporting new aviation technologies and the integration of emerging airspace users into the ATM system.

Election of Chairperson

2.23 Mr. Vincent Hwa, Director of Air Traffic Services, Civil Aviation Authority of Singapore, was elected as the succeeding Chairperson of the ATM Sub-Group of APANPIRG with unanimous support.

Summary

2.24 The Meeting recognised the continued progress achieved across key areas of ATM implementation, including ATFM, TBO, and contingency planning. It acknowledged the valuable contributions of Ad Hoc Groups, reaffirmed the importance of addressing ATM-related deficiencies, and emphasised sustained regional collaboration to achieve seamless and harmonised air traffic management in the APAC region. The detailed information on each Working Paper (WP) is presented below.

2.25 The Meeting expressed appreciation to Mr. Kuah Kong Beng for his relentless support and contributions to the ATM/SG. His exemplary leadership to ATM/SG had laid a remarkable cornerstone to the development of aviation industry for the APAC region. The Meeting wished Mr. Kuah all the best in his next chapter of wonderful life.

ANS USOAP Update

2.26 The Secretariat provided information on the ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA). The paper provided update of the 2024 edition of the USOAP CMA Protocol Questions (PQs), and annual update of the regional USOAP Air Navigation Services (ANS) implementation status.

2.27 A comparison of the PQs in the 2020 and 2024 editions and number of changes for the ANS audit area were shown in the **Table 1**.

Table 1: A Comparison of the PQs in the 2020 and 2024 Editions and Changes in ANS Audit Area

<table>
<tr><th></th><th>Area</th><th>Number of 2020 PQs</th><th colspan="3">Number of 2024 PQs</th></tr>
<tr><td>1</td><td>LEG</td><td>23</td><td colspan="3">23</td></tr>
<tr><td>2</td><td>ORG</td><td>13</td><td colspan="3">13</td></tr>
<tr><td>3</td><td>PEL</td><td>93</td><td colspan="3">100</td></tr>
<tr><td>4</td><td>OPS</td><td>126</td><td colspan="3">136</td></tr>
<tr><td>5</td><td>AIR</td><td>186</td><td colspan="3">198</td></tr>
<tr><td>6</td><td>AIG</td><td>84</td><td colspan="3">84</td></tr>
<tr><td rowspan="5">7</td><td rowspan="5">ANS</td><td rowspan="5">122</td><td rowspan="5">128</td><td>New</td><td>11</td></tr>
<tr><td>Deleted</td><td>5</td></tr>
<tr><td>Revised</td><td>108</td></tr>
<tr><td>Merged</td><td>0</td></tr>
<tr><td>No Change</td><td>9</td></tr>
<tr><td>8</td><td>AGA</td><td>143</td><td colspan="3">153</td></tr>
<tr><td>9</td><td>SSP</td><td>0</td><td colspan="3">16</td></tr>
<tr><td colspan="2">Total</td><td>790</td><td colspan="3">851</td></tr>
</table>

2.28 The Meeting confirmed that the APAC region EI (65.40%) was lower than the global average (66.44%) according to the summary of the global average level of ANS-related EI for the 187 States that had been audited or received a USOAP activity, as of 31 July 2025. **Figure 1** illustrated the EI scores for ANS-related PQs of the 37 APAC States that had been audited or received USOAP activity:

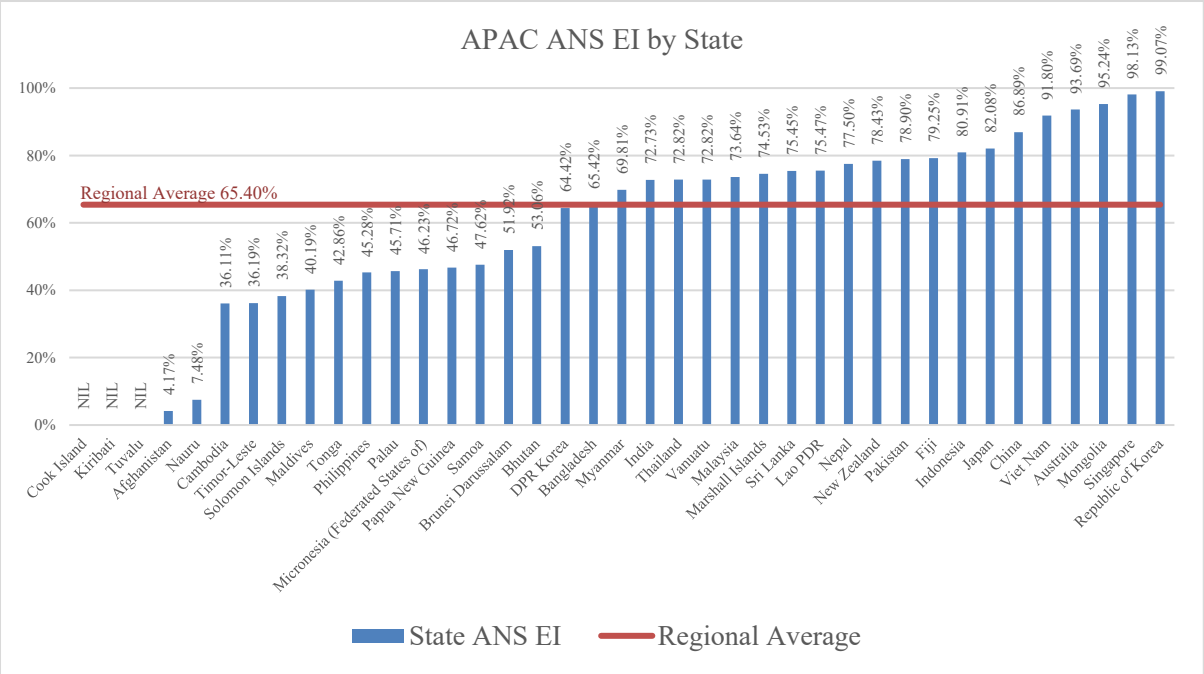

Figure 1: USOAP ANS EI Comparisons by State (September 2024)

Updating the Asia/Pacific Seamless ANS Plan

2.29 The Meeting was presented with a proposal to amend the implementation priority of the Navigation Systems (NAVS) Block 0 elements in the *Asia/Pacific Seamless ANS Plan Version 4.0*, and an update on the APAC Seamless ANS Reporting Tool. It was noted that discrepancies existed between the priorities assigned in the published Plan (Priority 2 for NAVS-B0/1 to B0/4) and those recommended by the CNS-related Ad Hoc Group (Priority 1). Following discussions at the GBAS/SBAS ITF/7 Meeting in May 2025, the ICAO Secretariat presented a Working Paper to the Twenty-Ninth Meeting of the Communications, Navigation and Surveillance Sub-Group (CNS SG/29, June 2025), which reviewed and agreed on revised priorities for the NAVS elements.

2.30 The Meeting adopted the following Draft Conclusion to update the *Asia/Pacific Seamless ANS Plan*, for APANPIRG/36's consideration.

Draft Conclusion ATM/SG/13-1: Corrigendum to the *Asia/Pacific Seamless ANS Plan Version 4.0*

That,

1. the corrigendum to the *Asia/Pacific Seamless ANS Plan Version 4.0* at **Appendix A** be adopted, and uploaded to the ICAO Asia/Pacific Regional Office webpage to supplement the existing version;
2. the ICAO Secretariat to update the Asia/Pacific Seamless ANS Reporting Tool to reflect these changes; and
3. States are urged to update their national air navigation plan (NANP) to align with the revised *Asia/Pacific Seamless ANS Plan Version 4.0*.

2.31 In addition, the Meeting adopted a Draft Decision related to the update of the ATM/SG Terms of Reference, for consideration by APANPIRG/36. The revision aligned the Terms of Reference with the current title "Asia/Pacific Seamless Air Navigation Service (ANS) Plan," replacing "ATM Plan" to better reflect all ANS domains, including aerodromes, meteorology, and SAR.

Draft Decision ATM/SG/13-2: Update Air Traffic Management Sub-Group of APANPIRG (ATM/SG) Terms of Reference

That, the updated ATM/SG Terms of Reference at **Appendix B** be adopted.

FIT-Asia and RASMAG Outcomes

2.32 The Fifteenth Meeting of the FANS Interoperability Team – Asia (FIT-Asia/15) and the Thirtieth Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/30) were held in Bangkok, Thailand, from 24 to 27 June and 14 to 17 July 2025, respectively.

2.33 The details will be further discussed under Agenda Item 3.3, ensuring a comprehensive review of the outcomes.

CNS, AOP, MET Outcomes

2.34 Reports relevant to the ATM Sub-Group were presented by the CNS, AOP, and MET Sub-Groups. Detailed information was not included in this report, as it was incorporated in the respective reports of those Sub-Groups to APANPIRG.

Application of ATC Separation Standards

2.35 The Secretariat provided information on the Seamless ATM survey conducted to determine which Air Traffic Control (ATC) separation minima was being applied within the APAC Region. The responses to the latest survey increased slightly from 16 to 18 (compared to last reporting period).

2.36 The survey measured the minimum horizontal separation applied within State/Administration's FIR in Category R, Category S and Category T airspaces[1].

2.37 In the analysis there were 11 States that utilised more than 5 NM in Category S airspace and three States that utilised more than 5 NM in Category T airspace. The highest non-compliant Transfer of Control (TOC) points, belong to Category S → Category S TOC points. Even with surveillance coverage, the separation minimum of more than 10 NM was currently implemented at TOC points in the APAC region.

Use of Digital Form for Status and Implementation Progress Report

[1] Asia/Pacific Seamless ANS Plan paragraph 1.4:

> Category R: remote en-route airspace with Air Traffic Services (ATS) HF or CPDLC communications and outside the coverage of ground-based surveillance coverage; or
>
> Category S: serviced (or potentially serviced) en-route airspace – by direct (not dependent on a Communication Service Provider (CSP) ATS communications and surveillance; or
>
> Category T: terminal operations serviced by direct ATS communications and surveillance.

2.38 The Meeting noted that the implementation status of ANS-related plans had been reported using Microsoft Excel-based forms submitted via email, including those for AIM, ATFM, ATM Contingency, and SAR. This manual process required extensive consolidation work by ICAO after the annual 28 February deadline and was prone to human errors such as duplicate entries and inconsistent formatting, affecting data accuracy and analysis.

