



ICAO

International Civil Aviation Organization

Thirteenth Meeting of the Air Traffic Management Sub-Group (ATM/SG/13) of APANPIRG

Singapore, 25 – 29 August 2025

Agenda Item 7: AOP, MET, AIM, SAR

AIS – AIM IMPLEMENTATION TASK FORCE OUTCOMES

(Presented by the Secretariat)

SUMMARY

This paper presents an update on Aeronautical Information Services (AIS) and Aeronautical Information Management (AIM) implementation, including the outcomes of the Eighteenth Meeting of the ICAO Aeronautical Information Services – Aeronautical Information Management Implementation Task Force.

1. INTRODUCTION

1.1 The Twentieth Meeting of the ICAO Aeronautical Information Services (AIS) – Aeronautical Information Management (AIM) Implementation Task Force (AAITF/20) was held from 9 to 13 June 2025 at the New Chitose Airport Portom Hall in Chitose, Japan. A total of 100 participants from Australia, Brunei Darussalam, China, Hong Kong China, Macao China, Fiji, India, Indonesia, Japan, Malaysia, Mongolia, Pakistan, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, United States, Viet Nam, IATA, IFAIMA, and ICAO attended the AAITF/20 meeting.

1.2 24 Working Papers (WPs), 16 Information Papers (IPs) six presentations and six flimsies were presented to AAITF/18.

1.3 AAITF/20 formed two Draft Conclusions and one Draft Decision for consideration by ATM/SG.

1.4 The full report of the meeting is available on the ICAO Asia/Pacific (APAC) Regional Office web-page at <https://www.icao.int/APAC/meetingdocs?fid=541>

2. DISCUSSION

Asia/Pacific ATM and Airspace Safety Deficiencies in the AIS/AIM Field

2.1 AIS/AIM-related Air Navigation Deficiencies as identified/agreed by APANPIRG/35 were provided for review and update by the meeting.

2.2 There are four AIS/AIM-related deficiencies in the list agreed by APANPIRG/35:

- a) WGS-84 not implemented (eight States);
- b) AIP Format (one State);
- c) Quality Management System not implemented (18 States); and

d) Aeronautical data promulgation within the State's area of responsibility (one State).

2.3 No new deficiencies had been identified since APANPIRG/35, and it was brought to the attention of the Meeting that a review of the QMS implementation in the Maldives and Brunei Darussalam are currently underway. The meeting was, once again, invited to note the ongoing, deep concern about poor quality management of aeronautical information in the APAC Region, and the apparent lack of organizational priority for this safety-critical obligation of all States that are signatory to the Convention on International Civil Aviation.

2.4 The list of AIS/AIM-related deficiencies as reviewed by AAITF/20 is included in the relevant working paper presented under ATM/SG/13 Agenda Item 4.

Regional Implementation Status of AIM Performance Expectations

2.5 The meeting was informed of the reported implementation status of AIM performance expectation detailed in the Performance Improvement Plan of the *APAC Regional Plan for Collaborative AIM*. States/Administrations were urged to report using the implementation reporting form by not later than 28 February each year (revised reporting date for all ATM-related regional plans).

2.6 The performance expectations were arranged in three phases:

Phase I, expected to be implemented immediately;

Phase II, expected to be implemented by 7 November 2019; and

Phase III, expected to be implemented by 27 November 2025.

2.7 States that had never provided information on their implementation status were:

Marshall Islands, Micronesia and Nauru.

2.8 The latest update of regional implementation status of the AIM performance expectations is provided in **Appendix A**.

2.9 Hong Kong China, Japan and Singapore reported implementation of all Phase I elements. Only Singapore reported implementation of all Phase II elements. No Administration reported implementation of all Phase III elements.

2.10 **Figure 1 and Figure 2** illustrate overall regional implementation of Phase I and II elements of the Regional Plan for Collaborative AIM; approximately 62% for Phase I (60% in 2024) and 44% for Phase II (42% in 2024). Combined progress towards implementation of Phases I and II was 54%, (53% in 2024).