2.39 To streamline data collection and improve efficiency, the Secretariat proposed replacing paper and Microsoft Excel-based forms with digital reporting forms. Relevant meetings, including ATFM/SG/15, APSAR/WG/10, and AAITF/20, agreed on draft conclusions supporting the use of digital forms. The ATM/SG subsequently adopted ***Conclusion ATM/SG/13-3: The Use of Digital Form to Collect Annual Regional ANS-related Monitoring and Reporting Data***, approving Microsoft Forms as the primary tool for collecting annual regional ANS-related data. The relevant reporting files on the ICAO APAC Office eDocuments webpage would be revised accordingly.

Progress of the APAC Data Analytics Ad Hoc Group

2.40 The APAC Data Analytics Group Ad Hoc Group (DAG) presented its second report to the ATM/SG covering the analysis for annual performance data from 18 airports across eight States/Administration and focused on eight KPIs as detailed below.

Table 2: KPIs Reported by ATM/SG DAG

KPA	KPI	Variant	GANP KPI Code
Capacity	Airport peak capacity	Departure	KPI09-D
		Arrival	KPI09-A
Capacity	Airport peak throughput	Departure	KPI10-1D
		Arrival	KPI10-1A
Efficiency	Additional taxi-out time	Advanced	KPI02-2
Efficiency	Additional taxi-in time	Advanced	KPI13-2
Predictability	Departure punctuality	± 15 mins	KPI01-2A
Predictability	Arrival punctuality	± 15 mins	KPI14-2A

2.41 The analysis indicated that airport performance was closely linked to infrastructure and operational environments, with clear interdependencies observed across Key Performance Areas (KPAs). These findings highlighted the importance of a balanced optimisation approach, ensuring that improvements in one area supported progress in others.

2.42 To further advance regional performance measurement, the Data Analytics Group (DAG) planned to expand its analysis to include three additional GANP KPIs—Additional Time in Terminal Airspace (KPI08), Airport Throughput Efficiency (KPI11), and Additional Fuel Burn (KPI16)—with implementation targeted for 2026. The DAG also intended to undertake cross-boundary studies and encouraged greater participation from States to share best practices and strengthen data-driven ATM performance across the region.

ATM and Airspace Safety Deficiencies List

2.43 ICAO presented the list of APANPIRG Air Navigation Deficiencies in the ATM and Airspace Safety fields. The ATM/SG/13 recommended the following change proposals for consideration by APANPIRG/36 under Agenda Item 4:

a) non-compliance with Annex 2 requirements for designation of restricted areas:

- Australia's Deficiency deleted.

2.44 The Meeting was informed that ICAO continued coordination with the Maldives to resolve the deficiency related to the Aeronautical Information Services (AIS) Quality Management System (QMS), with further discussions expected at the AAITF meeting in 2026. Regarding the deficiency on non-compliance with ICAO PANS-ATM (Doc 4444), Section 11.4, it was noted that ATFM/SG/15 had determined that additional data was required to assess the missing departure (DEP) messages for Maldives. ICAO planned another round of data collection later in 2025, with results to be reviewed at the next ATFM/SG meeting in 2026.

2.45 After the ATM/SG/13 meeting, ICAO APAC Office received supplementary evidence from Thailand to support the implementation the *Asia/Pacific Air Navigation Plan Vol II, Part I, Section 3 – Specific Regional Requirements* for implementation of the *Asia/Pacific Search and Rescue (SAR) Plan*. The ICAO Secretariat and the Chairperson of the APSAR/WG had reviewed the evidence submitted, and in accordance with the provisions of the APANPIRG Handbook, proposed the removal of the following deficiency for consideration by APANPIRG/36. Further details on this matter would be presented under Agenda Item 4.

a) Non-implementation of the *Asia/Pacific Air Navigation Plan Vol II, Part I, Section 3 – Specific Regional Requirements* for implementation of the *Asia/Pacific Search and Rescue (SAR) Plan*:

- Thailand (implementation status = 92% – Robust).

Regional Air Navigation Plan Update

2.46 ICAO presented an update on the progress of incorporating coordinate data for APAC FIRs and Search and Rescue Regions (SRRs) in the Regional Air Navigation Plan (ANP) Volume I. States were reminded that Doc 9673 did not provide a legal description of the FIRs in the first place, it was very important for States to understand that this process of checking, alignment and validation is crucial if they would like a formal basis for their FIRs.

2.47 The exercise to review the ANP with FIR and SRR coordinates was based on ICAO historical records and not new proposals for change. The Proposal for Amendment (PfA) process for FIRs and SRRs were the same process of approval in ANP Volume I (approval of the Council). Some States had submitted major amendments to their FIRs during the review process. These would only be considered if the proposed change only affected national airspace and not the neighbouring airspace, or if all parties agreed with the change proposal before submission to ICAO.

2.48 The Meeting noted 30 FIRs and 15 SRRs PfAs were approved by the President of the Council and incorporated in the ATM Table I-1 of the ANP Volume I, and that there were issues in some areas affecting the resolution of FIRs/SRRs affecting progress and urged States/Administrations to provide updates of any bilateral/trilateral discussion of unresolved FIR boundaries.

Implementation of Project 30/10 in Asia/Pacific Region

2.49 The Secretariat presented a proposal for the regional adoption of Project 30/10 in the APAC region, aimed to improve ATM by using more efficient longitudinal separation minimum between aircraft, in accordance with a ***AN-Conf/14 Recommendation 3.1/1: Project 30/10 – Optimized implementation of longitudinal separation minima***.

2.50 Acknowledging that further progress was needed to fully realise the objectives of Project 30/10 in the APAC region, the Meeting concurred on the necessity of developing regional action plans harmonised with adjacent regions. The Meeting was clarified that this Task Force would be responsible for developing the regional roadmap for implementing Project 30/10 in the APAC region. This roadmap would serve as the primary reference document for APAC States/Administrations, as well as the SAIOSEACG, BOBTFRG and SCSTFRG.

2.51 The Meeting subsequently endorsed the following Draft Decision for consideration by APANPIRG/36:

Draft Decision ATM/SG/13-13: Establishment of APAC Project 30/10 Task Force

That, the APAC Project 30/10 Task Force be established to develop the Asia/Pacific regional roadmap that include, but not limited to, the following tasks:

a) a further comprehensive analysis of the current separation minima applied within the Asia/Pacific Administrations and between adjacent FIRs;

b) the identification of technical and operational enablers necessary for the successful implementation of Project 30/10, including reviewing and updating regional documents;

c) collaboration with adjacent regions to achieve harmonized implementation of Project 30/10; and

d) an assessment of training needs for controllers to effectively apply more efficient separation minima.

Air Traffic Flow Management Steering Group Outcomes

2.52 The Meeting was presented with the outcomes of the Fifteenth Meeting of the Air Traffic Flow Management Steering Group (ATFM/SG/15), held in Bangkok, Thailand, from 28 April to 2 May 2025, together with updates on sub-regional cross-border ATFM programmes. The Meeting noted the 2025 ATFM Implementation Status, under which nine States and Administrations—Australia, Cambodia, China, Hong Kong China, Japan, the Republic of Korea, Singapore, Thailand, and the United States—were assessed as having robust implementation. It was further noted that Australia had revised its implementation status from Tier A to Tier B, as it would no longer participate in cross-border ATFM operations.

2.53 The Meeting reviewed progress in regional ATFM collaboration, including the Asia/Pacific Cross-Border Multi-Nodal ATFM Collaboration (AMNAC), the North Asia Regional ATFM Harmonization Group (NARAHG), and the reactivation of the Bay of Bengal Cooperative ATFM System (BOBCAT) to manage traffic congestion resulting from the Kabul FIR contingency. The Meeting also noted updates on the development of the FIXM Version 4.3 Extension to support cross-border ATFM and A-CDM integration and endorsed the regional change management process for future FIXM version revisions in a SWIM environment.

2.54 The Meeting further noted the establishment of the APAC ATFM Concept Design Ad Hoc Group, comprising 11 States/Administration, CANSO, IATA, and IFATCA, tasked with developing a revised Regional ATFM Concept of Operations for consideration by ATFM/SG/17 in 2027. Finally, the ICAO Secretariat briefed the Meeting on the APAC Common SWIM Information Services and invited States to provide comments on the ATFM/A-CDM Integrated Service and Traffic Flow Status Service components.

2.55 ATM/SG/13 agreed to the following Conclusions:

Conclusion ATM/SG/13-4: Addition of Appendix to the Asia/Pacific Regional Framework for Collaborative ATFM

Conclusion ATM/SG/13-14: Normalization of Asia/Pacific Regional A-CDM Monitoring and Reporting Scheme

Conclusion ATM/SG/13-5: Change Process of the FIXM Version Used for Asia/Pacific Cross-Border Operational ATFM System-to-System Information Exchange in SWIM

Proposal for Modification of Name of ATFM Steering Group to ATFM & A-CDM Steering Group

2.56 The Meeting was informed that the Asia/Pacific Airport Collaborative Decision Making Task Force (APA-CDM/TF), which operated from 2017 to 2020, had successfully completed its assigned tasks, including the development of the Asia/Pacific A-CDM Implementation Roadmap, and was subsequently dissolved through APANPIRG Decision 32/1. The Meeting further noted that A-CDM-related activities were now under the purview of the ATFM/SG. In view of the limited participation of airport and A-CDM experts in ATFM/SG meetings and to better reflect its expanded scope, it was proposed and fully supported by ATFM Points of Contact from APAC States and Administrations to rename the group as the ICAO Asia/Pacific ATFM and A-CDM Steering Group (ATFM & A-CDM/SG)

2.57 The ATM/SG discussed and adopted the following Draft Decision for consideration by APANPIRG/36.

Draft Decision ATM/SG/13-11: Modification of Name of ATFM Steering Group (ATFM/SG) to ATFM and A-CDM Steering Group (ATFM & A-CDM/SG)

That,

1. the name of the ICAO Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG) changed to the ICAO Asia/Pacific Air Traffic Flow Management and Airport Collaborative Decision Making Steering Group (ATFM & A-CDM/SG); and
2. the Terms of Reference (TOR) be amended to reflect the Steering Group name change (**Appendix C**).

Initiative on Establishing a Collaborative Operational Mechanism for Regional Air Traffic Flow Management in the Asia/Pacific Region

2.58 The Meeting was presented with an initiative led by China, on behalf of several contributing States and Administrations, to establish a collaborative operational mechanism for regional ATFM within the Asia/Pacific Regional Framework for Collaborative Air Traffic Flow Management. The mechanism aimed to address coordination inefficiencies and information latency through regular and ad hoc web-based coordination, including ATFM calls, with plans for operationalisation by September 2025. The Meeting recognised that the initiative's objectives were aligned with existing sub-regional programs such as AMNAC and NARAHG, and appreciated the collaborative spirit behind the proposal.

2.59 The Meeting supported participation from service providers and airspace users, while emphasising the need to avoid duplication of efforts and to ensure that the initiative complements ongoing regional ATFM programs and contributes to harmonisation efforts. China clarified that participation in the mechanism would be voluntary and would focus on less addressed regions for ATFM. The Meeting recommended that participating States and Administrations present details of the mechanism at ATFM/SG/16 for further discussion and report the outcomes to ATM/SG/14.

Outcomes of ICAO APAC Airport and Airspace Capacity Assessment Workshop

2.60 The Meeting was informed that the ICAO APAC Airport and Airspace Capacity Assessment Workshop was hosted by AirNav Indonesia in Yogyakarta, Indonesia, from 2 to 5 June 2025. The event brought together 87 participants from 12 APAC States/Administrations, along with representatives from four international organizations, to share knowledge and best practices on assessing airport and airspace capacity. Participants expressed appreciation for the valuable insights gained and encouraged ICAO to organise similar workshops to further support APAC States/Administrations in capacity assessment and management.

2.61 The Meeting noted that ICAO had presented a draft Regional Guidance for Assessment of Airport Capacity and Airspace Capacity during the workshop to assist APAC States/Administrations in conducting standardised assessments. The draft guidance would be further refined in consultation with ATFM Points of Contact from APAC States and Administrations, with an updated version to be presented at the Sixteenth Meeting of the ATFM Steering Group (ATFM/SG/16) in April 2026.

Challenges Arising from Airspace Restructuring in Japan and their Solutions

2.62 The Meeting was presented with Japan's experience and challenges in its airspace restructuring project within the Fukuoka FIR from 2020 to 2025. Following the transition, the FIR was divided into high-altitude sectors (above FL335) managed by the Fukuoka ACC, low-altitude sectors for eastern Japan managed by Tokyo ACC, and low-altitude sectors for western Japan managed by Kobe ACC. After the restructuring, the FIR experienced delays and flow control issues in the upper sectors due to increased traffic levels and longer occupancy times, driven by smaller, more frequent aircraft and improved aircraft performance allowing higher cruising altitudes.

2.63 To address these challenges, simulations were conducted, which showed that raising the ceiling altitude for the lower sectors to FL415 would eliminate the need for flow control in upper sectors. Following this adjustment, both the number of flights subject to flow control and total delay time significantly decreased, despite overall traffic growth. Japan also shared its plan to introduce dynamic sectorisation in alignment with the CARATS 2040 initiative, which includes altitude and horizontal boundary adjustments through Dynamic Airspace Configuration (DAC).

Preparation for ATC Operation of the Fifth Runway at Guangzhou Baiyun International Airport

2.64 The Meeting was presented with China's update on the final stage of the Guangzhou Baiyun International Airport expansion project, which included the construction of a fifth runway and Terminal 3, with five-runway operations planned to commence in October 2025. China introduced new runway allocation methodologies designed to enhance surface and airborne operational efficiency, including a Stand-Based Strategy to minimise taxi distances and a Transfer Point-Based Strategy to reduce in-air conflicts.

2.65 The Meeting was informed of ongoing coordination between China and Guangzhou Airport to optimise Instrument Landing System (ILS) protected areas and Type B runway holding positions within regulatory frameworks, aiming to shorten taxi distances and prevent runway incursions. China also outlined prospective runway operation modes for post-expansion, including configurations with three runways for take-off and three for landing, which are expected to significantly enhance airport capacity and operational efficiency.

Terms of Reference and Progress Update of the ICAO Asia/Pacific Flight and Flow Information for a Collaborative Environment (FF-ICE) Ad Hoc Group

2.66 The Meeting was presented with the draft Terms of Reference (TOR) and progress update of the Asia/Pacific Flight and Flow Information for a Collaborative Environment (APAC FF-ICE) Ad Hoc Group, including outcomes from its second workshop held in March 2025 and the development of the draft Regional FF-ICE/R1 Implementation Framework. Established in 2023, the Ad Hoc Group had been actively promoting regional understanding of FF-ICE and advancing implementation discussions, and the Meeting agreed to the proposed TOR to support the Group in achieving its objectives, through ***Decision ATM/SG/13-15: Adoption of APAC FF-ICE Ad Hoc Group Terms of Reference***.

2.67 The Meeting was informed that the second workshop of the APAC FF-ICE Ad Hoc Group was held at the ICAO APAC Office in Bangkok, Thailand, from 18 to 20 March 2025, where a proposed regional implementation framework addressing FF-ICE/R1 implementation issues was discussed, covering both technical and operational aspects relevant to the APAC region. The workshop achieved consensus on key elements to be included in the framework, such as FF-ICE/R1 services to support the FPL2012 sunset, flight plan submission and dissemination, translation services, filing status, implementation timelines, and monitoring. The Meeting noted that the third workshop of the Ad Hoc Group was planned for Q4 2025 to review the draft regional implementation framework. It was expected that following the endorsement of the regional implementation framework, the Ad Hoc Group could be dissolved and replaced with an APAC FF-ICE/R1 Implementation Task Force, to support FF-ICE/R1 implementation efforts in the region.

Progress of the Asia-Pacific Trajectory-Based Operations Pathfinder Project

2.68 The Meeting was informed of the progress of the Asia-Pacific (APAC) Trajectory-Based Operations (TBO) Pathfinder Project, which involves the ANSPs of China, Hong Kong China, Indonesia, Japan, New Zealand, the Philippines, Singapore, Thailand, the United States, and Viet Nam, together with CANSO and IATA. Three workgroups were established under the project: WG1 on Learning and Advocacy, WG2 on TBO Trials and Capability Development, and WG3 on Benefit Analysis and the TBO Roadmap, each focusing on specific objectives and deliverables to advance TBO implementation in the region.

2.69 The Meeting recognised that the successful realisation of TBO depends on the effective interaction of its various components and emphasised the importance of a harmonised approach to defining, developing, and deploying TBO across the region. It was noted that the outcomes and activities of the three workgroups would be shared through ICAO and other international forums to support regional and global TBO advancement.

TBO Validation Achievements of China

2.70 The Meeting was informed of China's progress in advancing Trajectory-Based Operations (TBO) following the successful completion of the first Initial 4D Trajectory (i4D) trial flight in the APAC region in March 2019. A series of TBO validations were conducted in 2022 within the Shanghai Terminal Manoeuvring Area, focusing on precise time control through integrated air-ground coordination, intent sharing, runway misalignment prevention, and data link ATC services. Further development included the establishment of a dual-aircraft TBO simulation platform in 2024, integrating flight simulators, ATC automation, and data link systems. A validation conducted on 30 December 2024 confirmed the technical feasibility of TBO using existing avionics capabilities.

2.71 China outlined its TBO operational strategy covering the entire flight cycle, proposing a hybrid model that combines TBO and non-TBO operations during the transition phase. This model is supported by current avionics and air-ground data link networks such as CPDLC via ACARS, with upgrades planned for future capabilities. The Meeting encouraged China to share its findings and lessons learned with a wider audience through relevant ICAO forums to support broader regional implementation and knowledge exchange.

Development of Trajectory-Based Operations (TBO) Roadmap for Inclusion into the APAC Seamless ANS Plan in support of a Harmonised Implementation in APAC

2.72 The Meeting was presented with a proposal for an Asia-Pacific (APAC) Trajectory-Based Operations (TBO) Roadmap to be incorporated into the *Asia/Pacific Seamless ANS Plan* to guide States/Administrations in implementing TBO. The roadmap, aligned with ICAO technical panel work and related regional initiatives such as SWIM and FF-ICE, provides a structured, incremental approach to achieving a fully implemented TBO environment while ensuring regional and global interoperability.

2.73 The Meeting noted that the roadmap would initially focus on Levels 1 and 2 of the ICAO ATM Requirements and Performance Panel (ATMRPP) frameworks and could be added as a new chapter in the *Asia/Pacific Seamless ANS Plan*, with relevant ASBU elements integrated into the Performance Improvement Plan. To align with the SWIM and FF-ICE/R1 implementation targets of 2030 and 2032, the Plan would be extended to include Phase VI in November 2031. The Meeting recognised the proposal as a timely and harmonised pathway to guide regional TBO implementation consistent with global developments.

2.74 The Meeting agreed to ***Conclusion ATM/SG/13-6: TBO Related Revisions for the Asia/Pacific Seamless ANS Plan***.

Mitigation Measures to Avoid Confusing Callsigns in Indian Airspace

2.75 The Meeting was presented with India's paper highlighting the causes and impacts of call sign confusion and outlining initiatives undertaken in India to address the issue. The paper encouraged ANSPs in the APAC region to explore upgrading ATM automation systems to handle alphanumeric call signs, promote regional and global coordination to harmonize their use, employ artificial intelligence (AI) and/or machine learning (ML)-based tools to detect and resolve similar call signs, establish reporting mechanisms, and conduct regular training and awareness programs for operational personnel. The Meeting also noted recommendations for airlines, ACI, CANSO, IATA, and other international bodies to adopt clear alphanumeric call signs, utilise AI tools to prevent conflicts, and provide training to flight crews to enhance communication clarity.

2.76 The Meeting expressed strong support for the initiative, acknowledging that call sign confusion was a shared challenge among many APAC States/Administrations. Additional mitigation measures were shared by the Philippines and Viet Nam, including the use of suffixes, flight direction-based numbering, and in-house detection systems. India clarified that current ATC systems could only identify identical, not similar, call signs. ICAO recalled the still-valid ***Conclusion APANPIRG/31/11*** on the Alphanumeric Call Sign Initiative, which encourages leading ANSPs and aerodrome operators, in coordination with CANSO and ACI, to conduct trials and develop an APAC-wide project to advance the implementation of alphanumeric call signs.