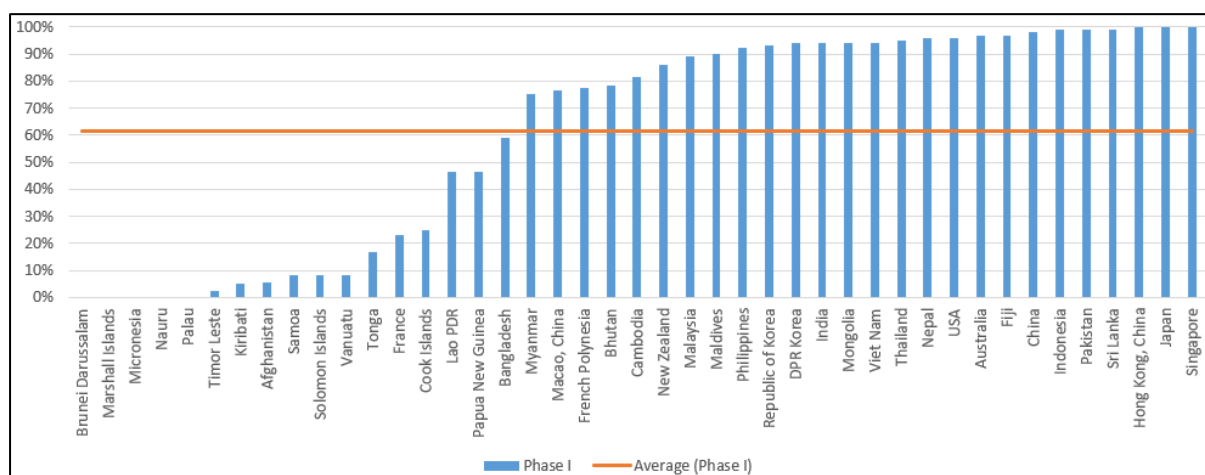


Figure 1: Regional Phase I Implementation Progress (updated 13 June 2025)

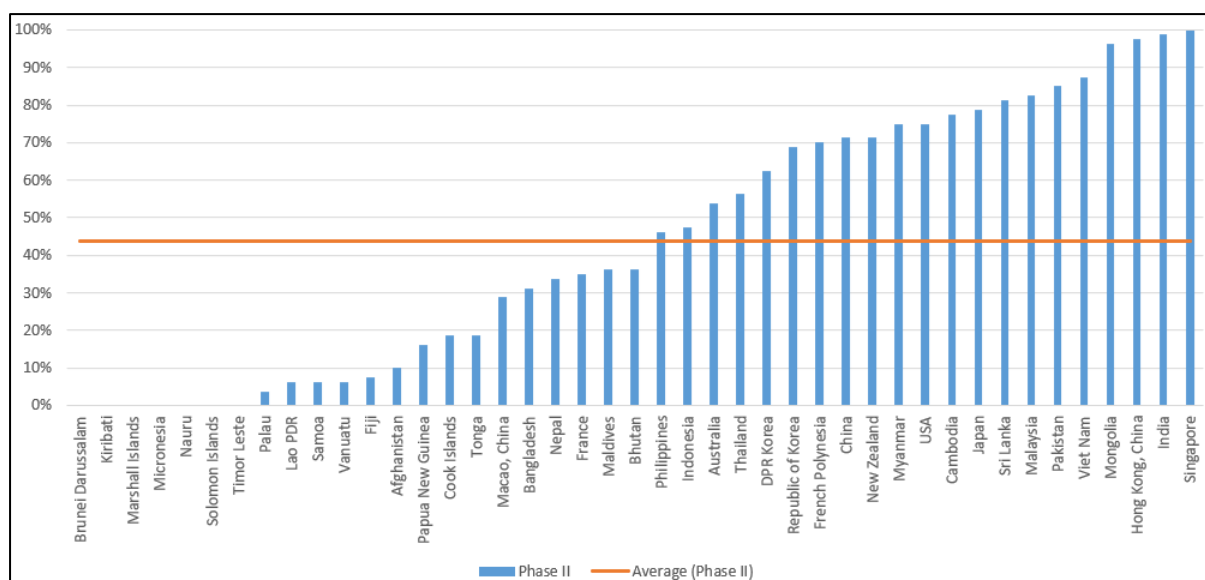


Figure 2: Regional Phase II Implementation Progress (updated 13 June 2025)

2.11 Regional implementation of Phase III elements, expected to be implemented by 2025, was approximately 20%, increased from 17% in 2024.

2.12 Singapore had proposed deferring the Asia/Pacific Regional Plan for Collaborative AIM Phase III implementation timeline to 2028, as regional requirements were still being developed. ICAO had noted that this concern would be considered alongside updates to the Global Air Navigation Plan expected from the ICAO 42nd Assembly. The revision to the Regional Plan would follow a review of the Seamless ANS Plan. ICAO had acknowledged the proposed delay and had suggested raising it at the ATM/SG meeting in August 2025.

NOTAM Proliferation Analysis

2.13 IFAIMA presented a paper on the persistent problem of NOTAM proliferation in the APAC region. Building on earlier actions from AATF/13 and ATM/SG/6, the paper reiterated the need for States to reduce permanent and long-duration NOTAMs by promptly transferring relevant information into the AIP or AIP Supplements.

2.14 As of 15 May 2025, the APAC Region had 5,989 active NOTAMs, of which 356 (6%) were classified as old (over three months) and 153 (2.5%) as very old (over one year). Although the

total number of NOTAMs had slightly decreased over the preceding five years, the number of old NOTAMs had increased by 21% since 2024, while the number of very old NOTAMs had declined by 15%. Over the previous two years, 395 old and very old NOTAMs had been issued, highlighting ongoing procedural compliance issues. (**Figure 3**)

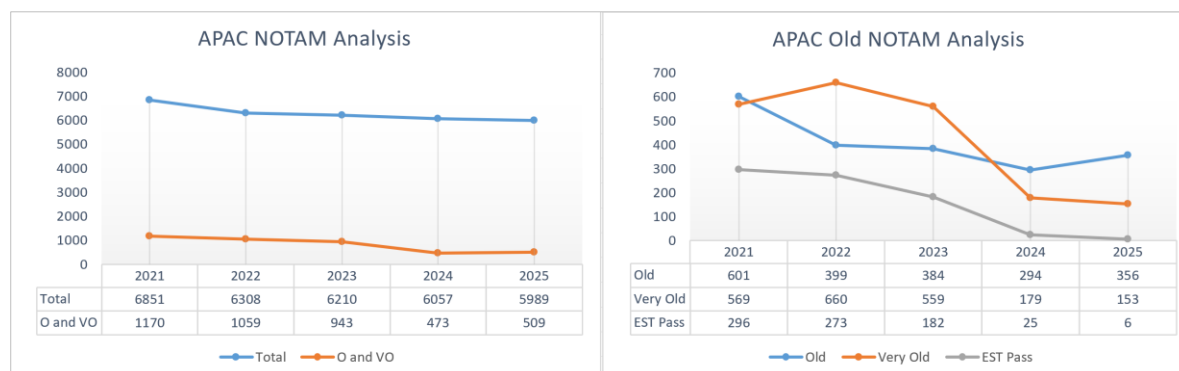


Figure 3: Regional NOTAM analysis

2.15 Twenty Administrations had achieved zero old or very old NOTAMs. However, a few high-volume States accounted for a disproportionately large share of the outdated notices. The analysis indicated that implementation of PANS-AIM procedures 6.1.4.4 and 6.1.4.5, which required transferring NOTAM information to appropriate aeronautical information products within three months, had been insufficient. It was estimated that proper compliance with these provisions could have reduced the number of old and very old NOTAMs by up to 77.6%.

2.16 The meeting was invited to note the findings, encourage immediate remedial action by States/Administrations, ensure adherence to relevant procedures, and engage in further discussion as appropriate.

Airline Feedback on NOTAMs

2.17 IATA presented a working paper that captured airline feedback on the quality of NOTAMs in the APAC region and worldwide. The paper revisited long-standing concerns from previous meetings, focusing on persistent challenges and sharing practical insights from operational experience. A central issue remained the misuse of permanent and long-term NOTAMs instead of timely updates to the AIP or AIP Supplements. The repeated re-issuance of identical content created information overload and increased the risk of critical details being missed. This practice was noted as being contrary to ICAO Doc 8126 requirements for incorporating PERM NOTAMs into the AIP within three months.

2.18 The paper also described specific quality and format issues. Airlines reported inconsistencies in NOTAM formatting, overuse of generic Q-codes, outdated contact details, missing geographic references, and failure to cancel notices once temporary activities concluded. Redundant and outdated information, overly long messages—some exceeding 200 words—and complex time entries reduced operational efficiency. Temporary obstacle NOTAMs were highlighted as particularly difficult to interpret due to lack of standardisation, and airlines advocated for clear coordinates and structured layouts to enable automated processing and map-based analysis.

2.19 Airlines further expressed concerns about the high volume of low-relevance NOTAMs, such as those issued for minor lighting outages, which diluted the significance of safety-critical notices. Suggestions included creating a separate series for VFR-specific NOTAMs and applying stricter issuance criteria. The meeting was invited to note this feedback and consider actions to improve compliance with ICAO guidance, particularly regarding timely integration into the AIP, accurate and consistent Q-code usage, concise formatting, and enhanced standardisation.

Knowledge development for originators

2.20 Japan stressed the need to equip aeronautical information originators with the skills for timely and accurate data submission during the transition from AIS to AIM. Many, especially at regional airports, lacked experience with NOTAM and AIP updates, and frequent staff changes worsened the issue. To address this, Japan's AIS Centre provided training on aeronautical information basics, NOTAM procedures, the AIRAC cycle, and the importance of accuracy.

2.21 To prepare for digital information services, the AIS Centre offered role-specific briefings on digital submissions, SWIM portal use, and compliance. A post-training survey found that over half of airport administrators were ready to adopt digital services early. These efforts showed that targeted knowledge-sharing could improve data submission quality and reinforced the value of close AIS–originator collaboration.

2.22 The meeting also reviewed training benefits in other States. Mongolia reported success with regular courses, while Australia showcased its Aeronautical Data Originator portal for standardized, validated submissions. Hong Kong, China supported ongoing coordination among key stakeholders to improve AIM development. The meeting concluded that better integration across AIM, ATC, and airport operations was needed, and that originators must ensure and verify data quality.

Replacing the NOTAM Concept

2.23 The United States, on behalf of IMP/WG-A, briefed the meeting on progress toward replacing the traditional NOTAM system with the Digital Operational Reporting Information Service (DORIS). Designed to deliver standardised, machine-readable temporary changes to aeronautical data, DORIS aimed to improve situational awareness and operational efficiency through real-time digital services.