Improving the Effectiveness of Pilot – Controller Communication by Collaboration between the Operators and ANSPs

2.77 The Meeting was informed of ongoing collaboration between IATA and the Air Traffic Management Bureau (ATMB) of the Civil Aviation Administration of China (CAAC) to address pilot-controller communication issues. Joint initiatives included an operator survey on ATM operations during thunderstorms, a review of emergency response phraseologies, and a workshop held at the IATA Beijing Office from 14 to 15 November 2024 covering topics such as operations during thunderstorms, flexible airspace use, runway safety, and operational efficiency.

2.78 The Meeting noted that IATA and CAAC/ATMB planned to renew their memorandum of understanding in 2025 to further cooperation through future workshops and surveys. It was suggested that details of the operator survey and workshop outcomes be shared, and that future workshops include participation from controllers of other APAC States/Administrations.

Spectrum Resilience: Balancing Spectrum Efficiency with Aviation Safety

2.79 The Meeting was informed by IATA of the growing risks posed by emerging telecommunication technologies such as 5G and 6G, which may interfere with critical aircraft systems like radio altimeters. IATA emphasised that interference-free access to aeronautical spectrum remains essential for flight safety and operational efficiency and highlighted the disparity between the rapid innovation cycle of the telecommunications industry and the slower pace of avionics development. More resilient equipment would take years to be introduced, creating a potential safety gap, while differing national regulations were viewed as insufficient for ensuring consistent protection globally.

2.80 IATA reported that a global strategy was being developed to mitigate the impacts of non-aeronautical telecommunications activities on aviation frequencies, emphasising the need to communicate the economic importance of aviation to relevant authorities. IATA requested ICAO's continued support through workshops with States, aviation organisations, and industry. Singapore and India noted that spectrum management decisions often occur in non-aviation forums, such as the World Radiocommunication Conference, where aviation needs may not be fully considered. The Secretariat encouraged States' experts to participate actively in ICAO and ITU meetings, including the Frequency Spectrum Management Panel (FSMP) and the Asia/Pacific Spectrum Review Working Group, to enhance global and cross-domain awareness.

Trial Operation of Data Link ATC Services in Middle-South Regional Air Traffic Management Bureau of CAAC

2.81 China briefed the Meeting on trial operations of data link ATC services in the Middle-South Region of China aimed at reducing voice communication congestion and improving operational efficiency. Since 2019, several trials had been conducted for information services such as Landing Runway and Arrival Procedure messages for Guangzhou Baiyun International Airport and Weather Deviation Information for Zhengzhou ACC. The trials confirmed reliable and stable communication performance, resulting in over 70,000 minutes of saved voice communication through more than 450,000 data link messages.

2.82 While the trials were well received by airlines, challenges remained, including latency issues, limited aircraft equipage with next-generation data link systems such as CPDLC, and the high cost of data communications that could hinder broader implementation.

GNSS Radio Frequency Interference (RFI)

2.83 The Meeting was informed by IATA of the growing safety and operational risks associated with GNSS RFI, which had become increasingly frequent, particularly in geopolitically unstable regions. Such interference was reported to disrupt navigation accuracy, situational awareness, and ATM, leading to diversions, reroutes, and higher workloads for pilots and controllers. The Meeting noted IATA's call for a coordinated approach to mitigate GNSS RFI through enhanced monitoring, source identification, regulation of jamming devices, stronger spectrum management, and the development of more resilient avionics, alongside improved contingency planning, training, and investment in alternative positioning, navigation, and timing (APNT) technologies.

2.84 The Meeting further noted ICAO's ongoing efforts to address GNSS RFI through an Ad Hoc Group established in 2024 to collect disruption data, enhance reporting procedures, and promote regional information sharing. Hong Kong China informed the Meeting of its work on infrastructure assessment and alternative navigation methods using DME/DME/IRU, stressing the need for practical regional solutions and improved cross-border cooperation. CANSO also shared guidance on the Minimum Operational Network (MON) approach to ensure contingency capability, with the Meeting recognising that collaboration among neighbouring ANSPs under the ICAO framework would be essential to maintain navigation resilience across the region.

Impact Assessment of GNSS RFI

2.85 Pakistan briefed the Meeting on the importance of assessing the impact of GNSS RFI at both aerodrome and airspace levels, emphasising the need for operators and ANSPs to evaluate existing infrastructure, conduct gap analyses, and identify mitigation measures. A case study at Karachi aerodrome illustrated how conventional CNS systems could enhance resilience against GNSS interference. The Meeting recognised that such assessments help States and ANSPs evaluate the robustness of the MON, strengthen contingency procedures, and anticipate risks, while complementing formal safety risk assessments.

2.86 The Meeting encouraged the sharing of best practices, regional cooperation, and ICAO's support in providing guidance on impact and safety assessments related to GNSS RFI. It was noted that a related seminar had been conducted in April 2025, and a follow-up workshop could be organised in coordination with the CNS Section after the completion of the Procedures for GNSS and Data Link Disruption Ad Hoc Group's work, with its outcomes to be shared among stakeholders.

Progress of the Procedures for GNSS and Data Link Disruption Ad Hoc Group

2.87 The Meeting recalled the establishment of the Procedures for GNSS and Data Link Disruption Ad Hoc Group under ATM/SG/12, tasked with collecting disruption data, developing procedures, and establishing reporting and information-sharing mechanisms. The Group, comprising SMEs from ten States and three international organizations, had developed a draft TOR, but its first plenary meeting was postponed due to the unavailability of the initial Rapporteur. Following consultations, Singapore agreed to assume the role of Rapporteur.

2.88 Recognising the ongoing challenges posed by GNSS and data link disruptions, the Meeting agreed to expedite the Group's work, finalise its modalities and schedule before ATM/SG/14 in 2026, and encouraged additional States and Administrations to participate and contribute.

Requirement to Amend Transition Altitude Establishment Criteria in PANS-OPS Volume III (Doc 8168)

2.89 Pakistan highlighted the need to review the criteria for establishing transition altitude in PANS-OPS (Doc 8168), noting that the existing provisions dated from the 1960s and that many APAC States had adopted higher transition altitudes to enhance safety and operational efficiency. Low transition altitudes were noted to increase cockpit workload and constrain airspace management, while higher altitudes supported continuous climb and descent operations under PBN and improved safety margins.

2.90 The Meeting acknowledged regional trends toward harmonisation, with many States adopting uniform transition altitudes across their airspace. India noted that Doc 8168 allowed States to determine transition altitudes based on local conditions, while raising concerns about differing QNH values. Pakistan reiterated the importance of harmonisation and regional QNH application for safety. The Meeting agreed to refer the matter to ICAO Headquarters for further consideration.

SAIOSEACG Meeting Outcomes

2.91 The Meeting reviewed the outcomes of the Fourth Meeting of the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG/4), held in Bangkok, Thailand, from 18 to 21 March 2025, which reported progress on key regional ATM priorities, including the Project 30/10, Free Route Airspace (FRA) development, readiness for FF-ICE and TBO implementation, regional contingency planning, and mitigation of GNSS RFI. ICAO also briefed the Meeting on the plan to reactivate BOBCAT to accommodate growing South Asia–Europe traffic and discussed operational challenges and mitigation measures in the Kabul FIR.

2.92 Updates were also provided on the South China Sea and Bay of Bengal Traffic Flow Review Groups (SCSTFRG and BOBTFRG), highlighting progress on reduced longitudinal separation, new parallel route proposals, and PBCS and space-based ADS-B initiatives. The Meeting acknowledged ongoing challenges, including uneven automation levels across FIRs, and emphasised the need for greater cross-border coordination and harmonisation. Member States were encouraged to continue supporting regional route enhancement efforts, while ICAO reaffirmed its commitment to facilitating regional ATM cooperation and implementation.

Data-Driven and Performance-based Case Study on Improving Airspace Efficiency and Capacity

2.93 The Meeting was informed of IATA's ongoing project and case study aimed at enhancing airspace efficiency and capacity through data-driven analysis. The initiative sought to develop a standardised methodology for comparing current airspace structures with proposed optimisations, focusing on metrics related to flight efficiency and environmental impact. The initial case study targeted the Europe–Asia interface FIRs, which were affected by traffic growth, geopolitical factors, and airspace constraints.

2.94 The project involved data collection, statistical modelling, stakeholder consultations, and technical site visits, leading to the development of a white paper using industry metrics such as ICAO GANP KPIs. The findings would be refined through validation workshops before publication. The Meeting noted that IATA would continue coordination with States, Administrations, and ANSPs in the APAC region and would update stakeholders on progress through future meetings and workshops.

Regional ATM Contingency Planning and Contingency Operations Update

2.95 The Secretariat presented an update on ATM contingency planning in the APAC region, including States' implementation of the *Asia/Pacific Region ATM Contingency Plan* and recent contingency operations since ATM/SG/12. The Meeting noted that only nine States and Administrations had achieved a "Robust" level of implementation, nine were assessed as "Marginal," and 17 had not submitted any implementation status reports to the ICAO APAC Office, underscoring the need for stronger regional coordination and more consistent reporting.

2.96 Currently, the POC List for the East Asia and North Pacific CCT was maintained separately from the consolidated ATM Points of Contact List. To promote streamlined communication, minimise the risk of missed or duplicated messages, and ensure that the appropriate contacts were reached promptly, ATM/SG/13 agreed to the following Conclusion:

Conclusion ATM/SG/13-7: Consolidation of the East Asia and North Pacific Contingency Coordination Team POC Details with the ATM Points of Contact List

2.97 The Secretariat presented the status updates on Kabul FIR Contingency Operations. Recognising the need to enhance the airspace capacity to accommodate increased in traffic operating through Kabul FIR, the Kabul FIR CCT had agreed on a phased implementation of the revised Kabul FIR contingency arrangement. **Figure 2** illustrated the comparison of flight levels arrangements before and after the implementation of Phase 1 of the revised Kabul FIR contingency arrangement, which took effect on 11 August 2025.