2.24 DORIS was based on separating data from its portrayal, with next intended users responsible for rendering information for end users. Transition requirements included Digital Data Sets, SWIM compliance, and supporting infrastructure. Publication was planned for late 2025, with SARPs effective in November 2030 and applicable from November 2032, while the discontinuation of NOTAM and AIP SUP formats was anticipated but unscheduled.

2.25 The transition was expected to be gradual, potentially extending beyond 2038. As States would progress at different rates, interim solutions such as Digital NOTAM or AFTN-style messages were under consideration to maintain compatibility.

2.26 Planned actions included releasing the DORIS concept on the ICAO website in 2025, updating Doc 8126, amending Annexes and PANS, and holding workshops from 2026 to 2028. Engagement with industry, including COTS solution providers, was seen as vital to ensure harmonisation between temporary and static datasets.

Airline Feedback on AIS

2.27 IATA presented feedback from member airlines on the quality and accessibility of AIS in the Asia-Pacific region. The report reflected persistent challenges and included recommendations to improve service consistency, digital access, and data accuracy.

2.28 Airlines reported ongoing issues with AIS websites and eAIP access. In several States, eAIP platforms were unavailable during public holidays or secured with overly complex login procedures, hindering timely access to critical operational data. Some States maintained separate websites for AIP and Airspace Usage Plans (AUP), with noted discrepancies between AUP content and current NOTAMs. Concerns were also raised about inconsistent AIP formatting and the lack of downloadable full versions, which created difficulties in low-connectivity environments.

2.29 Feedback addressed aerodrome charting accuracy, especially taxiway restrictions, with one case of operational confusion due to mismatches between ATC instructions and published data. Outdated AIP Supplements were another concern, with examples of multiple NOTAMs issued over many years without consolidation into the AIP. Airlines requested timely incorporation of amendments, clear revision indicators, elimination of separate AIP subscription fees, and deferral of non-urgent changes to regular update cycles.

2.30 Airlines further recommended consistent use of ICAO location indicators and a reduction in minor amendment frequency. The meeting was invited to note these observations and encourage States to improve AIS usability, standardisation, and transparency, with ongoing input from airspace users to support collaborative enhancement.

Asia/Pacific Region ICARD Status and 5LNC Duplicate Resolution

2.31 The Secretariat presented a paper on the ICARD application, highlighting its role as the sole source for five-letter name-codes (5LNCs) used to mark waypoints, and the global initiative to eliminate duplicate 5LNCs. Current ICARD usage and associated challenges were reviewed. The meeting was reminded that when personnel from a State regulator or Air Navigation Service Provider are responsible for allocating 5LNCs for ATS routes, STARs, and related procedures, at least one, and preferably two, staff members must be registered as ICARD_5LNC_PLANNERS to meet Annex 11 requirements.

2.32 The meeting was further reminded that ICARD must serve as the central system for reserving and allocating 5LNCs. Guidance on submitting new 5LNC requests, amendments, and deletions was also provided to ensure compliance and improve the management of aeronautical waypoint codes.

2.33 The meeting was presented with the challenges and agreed to the proposed actions as follows:

Challenges

- a) Like-sounding proximate checks work only on accepted ICARD 5LNCs. When large number of new requests are submitted together, the submitter has to check manually within their own list of submission;
- b) Difficulty in selecting appropriate 5LNCs due to the more 5LNCs already allocated and 500NM like-sounding proximate criteria;
- c) ICARD does not reflect unregistered published 5LNCs, resulting in rejection of requests;

- d) Rejection of new 5LNCs starting with the letter “X” as it may pose pronounceability issues for all airspace users and Air Traffic Control;
- e) Available 5LNC in ICARD that may pose pronounceability issues, for example: “SRONO”, “TMANG”; and
- f) Some States have removed 5LNC from AIP; however, they did not submit a deletion (DEL) request in ICARD.

Proposed Actions

- a) The practice of reserving blocks of codes for State use was discontinued several years ago, and new blocks are no longer provided. ICAO proposed to release the 5LNCs currently in the block codes to the general pool by 31 December 2025 (AAITF/20 WP/14 Attachment D). It was strongly recommended that ICARD Planners complete the planning and registration of their reserved block codes by 25 December 2025 (Last AIRAC Cycle of 2025). Subsequently, all block codes would be made available for use by all State/Administration;
- b) Removal of all 5LNCs starting with “X” in the ICARD system;
- c) An ad hoc group to be established, to review and conduct a study on the reduction of proximity radius criteria, with the objective of facilitating an increase in the number of successful 5LNC requests;
- d) States were strongly recommended to review and verify the newly identified duplicates (AAITF/20 WP/14 Attachment C) and inform ICAO to resolve the verified duplicates by 28 February 2026. After which, all new duplicated 5LNCs would be combined into one attachment for the AAITF/21 in 2026; and
- e) States were strongly encouraged to submit ICARD deletion (DEL) requests to allow more 5LNC available for APAC States/Administrations.

2.34 ICAO clarified that the draft conclusion is focused on new ICARD request and those 5LNC starting with “X” that are listed as available in the ICARD would be remove for selection. Whereas for currently published 5LNC starting with “X”, States were encouraged to plan for changes to in due course.

2.35 All administrations with block codes were requested to inform the ICAO Regional Office of their plans to use the assigned 5LNC block codes by 31 December 2025. Otherwise, the codes would be returned to the general pool.

2.36 The following Draft Conclusion was proposed below:

Draft Conclusion ATM/SG/13-xx: Removal of Available (Non-Allocated) 5LNCs Starting with ‘X’ and Release of Block Codes

That, 5LNCs starting with ‘X’ in the ICARD system that are not registered to any Administrations shall be removed for selection from the ICARD system; and the release of 5LNC block codes to the general pool by 31 December 2025.

5ANNC utilization and recommendations to ICARD

2.37 Japan had implemented 865 five-character alphanumeric codes (5ANNCs) by 20 March 2025, accounting for about 24 percent of all waypoint codes. These were primarily used in SIDs, STARs, and IAPs where direct ATC routing was uncommon. Operators found 5ANNCs effective in reducing communication errors, especially when language accents varied. Japan noted the challenge of anticipating future ATC needs when designing procedures and stressed the importance of balancing 5ANNC usage with expanding the availability of five-letter name codes (5LNCs) through ICARD updates.

2.38 To prevent depletion of 5LNCs, Japan proposed reducing the proximity check radius for sound-like conflicts in the APAC region from 500 to 300 nautical miles, aligning with the EUR/NAT standard. The meeting was encouraged to review safety considerations and gather data before making such a change. Japan also suggested several ICARD enhancements, such as enabling proximity checks between unregistered codes, adding pronunciation checks for all codes, allowing user-defined pronounceable 5LNCs, removing unpronounceable codes from the reserve list, and promptly deleting obsolete codes to free capacity.

2.39 It was confirmed that further details on these proposals would be provided during the 5LNC & 5ANNC Seminar later in the meeting. Australia and Indonesia expressed support for Japan's proposals. Regarding 5ANNCs, Australia and ICAO clarified that these codes assumed no verbal ATC instructions, and therefore no provisions existed for managing their duplication.

2.40 The Secretariat reported that no new ICARD features had been introduced because the system was outdated, but consultations on potential improvements had been initiated earlier in the year.

Increasing Available 5LNCs in the APAC Region

2.41 Australia presented challenges in obtaining new five-letter pronounceable name-codes (5LNCs) in the APAC region due to strict 500NM sound-like proximity checks for enroute waypoints. This shortage was particularly evident on Australia's east coast, where overlapping proximity zones around major airports limited availability. For Western Sydney's second international airport, 151 new terminal waypoints were required, with 99 assigned five-character alphanumeric codes (5ANNCs) because of the limited 5LNC supply. Australia also highlighted the unreliability of the ICARD proximity tool and noted that Annex 11 did not mandate a fixed proximity radius, allowing for possible regional adjustments.

2.42 The meeting noted that the EUR/NAT region applied a reduced 300NM proximity radius, which could ease APAC constraints if adopted regionally. Australia supported using 5ANNCs for non-compulsory reporting points in PBN procedures, as recommended by the APAC Regional Office. To address the shortage, Australia proposed creating an APAC 5LNC Ad Hoc Group to review practices, study international approaches, evaluate ICARD policies, and suggest improvements to increase usable 5LNCs. Japan also submitted a related paper on 5ANNC use and ICARD application challenges.

2.43 Japan, Singapore, Hong Kong China, Indonesia, Malaysia, Thailand, and the Republic of Korea supported Australia's proposal and endorsed forming the ad hoc group to tackle the limited 5LNC availability in the APAC region. Their backing reflected a broad consensus on the urgency of the issue and the need for collaborative regional action.

2.44 The Secretariat clarified the ICARD proximity check algorithm, explaining that it mainly evaluated letter similarity, such as matching sequences in specific letter positions, and that flagged codes could still be accepted if states performed their own safety assessments on proximity and pronounceability. It was noted that acceptance decisions were subjective and handled on a case-by-case basis.

2.45 The meeting reviewed the draft Terms of Reference (TOR), and agreed to the Decision to address growing operational needs linked to airspace development and 5LNC management. During the meeting, Australia, Hong Kong China, Indonesia, Japan, the Republic of Korea, Singapore, and Thailand expressed their intention to contribute to the Ad Hoc Group. In addition, it was agreed that both Australia and Japan would serve as rapporteurs.