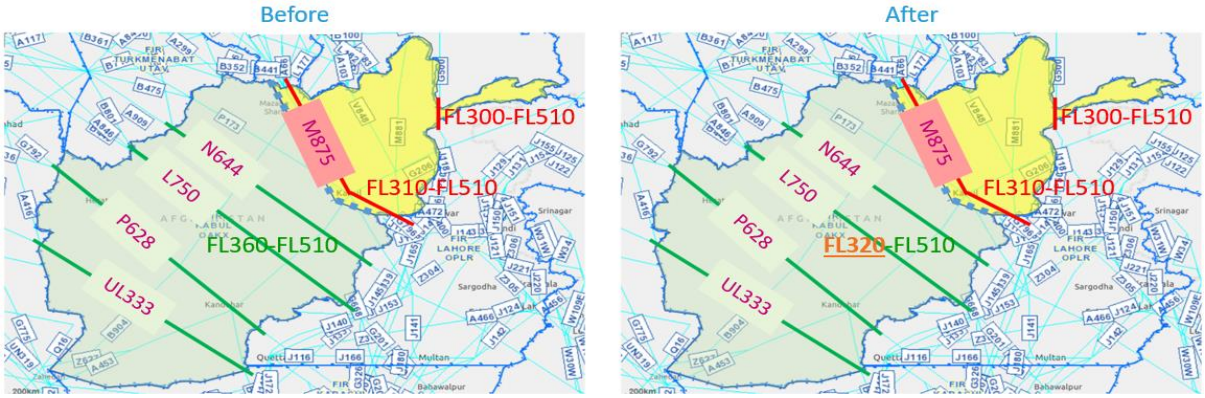

Figure 2: Revised Kabul FIR Contingency Arrangements – Phase 1 Implementation

2.98 The Meeting was informed of the planned resumption of the BOBCAT ATFM procedures to support the Kabul FIR contingency arrangement. Effective 4 September 2025, all westbound flights intended to enter the Kabul FIR between 2000 UTC and 2359 UTC daily on affected ATS routes and flight levels would be required to comply with the BOBCAT ATFM procedures as published in the relevant States' AIP.

2.99 The Meeting was informed that a CCT had been established by the ICAO APAC Office following the closure of ATS route segments within Indian and Pakistan airspace due to military exchanges, which affected approximately 250 daily flights. The key lessons learned underscored the importance of maintaining regular communication with ICAO, sharing timely information to support effective contingency planning, and ensuring that civil and military authorities are aware of their international obligations to coordinate hazardous activities and provide contingency services in accordance with ICAO standards to maintain safe and efficient air traffic operations.

Proposal for the Development of a Level 2 ATM Contingency Plan in the Northeast Asia

2.100 The Republic of Korea presented a proposal for developing a Level 2 ATM Contingency Plan for the Northeast Asia region, intended for implementation in the event of disruption or potential disruption to ATS and associated support services. The initiative was consistent with paragraph 7.8 of the *Asia/Pacific Region ATM Contingency Plan*, which calls for the establishment of Level 2 arrangements when the activation of a Level 1 plan affects neighbouring States. This highlights the importance of bilateral and multilateral coordination to ensure a harmonised and timely regional response. The Republic of Korea also introduced proposed contingency route structures for the Incheon FIR, designed to provide segregated entry and exit points to maintain safety and efficiency during contingency operations.

2.101 Japan expressed its support for collaborating on the development of a Level 2 ATM Contingency Plan for the Northeast Asia region. China informed the Meeting that it had been actively engaging with neighbouring States to establish Level 2 contingency arrangements in accordance with ICAO provisions. China further recommended that discussions on specific details continue under the AAC framework or through China-ROK ATM/CNS bilateral meetings, with the goal of developing a harmonised plan aligned with actual operational scenarios.

Enhancing Operational Continuity: Jakarta ACC AMHS Disruption, Mitigation Measures, and Path Forward

2.102 The Meeting was informed of the recent disruption of the Automatic Message Handling Service (AMHS) at Jakarta ACC, which affected international ATS message exchanges. Indonesia implemented immediate mitigation measures in coordination with Brisbane and Singapore ACCs, ensuring continued message distribution through alternate channels. The incident underscored the importance of having a robust contingency plan and effective regional collaboration to maintain operational continuity and interoperability during system disruptions.

2.103 To strengthen system resilience and minimise single points of failure, Indonesia was establishing a secondary international AMHS connection via Ujung Pandang ACC and planned to update its Letters of Coordination with Singapore and Brisbane ACCs to include provisions for managing disruptions and high-latency message handling. The Meeting emphasised that States and Administrations should consider incorporating similar provisions into their Letters of Agreement to safeguard communication reliability and system integrity.

Tropical Cyclone Alfred – Contingency Activation

2.104 The Meeting was briefed on the impact of Tropical Cyclone Alfred, which had severely affected air traffic operations in the Brisbane and Gold Coast regions of Australia. The cyclone triggered the activation of contingency plans and preparations for a possible full evacuation of air traffic control facilities, as the storm caused extensive damage across southeast Queensland and northeastern New South Wales. In response, a Crisis Management Team (CMT) was established, meeting several times daily to coordinate between meteorology, network operations, and technical services. Contingency measures were implemented, affecting several enroute and TMA sectors, while neighbouring ANSPs were informed to facilitate rerouting of international flights. Preparations were also made for the potential relocation of Brisbane ATS operations to Melbourne, although only the Gold Coast Tower ultimately required evacuation.

2.105 The Meeting expressed appreciation to Australia for sharing its experiences and emphasised the importance of maintaining robust and adaptable ATM contingency plans to ensure operational safety and continuity during severe weather or other disruptions to ATS. The Chairperson further encouraged all States and Administrations to establish, periodically review, and actively disseminate comprehensive ATM contingency plans to ensure effective management of aircraft operations under contingency conditions.

Enhancing Collaborative Contingency Planning – Lessons from Lewotobi Volcano Eruption Response in Indonesia

2.106 The Meeting was informed of Indonesia's experience in managing the impact of the Lewotobi Volcano eruption in early 2025, which produced volcanic ash plumes reaching FL642 and significantly disrupted air traffic to and from regional airports. The event demonstrated the severe risks volcanic activity poses to aviation safety and operational continuity across the APAC region.

2.107 Indonesia's response involved close multi-agency coordination, including the issuance of SIGMETs and volcanic ash advisories by the Darwin Volcanic Ash Advisory Centre (VAAC Darwin), temporary airport closures, and airspace rerouting. The Directorate General of Civil Aviation (DGCA) issued safety directives and coordinated with the ICAO APAC Office, while AirNav Indonesia implemented dynamic airspace management and issued relevant NOTAMs. Daily virtual coordination meetings facilitated real-time situational awareness and timely operational decisions. The Meeting noted key lessons learned, such as the importance of early detection and monitoring, rapid advisory dissemination, collaborative decision-making, and robust contingency arrangements, emphasising the necessity of enhanced inter-agency and cross-border cooperation for effective management of volcanic ash events.

Enhanced Civil Military Cooperation in ATM for the Safe and Optimal Use of Airspace

2.108 The Secretariat reminded the Meeting that Civil-Military Cooperation in Air Traffic Management (CMAC), particularly the Flexible Use of Airspace (FUA), remains a key element of the ICAO GANP. This framework is essential for enhancing airspace capacity, operational efficiency, and environmental sustainability. Given the expected rapid growth of air traffic in the APAC region and the relatively limited maturity of CMAC implementation, the subject continues to be a high priority under the *Asia/Pacific Seamless ANS Plan* and the *Delhi Declaration*. The Secretariat emphasised that continuous efforts and collaboration from both States/Administrations and ICAO are vital to achieving further progress.

2.109 The Meeting noted that, despite challenges, several APAC States/Administrations had made tangible progress in CMAC and FUA implementation, supported by ICAO through regional workshops and seminars. To gain a clearer understanding of the current status and identify regional needs, ICAO announced that a CMAC/FUA implementation survey would be circulated via a State Letter. The outcomes of this survey would serve as a foundation for gap analysis and enable ICAO to better tailor its assistance to strengthen regional implementation.

2.110 The Meeting was also informed that an inter-regional workshop on enhanced CMAC and FUA implementation would be held in Bangkok, Thailand, from 19 to 23 January 2026. The event, co-hosted by the ICAO APAC Regional Sub-Office (RSO) and the EUR/NAT Office, would be conducted in person to foster active participation and hands-on learning. The workshop would feature tabletop exercises and case studies focusing on high-level frameworks, joint civil-military coordination, FUA airspace design, safety assessments, performance evaluation, and system interoperability.

Collaborative Efforts to Manage Danger Area over High Seas

2.111 The Meeting was informed by the Republic of Korea of the establishment of the danger area ZS(D)006 across the boundary between the Incheon and Shanghai FIRs, designated for ground-to-air firing as published in China's AIP. The Republic of Korea highlighted that this danger area was established without prior coordination and emphasised that earlier consultation in accordance with ICAO Annexes 11 and 15 would enhance civil aviation safety. While the Republic of Korea implemented monitoring measures, no activation of NOTAMs had been received since its establishment, raising safety concerns.

2.112 The Meeting noted that the Republic of Korea requested bilateral discussions with China to resolve the matter and called for the removal of ZS(D)006 from the Incheon FIR, as the area overlapped with danger areas already published by the Republic of Korea since 2023. India and IFALPA expressed similar concerns over the lack of prior notification and urged corrective measures consistent with ICAO provisions. The Meeting recognised the need for greater international cooperation to ensure that danger areas over high seas were established through proper coordination.

2.113 China informed the meeting that the danger area had never been activated and would be notified via NOTAM if necessary. China proposed to continue discussions bilaterally with the Republic of Korea through established ATM/CNS coordination channels. The Meeting acknowledged the need for strengthened coordination mechanisms among States and Administrations to ensure that any establishment of danger areas over international waters is properly coordinated, transparent, and compliant with ICAO standards.

Rocket Launch Danger Area Coordinates Mismatch

2.114 IATA informed the Meeting about mismatched rocket launch danger area coordinates between adjacent FIRs, which caused confusion and increased workload for pilots and dispatchers. These discrepancies often occurred during airspace closure coordination and NOTAM publication, creating ambiguity and operational risks. Some ANSPs had also unilaterally added supplementary buffer zones around danger areas, which, though well-intentioned, sometimes led to inconsistencies between FIRs.