Decision AAITF/20-4: Establish APAC 5LNC Ad Hoc Group

That, AAITF establishes the APAC 5LNC Ad Hoc Group, to:

- a) review current 5LNC management practices implemented by APAC States;*
- b) examine 5LNC guidelines and practices adopted in other ICAO regions;*
- c) assess the existing ICAO APAC guidance materials related to 5LNCs;*
- d) consider ongoing ICAO work related to ICARD; and*
- e) develop recommendations for consideration by the AAITF.*

5LNC and 5ANNC Seminar

2.46 A 5LNC and 5ANNC seminar was conducted on Wednesday 11 June 2025 and included the following presentations:

- a) ICAO 5LNC refresher and Issues by the ICAO secretariat
- b) Challenges related to 5LNCs by IFAIMA
- c) 5LNC Challenges in Australia
- d) Overview of the Republic of Korea's 5LNC Management and Introduction to the 2025 Periodic Review of Significant Points
- e) Lessons from Indonesia's Journey Toward ICAO ICARD Resolution Compliance
- f) Challenges of 5LNC from a Data Perspective by USA; and
- g) 5ANNC utilization and recommendations to ICARD by Japan

2.47 The presentations shared many common points such as difficulties in finding suitable pronounceable 5LNCs, and issues and suggested improvements specific to the ICARD system. The use of 5ANNCs was presented by Australia, Indonesia and Japan which helped to alleviate the challenges of limited 5LNCs. Indonesia also identified challenges in the implementation of 5ANNCs.

2.48 In addition, Australia stressed the importance of independent checks and also presented a case study on the benefits of reduction of the enroute proximity check criteria of 500NM to 300NM. United States provided information for the process of aeronautical data chain and flow of aeronautical data.

Outcomes of the APAC Common SWIM Aeronautical Information Services Ad Hoc Group

2.49 The APAC Common SWIM Aeronautical Information Services Ad Hoc Group, established by AAITF/19, reported its outcomes at AAITF/20 after convening five meetings with experts from multiple States and organizations. The group reached consensus on the Terms of Reference (TOR) and an initial set of SWIM services, agreeing to adopt AIXM 5.1.1 as the regional standard and to use both Publish/Subscribe and Request/Reply exchange patterns for most services. Discussions covered airspace, aerodrome, digital NOTAM, ATIS, and SAR information.

2.50 Key achievements included proposed updates for describing and exchanging airspace data, retention of Runway Condition Report services due to operational relevance, and agreement to consider ATIS and SAR services in future phases. The group acknowledged that some elements required further clarification, particularly through coordination with the APSAR Working Group. The initial outcomes were submitted to SWIM/TF/10, and the Secretariat presented the necessary Decision and TOR for the group's continuation.

2.51 In response to questions, the meeting was informed that the main difference between AIXM 5.1 and 5.1.1 was the addition and correction of the GML structure in version 5.1.1. While the two versions remained compatible for data transmission, certain automated charting functions could be limited if version 5.1 was used without the improvements from 5.1.1. The data itself would transfer correctly, but system capabilities might be reduced.

2.52 The meeting agreed on the proposed Decision and TOR and supported the continuation of the Ad Hoc Group's work. This endorsement ensured ongoing regional coordination to advance SWIM AIS implementation and alignment with global standards.

Proposal to Develop APAC Common Digital Sub-Datasets

2.53 The Republic of Korea proposed developing APAC Common Digital Sub-datasets to better support SWIM Aeronautical Information Services, noting that existing Annex 15 datasets may not fully meet service needs. These sub-datasets should be structured, include relevant metadata, and follow ICAO standards, with a modular design to improve efficiency.

2.54 The meeting acknowledged possible data gaps, the technical complexity of mapping elements to service requirements, and the need for regional consensus on their necessity and structure. Singapore suggested involving the SWIM Task Force to ensure technical alignment with existing data models.

2.55 It was agreed that the Ad Hoc Group would study the need and structure of the sub-datasets with the SWIM Task Force and IMP. No immediate changes were made to the group's TOR, pending further analysis and expert input.

Addressing the Need for Clarification on the Requirements Related to Electronic Charts

2.56 Singapore sought clarification on electronic chart requirements under the Asia/Pacific Regional Plan for Collaborative AIM, noting that Phase III mandated electronic charts but lacked detailed specifications on data elements, formats, update frequency, and integrity standards. The absence of guidance was recognized as a challenge for States moving from AIS to AIM, risking inconsistent implementation, data incompatibility and reduced interoperability.

2.57 The meeting supported creating standardized exchange formats aligned with international models like AIXM, along with consistent update and data integrity protocols. Clearly defined data elements and structured guidance were agreed as essential for harmonized, reliable electronic chart exchanges across the region.

2.58 It was noted that the ICAO Information Management Panel (IMP) was already addressing related topics, including future Annex 4 provisions and aeronautical charting requirements. Several IMP job cards covered electronic charting standards and risks, so the meeting agreed to defer further regional action until the IMP's work was complete to avoid duplication and maintain alignment with global developments.

Use of Digital Form for Status and Implementation Progress Report

2.59 The ICAO Secretariat informed the meeting that the annual Regional AIM Monitoring and Reporting process, which relied on Microsoft Excel sheets submitted via email by 28 February, created a significant consolidation burden and was prone to errors such as duplication, inconsistent formatting, and inaccurate data entry. These issues risked compromising the accuracy of subsequent analyses.

2.60 To improve efficiency and accuracy, the Secretariat proposed replacing the Excel-based system with a Microsoft Forms digital submission process. It was noted that State letters were normally sent to State points of contact, and to ensure timely notification of the revised format, ICAO could also send email updates directly to all current AIS personnel contacts in the Asia/Pacific region.

2.61 The meeting agreed to the following Draft Conclusion, to be considered by ATM/SG.

Draft Conclusion AAITF/20-2: The Use of Digital Form to Collect Annual Regional AIM Monitoring and Reporting Data

That, the digital form (Microsoft Forms) be used as the primary means to collect annual Regional AIM Monitoring and Reporting data.

2.62 Given that the use of digital form is also applicable to the other regional subsidiary plan monitoring and reporting forms, the Secretariat has prepared a separate working paper consolidating the relevant discussions and agreements from the related meetings for ATM/SG's consideration (ATM/SG/13 WP/07).

Review the AAITF TOR

2.63 The meeting reviewed the AAITF Terms of Reference (TOR) and a minor change was proposed to amend the reference to the ICAO Doc 10203 – Manual on the System-Wide Information Management (SWIM) Implementation, as well as PANS-IM (Doc 10199). Accordingly, the meeting agreed on the following Draft Decision, to be considered by ATM/SG:

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

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

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the ATM and Airspace Safety Deficiencies in the AIS/AIM field, and particularly the deep concern about poor quality management of aeronautical information in the APAC Region;
- b) note the continuing overall poor implementation of the Phase I and II performance expectations of the Regional Plan for Collaborative AIM;
- c) note the need for increased effort and compliance in the management of NOTAMs;
- d) note the ongoing need for resolution of duplicated 5-letter name codes, and for ICARD registration of all 5LNCs that are published in AIP;
- e) discuss and agree to **Draft Conclusion ATM/SG/13-x: Removal of Available (Non-Allocated) 5LNCs Starting with 'X' and Release of Block Codes**;
- f) discuss and agree to **Draft Decision ATM/SG/13-x: Update AAITF Terms of Reference (TOR)**;
- g) note **Decision AAITF/20-4: Establish APAC 5LNC Ad Hoc Group**; and

h) discuss any relevant matters as appropriate.

Draft Conclusion ATM/SG/13-x: Removal of Available (Non-Allocated) 5LNCs Starting with ‘X’ and Release of Block Codes		
What:	That, 5LNCs starting with ‘X’ in the ICARD system that are not registered to any Administrations shall be removed for selection from the ICARD system; and the release of 5LNC block codes to the general pool by 31 December 2025.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why:	5LNCs starting with ‘X’ in the ICARD may pose pronounceability issues to airspace users and Air Traffic Control and the release of Block codes will increase the number of available 5LNCs for all.	Follow-up: <input checked="" type="checkbox"/> Required from States
When:	29-Aug-25	Status: Draft to be adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX		

Draft Decision ATM/SG/13-x: Update AAITF Terms of Reference (TOR)		
What:	That, the updated AAITF Terms of Reference at AAITF/20 Meeting Report Appendix D be adopted.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> 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: <input checked="" type="checkbox"/> Required from States
When:	29-Aug-25	Status: Draft to be adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX		