2.115 The Meeting noted that while these additional buffers aimed to enhance safety, the Launching State held primary responsibility for defining danger areas through proper risk assessments, which already accounted for safety margins. Unilateral modifications by other States could undermine clarity and uniformity. India and the Philippines raised similar concerns, emphasising that responsibility for the adequacy of defined danger areas should remain with the Launching State in accordance with international practice.

2.116 The Meeting emphasised the need for improved pre-launch coordination and harmonised publication of danger areas across FIRs to reduce ambiguity and ensure safety. Reference was made to ICAO and regional guidance, including ***Conclusion ATM/SG/9-4*** on the management of danger areas over the high seas. It was agreed that ICAO would organise future workshops on this topic, with the agenda and timing to be coordinated and hosting opportunities open to volunteer States.

Update on South-East Asia-Oceanic Implementation of Free Route Operations (FRTO) Project

2.117 The paper presented updates on the South-East Asia–Oceanic Implementation of Free Route Operations (SEA-O FRTO) project under the AAC Workstream 4, involving four ANSPs and four airlines. The operational trial integrated several existing and emerging User Preferred Route (UPR) programs, enhancing efficiency through collaboration among neighbouring ANSPs to create larger flexible airspace access. By connecting FIRs and removing fixed boundary constraints, flights between 37 agreed city pairs were able to operate with greater flexibility. Early results showed positive feedback, especially for Manila–Sydney, Manila–Brisbane, and Hong Kong routes, although limited benefits were observed for flights to or from Indonesia and some Singapore routes due to seasonal wind effects.

2.118 The project team planned to use the trial data and lessons learned to develop guidance material that would support other ANSPs in transitioning to a Free Route Operations (FRTO) environment. This guidance would outline best practices and performance benefits to promote regional expansion of the capability. The material was expected to be finalised and submitted for targeted endorsement by the AAC in 2026, contributing to the broader regional effort toward more efficient and seamless airspace operations.

Measures to Enhance Safety and Efficiency on A593 within Incheon FIR

2.119 The Republic of Korea presented measures to enhance airspace safety and efficiency in the SADLI–LAMEN segment of ATS route A593, where increasing traffic and Large Height Deviation (LHD) occurrences had raised operational concerns. Proposed improvements under Phase 2 of the A593 Normalisation Plan included adjusting transfer of control points (TCPs), implementing ATS Inter-facility Data Communication (AIDC), establishing triple routes, and reducing longitudinal separation. The Republic of Korea had delegated the airspace between SADLI and LAMEN to China, with Shanghai ACC providing ATS, but emphasised its continued oversight responsibility under ICAO Annex 11. Despite initial correspondence and China's expression of cooperation in 2022, further engagement had been limited.

2.120 The Meeting noted that in April 2025, both States had agreed on an LHD event-sharing mechanism, leading to some improvement in safety monitoring; however, oversight remained incomplete as it focused only on LHD data. To strengthen safety management, the Republic of Korea proposed that China share broader safety oversight information, including non-compliance reports, safety performance analyses, and risk assessments for the delegated airspace. The proposal aimed to enhance transparency and bilateral cooperation in maintaining airspace safety and efficiency in accordance with ICAO provisions.

Suggestions for Enhancing the Safety and Efficiency of FUKUE-AKARA Corridor Operations

2.121 The Meeting was informed of the establishment of the AKARA Corridor Technical Working Group (TWG) in October 2018, facilitated by the ICAO Council during AN-Conf/13, to coordinate airspace optimisation among China, Japan, and the Republic of Korea. Following five TWG meetings and several bilateral and trilateral discussions, consensus was reached on a two-phase plan for optimising the Corridor. Phase 1 was implemented on 25 March 2021, with Shanghai ACC maintaining coordination with Incheon ACC and providing radar vectoring for eastbound flights. However, Phase 2, originally scheduled for June 2021, was postponed due to factors including the COVID-19 pandemic.

2.122 In view of increasing east and west traffic, suggestions were raised to remove altitude restrictions and advance airspace structure optimisation. The Meeting noted China's non-acceptance of proposals for westward TCP adjustments, which diverged from the previously agreed plan. China clarified that AIDC implementation was not yet feasible and would be considered once route structure and operational optimisation were finalised, after which both States could explore AIDC testing and reduction of longitudinal separation.

2.123 The Meeting noted that further discussions would be required to reduce longitudinal separation and confirmed its readiness to support the implementation of Phase 2 as previously agreed by consensus. Japan also indicated support for the removal of the flight level allocation scheme (FLAS) and the establishment of triple routes, requesting additional details on the current status and future plans. China and the Republic of Korea reaffirmed their commitment to maintaining an open and cooperative approach and agreed to continue advancing Phase 2 implementation through bilateral and multilateral meetings. Both States concurred with the Chairperson's suggestion to present a joint paper on the progress of Phase 2 implementation to the ATM/SG next year.

AIS – AIM Implementation Task Force Outcomes

2.124 The Secretariat reported outcomes of the Twentieth Meeting of the Aeronautical Information Services – Aeronautical Information Management Implementation Task Force (AAITF/20), held in Chitose, Japan, from 9 to 13 June 2025. The Meeting reviewed regional deficiencies, highlighting concerns over weak quality management of aeronautical information. States/ Administrations were urged to submit annual AIM implementation reports, though progress remained limited, with only Singapore completing all Phase II elements. The Meeting also discussed NOTAM proliferation and data quality issues, with IATA sharing airline feedback and Japan and other States introducing training initiatives. The United States presented progress on the Digital Operational Reporting Information Service (DORIS) to replace NOTAMs.

2.125 The Secretariat also presented updates on five-letter name-code (5LNC) and five-character alphanumeric code (5ANNC) management. Several States supported establishing an APAC 5LNC Ad Hoc Group to address code shortages and duplication. Progress was noted from the APAC Common SWIM Aeronautical Information Services Ad Hoc Group, which endorsed AIXM 5.1.1 and initial service specifications, alongside discussions on digital sub-datasets, electronic charts, and AIM performance monitoring tools.

2.126 The Meeting agreed to ***Conclusion ATM/SG/13-8: Removal of Available (Non-Allocated) 5LNCS Starting with 'X' and Release of Block Codes***.

2.127 The Meeting discussed and adopted the following Draft Decision for consideration by APANPIRG/36.

Draft Decision ATM/SG/13-12: Update AAITF Terms of Reference (TOR)

That, the updated AAITF Terms of Reference at **Appendix D** be adopted.

2.128 The Meeting discussed challenges in the management of five-letter name codes (5LNC), including prolonged processing times, rejection due to similarity, and the adequacy of the existing 500 NM sound-like proximity check radius. Various views were expressed regarding potential reduction of the radius to improve flexibility, while others raised concerns about regional diversity in airspace structures and the need to maintain safety assurance. The Secretariat clarified that the extensive processing period was largely due to the high volume of requests and outlined the existing handling process. The Meeting agreed to conduct a detailed study, including a safety assessment, on the possible reduction of the sound-like proximity check radius, and incorporated this task into the draft Terms of Reference of the proposed Ad Hoc Group.

Enhancing AIS to AIM Phase II and III Implementation in Indonesia through Data Digitalization and AIM Automation Upgrade

2.129 The Meeting was informed of ongoing initiatives to accelerate the transition from AIS to AIM Phase II and III, including the comprehensive digitalisation of aeronautical data in AIXM-compliant formats covering aerodrome, en-route, terminal, and instrument flight procedure datasets. These efforts aimed to enable structured and interoperable data exchange in line with ICAO's global roadmap for a digital and data-centric aeronautical information environment. It was further noted that system upgrades were being implemented to support fully data-centric processes, Annex 15- and PANS-AIM-compliant digital products, and integration with meteorological and airspace management systems. These measures were expected to enhance data quality, accuracy, and timeliness, and strengthen readiness for full SWIM integration. The Meeting encouraged the sharing of experiences and best practices to support similar transitions across the region.

Deep Convection Notification Service for Demand Capacity Balancing at the Hong Kong International Airport

2.130 The Meeting noted the experience shared on collaboration between the ANSP and meteorological agency to initiate ATFM measures during forecasted deep convection events, improving operational efficiency and minimising delays. Deep convection, often producing severe weather such as thunderstorms or microbursts, poses risks to flight safety and airport capacity. Early detection and 72-hour forecasts allowed timely planning and coordination. The Meeting encouraged States/ Administrations to strengthen cooperation between ANSPs and meteorological agencies and to adopt proactive, data-driven approaches to manage weather-related operational challenges.

Asia/Pacific Search and Rescue Update

2.131 The Meeting was informed of the outcomes of the Tenth Meeting of the Asia/Pacific Search and Rescue Workgroup (APSAR/WG/10), held in Siem Reap, Cambodia, from 27 to 30 May 2025. The Workgroup reviewed proposed amendments to the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, including new naming conventions for rescue coordination centres (RCCs) and rescue sub-centres (RSCs). It was recommended that centres be named geographically, based on the name of a city, port, or State, and identified by their facility type such as Aeronautical Rescue Coordination Centre (ARCC), Maritime Rescue Coordination Centre (MRCC), or Joint Rescue Coordination Centre (JRCC) to ensure global consistency.

2.132 The Meeting also noted that most APAC Administrations were not yet fully prepared for ADT implementation and would need to integrate ADT considerations into safety oversight procedures, operational manuals, and personnel training. It was further noted that, based on the 2024 USOAP CMA Protocol Questions, 16 SAR-related PQs remained under review, with the regional Effective Implementation (EI) for SAR increasing slightly to 55 percent compared to 54 percent in the previous year.

2.133 ATM/SG/13 reviewed the draft *Asia/Pacific SAR Plan Version 5.0* and agreed to ***Conclusion ATM/SG/13-9: Revised Asia/Pacific SAR Plan***.

2.134 The Meeting discussed a proposal to revise the term "SAR capability" in the *Asia/Pacific SAR Plan* to "SRU capability," with APAC Administrations encouraged to report such information to APSAR/WG instead of exchanging it annually with neighbouring States. While recognising that accessible SRU data would enhance decision-making and efficiency during SAR operations, concerns were raised about disclosing sensitive military assets. The Meeting agreed that submission would be voluntary and limited to SRUs authorised to operate in neighbouring SRRs.

2.135 ATM/SG/13 agreed to ***Conclusion ATM/SG/13-10: Proposal Annual Submission of Asia/Pacific Search and Rescue Unit (SRU) Capability***.

2.136 The Meeting noted limited SAR community expertise in SWIM implementation and ADT applicability and encouraged States and Administrations to participate in the SAR workshop planned alongside APSAR/WG/11 in May 2026.

Inclusion of ATFM-related Phraseologies Contained in ICAO Doc 9971 into ICAO Doc 4444

2.137 The Meeting noted efforts to harmonise ATS procedures by incorporating ATFM provisions into operational manuals to enhance controllers' situational awareness and ensure the effective application of flow management measures using standardised phraseology. It was observed that while Doc 4444 specifies the use of start-up time procedures under ATFM regulations, it does not contain detailed ATFM communication phraseology, which was instead provided in Doc 9971. The Meeting further noted plans to include ATFM measures on flight progress strips to promote Calculated Take-Off Time (CTOT) compliance.

2.138 It was highlighted that operational stakeholders such as controllers and flight crews, who are directly responsible for implementing flow restrictions like CTOTs and Calculated Time Over (CTO), may not commonly refer to Doc 9971, while Doc 4444 remains a primary reference. The Meeting supported the proposal to include relevant ATFM communication phraseology from Doc 9971 into Doc 4444 and noted that any proposed amendments could be submitted through the appropriate ICAO processes once the related State Letter on Annex 11 and PANS-ATM amendments is circulated.

Adherence to the ICAO Principles and Recommendations for Setting Air Navigation Service Charges and Processing Overflight Approvals

2.139 The Meeting reviewed ICAO's established principles on ANS charges, emphasising the importance of transparent consultation with airspace users before introducing or modifying charging systems or levels. It was recalled that under Article 15 of the Chicago Convention, States should not impose charges solely for flight authorisations. Challenges related to overflight and air defence clearances were also discussed, including inconsistent information requirements, unaligned FIR and ADIZ boundaries, and the absence of automated approval systems.

2.140 The Meeting encouraged States/Administrations to adopt more efficient and technology-driven methods for approvals, such as integration with flight plan submissions or automated online systems, and to establish structured, regular consultation mechanisms with airspace users. Timely exchange of information and settlement of fees were recognised as essential to maintaining transparency, financial stability, and the sustainability of air navigation service provision.

Shaping the Future of Airspace – Airspace Asia Pacific 2025

2.141 The Meeting was informed of the upcoming CANSO Airspace Asia Pacific 2025 event to be held in Hong Kong, China, from 9 to 11 December 2025. Designed as a platform for airspace modernisation and ATM innovation, the event will bring together industry leaders, decision-makers, and technology experts to explore future technologies and foster collaboration. States and Administrations were encouraged to participate, share information with relevant organizations and institutions, and promote engagement in the event.

Free Route Airspace Implementation Webinar

2.142 ICAO informed the meeting about the upcoming ICAO Free Route Airspace (FRA) Implementation Webinar for Member States and Administrations in the APAC Region, which aimed to provide both foundational and advanced understanding of FRA concepts, focusing on practical implementation steps and addressing related challenges. States, Administrations, and International Organizations were encouraged to actively participate and nominate speakers to share their experiences and best practices during the webinar.

Update for the Guidance of Visual Approach for Parallel Runways

2.143 In response to ATM/SG/12 Action Item 12/3 concerning coordination with the ICAO Air Navigation Bureau (ANB) on developing guidance for visual approaches to parallel runways, the Secretariat provided an update on the current work within the ICAO Separation and Airspace Safety Panel (SASP) related to this subject. To advance the matter, the SASP Secretariat planned to submit a Working Paper, referencing ATM/SG/12 WP/31, for consideration at SASP Working Group 42 (WG/42), scheduled from 3 to 7 November 2025. Additionally, China expressed that it might submit a Working Paper during the same meeting to propose the establishment of a new Work Programme Element (WPE) dedicated to visual approaches for parallel runways.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

a) note the information in this paper;

b) discuss and agree to **Draft Conclusion ATM/SG/13-1: Corrigendum to the Asia/Pacific Seamless ANS Plan Version 4.0**;

c) discuss and agree to the following Draft Decisions:

- **Draft Decision ATM/SG/13-2: Update Air Traffic Management Sub-Group of APANPIRG (ATM/SG) Terms of Reference**;
- **Draft Decision ATM/SG/13-11: Modification of Name of ATFM Steering Group (ATFM/SG) to ATFM and A-CDM Steering Group (ATFM & A-CDM/SG)**;
- **Draft Decision ATM/SG/13-12: Update AAITF Terms of Reference (TOR)**;
- **Draft Decision ATM/SG/13-13: Establishment of APAC Project 30/10 Task Force**;

d) note the current status of the update of FIR boundary descriptions in the APAC ANP;

e) note the current issue of GNSS RFI;

f) note the current, ongoing ATM Contingency events in the APAC region;

g) note the technical Conclusions:

- ***Conclusion ATM/SG/13-3: The Use of Digital Form to Collect Annual Regional ANS-related Monitoring and Reporting Data****;*
- ***Conclusion ATM/SG/13-4: Addition Appendix to the Asia/Pacific Regional Framework for Collaborative ATFM****;*
- ***Conclusion ATM/SG/13-5: Change Process of the FIXM Version Used for Asia/Pacific Cross-Border Operational ATFM System-to-System Information Exchange in SWIM****;*
- ***Conclusion ATM/SG/13-6: TBO Related Revisions for the Asia/Pacific Seamless ANS Plan****;*
- ***Conclusion ATM/SG/13-7: Consolidation of the East Asia and North Pacific Contingency Coordination Team POC Details with the ATM Points of Contact List****;*
- ***Conclusion ATM/SG/13-8: Removal of Available (Non-Allocated) 5LNCs Starting with 'X' and Release of Block Codes****;*
- ***Conclusion ATM/SG/13-9: Revised Asia/Pacific SAR Plan****;*
- ***Conclusion ATM/SG/13-10: Proposal Annual Submission of Asia/Pacific Search and Rescue Unit (SRU) Capability****;*
- ***Conclusion ATM/SG/13-14: Normalization of Asia/Pacific Regional A-CDM Monitoring and Reporting Scheme****;*

h) note the Decision:

- ***Decision ATM/SG/13-15: Adoption of APAC FF-ICE Ad Hoc Group Terms of Reference****;* and

i) discuss any relevant matters, as appropriate.

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Draft Conclusion ATM/SG/13-1: Corrigendum to the Asia/Pacific Seamless ANS Plan Version 4.0	
What: That, 1. the corrigendum to the *Asia/Pacific Seamless ANS Plan Version 4.0* at **Appendix A** be adopted, and uploaded to the ICAO Asia/Pacific Regional Office webpage to supplement the existing version; 2. the ICAO Secretariat to update the Asia/Pacific Seamless ANS Reporting Tool to reflect these changes; and 3. States are urged to update their national air navigation plan (NANP) to align with the revised *Asia/Pacific Seamless ANS Plan Version 4.0*.	Expected impact: ☐ Political / Global ☐ Inter-regional ☐ Economic ☐ Environmental ☒ Ops/Technical
Why: To update and accurately reflect the priorities of ASBU NAVS elements within the Asia/Pacific Seamless ANS Plan.	Follow-up: ☐Required from States
When: 26-Nov-25	Status: Draft to be adopted by PIRG
Who: ☒Sub groups ☐APAC States ☒ICAO APAC RO ☐ICAO HQ ☐Other:	

Draft Decision ATM/SG/13-2: Update Air Traffic Management Sub-Group of APANPIRG (ATM/SG) Terms of Reference	
What: That, the updated ATM/SG Terms of Reference at **Appendix B** be adopted.	Expected impact: ☐ Political / Global ☐ Inter-regional ☐ Economic ☐ Environmental ☒ Ops/Technical
Why: To update the TOR to revise references to the Asia/Pacific Seamless ANS Plan.	Follow-up: ☐Required from States
When: 26-Nov-25	Status: Draft to be adopted by PIRG
Who: ☒Sub groups ☒APAC States ☒ICAO APAC RO ☐ICAO HQ ☐Other:	

Draft Decision ATM/SG/13-11: Modification of Name of ATFM Steering Group (ATFM/SG) to ATFM and A-CDM Steering Group (ATFM & A-CDM/SG)	
What: That, 1. the name of the ICAO Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG) changed to the ICAO Asia/Pacific Air Traffic Flow Management and Airport Collaborative Decision Making Steering Group (ATFM & A-CDM/SG); and 2. the Terms of Reference (TOR) be amended to reflect the Steering Group name change (**Appendix C**).	Expected impact: ☐ Political / Global ☐ Inter-regional ☐ Economic ☐ Environmental ☒ Ops/Technical
Why: To encourage participation of appropriate individuals with operational experience of Airport and A-CDM operations from States and Administrations	Follow-up: ☒Required from States
When: 26-Nov-25	Status: Draft to be adopted by PIRG

Who:	☒Sub groups ☒APAC States ☒ICAO APAC RO ☐ICAO HQ ☐Other:

Draft Decision ATM/SG/13-12: Update AAITF Terms of Reference (TOR)	
What: That, the updated AAITF Terms of Reference at **Appendix D** be adopted.	Expected impact: ☐ Political / Global ☐ Inter-regional ☐ Economic ☐ Environmental ☒ Ops/Technical
Why: The first edition of the Manual on System-Wide Information Management (SWIM) Implementation was published in 2024 as ICAO Doc 10203, as well as PANS-IM (Doc 10199).	Follow-up: ☐Required from States
When: 26-Nov-25	Status: Draft to be adopted by PIRG
Who: ☒Sub groups ☒APAC States ☒ICAO APAC RO ☐ICAO HQ ☐Other:	

Draft Decision ATM/SG/13-13: Establishment of APAC Project 30/10 Task Force	
What: That, the APAC Project 30/10 Task Force be established under the ATM/SG to develop the Asia/Pacific regional roadmap that include, but not limited to, the following tasks: a) a further comprehensive analysis of the current separation minima applied within the Asia/Pacific Administrations and between adjacent FIRs; b) the identification of technical and operational enablers necessary for the successful implementation of Project 30/10, including reviewing and updating regional documents; c) collaboration with adjacent regions to achieve harmonized implementation of Project 30/10; and d) an assessment of training needs for controllers to effectively apply more efficient separation minima.	Expected impact: ☒ Political / Global ☒ Inter-regional ☐ Economic ☐ Environmental ☒ Ops/Technical
Why: To provide the regional roadmap for the implementation of more efficient separation minimum in the Asia/Pacific Region, in accordance with AN-Conf/14 Recommendation 3.1/1.	Follow-up: ☒Required from States
When: 26-Nov-25	Status: Draft to be adopted by PIRG
Who: ☒Sub groups ☐APAC States ☒ICAO APAC RO ☐ICAO HQ ☐Other:	

CORRIGENDUM TO THE ASIA/PACIFIC SEAMLESS ANS PLAN VERSION 4.0

The *Asia/Pacific Seamless ANS Plan* is amended as follows.

The text proposed to be removed has been strike through and the text to be inserted is highlighted in Grey.

i) Paragraph 5.6 Table 1: Asia/Pacific ASBU Block 0, Block 1 and Block 2 Priority

Functional Category	Element	Description	Priority	Responsibility for Review
Technology	~~NAVS-B0/1 to B0/4~~	~~SBAS, GBAS, ABAS, MON (PARS 7.5, 7.7)~~	~~2~~	~~CNS SG~~
	NAVS-B0/1	GBAS (PARS 7.5, 7.7)	2	CNS SG
	NAVS-B0/2	SBAS (PARS 7.5, 7.7)	2	
	NAVS-B0/3	ABAS (PARS 7.7)	1	
	NAVS-B0/4	Nav. MON (PARS 7.7)	1	

ii) Paragraph 5.10

There are ~~18~~20 Priority 1 elements as follows:

a) Aeronautical Meteorology: AMET-B0/1 to B0/4;

b) Aeronautical Information Management: DAIM-B1/1 to B1/6*;

c) Airport CDM: ACDM-B0/1;

d) ANSP human and simulator performance (Regional);

e) ATS Inter-facility Datalink Communications: FICE-B0/1;

f) Space object launches and re-entry management (Regional);

g) Civil-Military SUA management (Regional);

h) Civil-Military strategic and tactical coordination (Regional);

i) Core data communications: COMI-B0/3, B0/7 and B1/1;

j) Direct and Free Route Operations: FRTO-B0/1 to B0/4;

k) Enhanced SAR systems (Regional);

l) Ground-based Surveillance: ASUR-B0/1 to B0/3;

m) Network Operations: NOPS-B0/1 to B0/5;

n) Performance-based Navigation Approach Procedures: APTA-B0/1 and B0/2;

o) Runway Sequencing: RSEQ-B0/1 to B0/2; ~~and~~

p) Safety Nets: SNET-B0/1 to B0/4; and

q) Navigation Systems: NAVS-B0/3 and NAVS-B0/4.

**Note: DAIM-B1/7 is placed within PASL Phase III.*

iii) Paragraph 7.5

Where practicable, all instrument runways serving aeroplanes should have the following approach procedures consistent with **APTA-B0/1** (Priority 1) and **APTA-B0/3**:

a) SBAS/GBAS CAT1 precision approaches (Priority 2); or ILS CAT1 approaches (with APV approach as a backup); or

b) Approaches with Vertical Guidance (APV); RNP APCH with LNAV-VNAV or LPV Minima; or

c) if an APV is not practical, straight-in RNP APCH with Lateral Navigation (LNAV) or SBAS based LPV Minima.

iv) Paragraph 7.7

SBAS, GBAS, ABAS and Nav. MON systems should be established as appropriate to the level and type of aircraft operations and the operating environment consistent with NAVS-B0/1 to B0/4, subject to an assessment of benefits and costs.

Note 1: States should prioritize implementation of regulations and infrastructure for facilitating use of ABAS and establishing a Nav. MON (Priority 1).

Note ~~1~~2: the application of GNSS and its augmentations such as GBAS Landing System (GLS) is recommended where these systems were economically beneficial.

Note ~~2~~3: As far as practicable, airspace and instrument flight procedures associated with international aerodromes should not be constrained by international borders and political barriers, and be established only after appropriate consideration of:

a) environmental efficiencies;

b) noise abatement and local authority regulations;

c) adjacent aerodromes;

d) conflicting instrument flight procedures; and

e) affected ATC units or ATM procedures.

Terms of Reference of Air Traffic Management Sub-Group of APANPIRG (ATM/SG)

The Objectives of the ATM/SG are to:

1) *ensure the continuous and coherent development of the ATM/AIM/SAR parts of the Asia/Pacific Regional Air Navigation Plan (APAC ANP) in a manner that is harmonized with adjacent regions, consistent with ICAO SARPs, the Global Air Navigation Plan and the Global Aviation Safety Plan;*

2) *facilitate the implementation of ATM systems, procedures and services identified in the APAC ANP, Aviation System Block Upgrade (ASBU) priority modules and Asia/Pacific Seamless ~~ATM~~ ANS Plan elements using the project management principles where appropriate;*

3) *review, identify and address deficiencies that impede the implementation or provision of efficient ATM services in the Asia and Pacific Regions.*

Deliverables to meet the Objectives:

1) *Progress report to be **submitted** to APANPIRG addressing the ATM/SG deliverables (listed in 2 to 9 below);*

2) *ATM parts of the ASIA/PAC ANP to be **reviewed** and, as necessary, amendment proposals **prepared** to update the APAC ANP to reflect changes in the operational and global requirements;*

3) *Level of implementation of ATM services to be **monitored** and, as necessary, **facilitated** to support the effective implementation of ASBU priority modules and the Asia/Pacific Seamless ~~ATM~~ ANS Plan elements;*

4) *Air navigation deficiencies in the field of ATM to be **identified** (which may require any necessary systems performance monitoring to be **facilitated**) and, where necessary, appropriate corrective action **proposed** and the development and implementation of action plans by States to resolve identified deficiencies **facilitated**;*

5) *Air navigation deficiencies in the field of ATM (as listed in the APANPIRG database) to be **reviewed** and, as necessary, **updated** to reflect the current situation;*

6) *Research and development, trials and demonstrations in the field of ATM and other relevant areas to be **monitored** and, as necessary, the transfer of this information and expertise between States **facilitated**;*

7) *Specific recommendations to be **made,** and guidance materials **developed,** aimed at improving aeronautical meteorological services by the use of existing and/or new procedures, facilities and technologies;*

8) *Inter-regional and intra-regional co-ordination issues in the field of ATM to be **reviewed** and **identified** and, as necessary, actions **recommended** addressing those issues*;

9) *ATS environmental initiatives are consistently identified and progressed; and report outcomes from ATM environmental initiatives;*

10) *Draft Conclusions and Decisions to be **formulated** relating to matters in the field of ATM that come within the scope of the APANPIRG work plan.*

Terms of Reference

Air Traffic Flow Management and Airport Collaborative Decision Making Steering Group (ATFM & A-CDM/SG)

1. 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 and aerodromes experiencing the most significant traffic demand, and noting the Asia/Pacific Seamless ANS 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:

    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 and A-CDM 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; and

        iii. ATFM Daily Plan;

    d. compliance by airspace and aerodrome users with ATFM and A-CDM measures; and

    e. any other guidance relevant to the Regional ATFM Framework and Asia/Pacific A-CDM Implementation Plan.

3. Maintain an overview of CDM/ATFM and A-CDM programs being conducted within the Region, with a view to facilitating their coordination and alignment, and to promote;

    a. harmonized procedures;

    b. implementation of the performance expectations of the Regional ATFM Framework and Asia/Pacific A-CDM Implementation Plan; and

    c. interoperability of A-CDM with ATFM;

4. Review the effectiveness of existing and planned ATFM and A-CDM programs in the Asia/Pacific Region, and make specific recommendations, including any adjacent airspace affecting the Asia/Pacific Regions, and research and recommend appropriate mechanisms for the on-going review of such programs;

5. The Group coordinates closely with other relevant bodies such as the Airport Operations and Planning Sub-Group (AOP SG), the Meteorological Requirements Working Group (MET/R WG) and System-Wide Information Management Task Force (SWIM TF).

6. The Group reports to the ATM Sub-Group (ATM/SG).

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Terms of Reference of the AIS-AIM Implementation Task Force (AAITF)

The objectives of the Task Force are to:

a) study means of aeronautical information management by civil aviation authorities and/or service providers in other regions including globally interoperable aeronautical data, aeronautical information exchange models and digital data sets, and promote the implementation of harmonized and interoperable methods/models in the Asia/Pacific Region;

b) assist States to implement Quality Management Systems for the aeronautical information service in an expeditious manner;

c) assist States to develop competency-based training and conduct workshops on the Asia/Pacific Regional Plan for Collaborative AIM;

d) review and update the Regional Plan for Collaborative AIM taking into account amendments to ICAO SARPs, procedures and guidance material;

e) monitor and review technical and operating developments in the AIS field especially in the area of automation and the exchange of digital data sets of aeronautical information in a SWIM environment; and

f) monitor the transition from AIS to AIM, and in particular monitor developments in Annexes 4 & 15, PANS-AIM (Doc 10066), PANS-Information Management (PANS-IM, Doc 10199 ~~when available~~) and related ICAO guidance documents.

To achieve the above objectives, the Task Force shall consider:

1. results of the ICAO Information Management Panel (IMP);

2. amendments to Annex 4, Annex 15, PANS-AIM, PANS-IM, ~~(when available)~~ the AIS Manual (Doc 8126), the Manual on the Quality Management System for AIS (Doc 9839), the Manual on AIS Training (Doc 9991), the Manual on System-Wide Information Management (SWIM) Implementation (Doc 10203 ~~when available~~) and the Aeronautical Chart Manual (Doc 8697);

3. revisions to the EUROCONTROL *Operating Procedures for AIS Dynamic Data* (OPADD);

4. implementation of the regional priorities and the performance objectives of the Asia/Pacific Seamless ANS Plan and the Regional Plan for Collaborative AIM.

The Task Force will maintain close coordination with other relevant bodies such as the System-Wide Information Management Task Force (SWIM TF).

The Task Force will report to the ATM Sub-Group of APANPIRG.

(Adopted by the 14th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/14), 2003, and most recently amended by APANPIRG/~~34~~36, ~~2023~~2025)