Regional Implementation Status of AIM Performance Expectations

Date Last Amended: May 18, 2025

	Phase 1												Phase 2								Phase 3			
	1				2	3	4	5	6	7	8	9	10	11	12	13	14			15	16	17	18	
	1a	1b	1c	1d													14a	14b	14c					
Afghanistan	0%	0%	0%	0%	0%	0%	40%	0%	30%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	50%	0%	0%	0%	
Australia	100%	100%	100%	100%	100%	100%	100%	60%	100%	100%	100%	100%	100%	70%	100%	60%	0%	100%	0%	0%	100%	0%	0%	
Bangladesh	100%	40%	100%	50%	0%	60%	50%	30%	30%	70%	80%	100%	60%	20%	50%	0%	0%	90%	0%	30%	0%	0%	0%	
Bhutan	100%	100%	100%	100%	0%	100%	40%	20%	80%	100%	100%	100%	50%	50%	70%	40%	10%	10%	20%	40%	100%	0%	0%	
Brunei Darussalam	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cambodia	100%	100%	90%	90%	30%	100%	70%	60%	80%	80%	80%	100%	80%	70%	80%	80%	90%	90%	30%	100%	30%	30%	50%	
China	100%	100%	100%	90%	100%	100%	100%	100%	100%	100%	100%	90%	40%	70%	100%	100%	20%	60%	80%	100%	30%	10%	10%	
Hong Kong, China	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	80%	100%	70%	50%	50%	
Macao, China	100%	100%	100%	100%	0%	100%	100%	100%	50%	0%	100%	70%	0%	50%	50%	50%	0%	0%	0%	80%	0%	0%	0%	
Cook Islands	0%	100%	0%	0%	0%	0%	100%	0%	30%	0%	0%	70%	0%	0%	100%	0%	0%	0%	0%	50%	0%	0%	0%	
DPR Korea	100%	100%	100%	100%	80%	50%	100%	100%	100%	100%	100%	100%	80%	50%	100%	70%	30%	20%	60%	90%	30%	30%	10%	
Fiji	100%	100%	100%	100%	70%	100%	100%	100%	100%	100%	100%	90%	20%	20%	20%	0%	0%	0%	0%	0%	20%	10%	0%	
French Polynesia	100%	100%	80%	100%	50%	0%	80%	80%	80%	100%	60%	100%	80%	100%	100%	80%	50%	50%	0%	100%	60%	60%	20%	
India	100%	100%	100%	100%	30%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	90%	100%	0%	0%	0%	
Indonesia	100%	100%	100%	100%	90%	100%	100%	100%	100%	100%	100%	100%	80%	70%	100%	50%	10%	10%	10%	50%	50%	50%	0%	
Japan	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	80%	80%	100%	100%	80%	90%	0%	100%	100%	100%	0%	
Kiribati	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Lao PDR	100%	100%	100%	100%	0%	100%	0%	0%	0%	30%	0%	30%	0%	0%	20%	0%	0%	30%	0%	0%	0%	0%	0%	
Malaysia	100%	100%	100%	70%	50%	100%	50%	100%	100%	100%	100%	100%	50%	50%	100%	100%	90%	90%	90%	90%	0%	0%	50%	
Maldives	100%	100%	100%	100%	0%	100%	80%	100%	100%	100%	100%	100%	100%	100%	90%	0%	0%	0%	0%	0%	100%	0%	0%	
Marshall Islands	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Micronesia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Mongolia	100%	100%	100%	100%	30%	100%	100%	100%	100%	100%	100%	100%	100%	70%	100%	100%	100%	100%	100%	100%	100%	50%	30%	
Myanmar	100%	100%	100%	100%	0%	100%	0%	100%	30%	100%	100%	70%	0%	50%	50%	100%	100%	100%	100%	100%	0%	0%	100%	
Nauru	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Nepal	100%	100%	100%	100%	100%	100%	60%	100%	100%	90%	100%	100%	40%	0%	60%	0%	60%	60%	50%	0%	20%	0%	0%	
New Zealand	100%	100%	100%	100%	0%	100%	50%	100%	80%	100%	100%	100%	0%	80%	100%	90%	100%	80%	40%	80%	0%	60%	80%	
Pakistan	100%	100%	100%	100%	100%	100%	90%	100%	100%	100%	100%	100%	70%	70%	100%	100%	80%	100%	60%	100%	80%	50%	50%	
Palau	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	
Papua New Guinea	50%	100%	50%	50%	0%	100%	50%	50%	30%	50%	0%	30%	0%	50%	50%	30%	0%	0%	0%	0%	0%	0%	0%	
Philippines	100%	100%	100%	100%	10%	100%	100%	100%	100%	100%	100%	100%	100%	20%	100%	100%	0%	0%	0%	50%	100%	0%	0%	
Republic of Korea	100%	100%	100%	100%	80%	80%	80%	100%	100%	80%	100%	100%	80%	50%	100%	70%	50%	50%	50%	100%	50%	20%	0%	
Samoa	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	
Singapore	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	
Solomon Islands	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Sri Lanka	100%	100%	100%	100%	100%	100%	100%	100%	100%	90%	100%	100%	100%	70%	100%	90%	100%	50%	40%	100%	20%	20%	20%	
Thailand	100%	100%	100%	100%	80%	100%	90%	100%	100%	80%	100%	90%	100%	100%	100%	30%	20%	0%	0%	100%	30%	20%	20%	
Timor Leste	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Tonga	0%	100%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	100%	0%	0%	0%	0%	50%	0%	0%	0%	
Vanuatu	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	
Viet Nam	100%	100%	100%	100%	70%	100%	100%	80%	90%	90%	100%	100%	100%	90%	100%	80%	90%	90%	70%	80%	10%	10%	10%	
USA	100%	100%	100%	90%	70%	100%	100%	100%	100%	100%	100%	90%	70%	80%	100%	100%	0%	80%	70%	100%	90%	100%	90%	
France	0%	100%	0%	0%	0%	0%	0%	0%	80%	0%	0%	100%	0%	0%	100%	100%	0%	0%	0%	80%	0%	0%	10%	
	66%	73%	66%	64%	36%	63%	57%	58%	64%	60%	61%	74%	44%	43%	64%	47%	32%	38%	27%	55%	30%	16%	14%	

Phase 1

1 Developed policy and enacted primary legislation and supporting regulations for Annex 4 and Annex 15 SARPS, and PANS-AIM Procedures including:

1a establishment of an organizational structure for the safety oversight of aeronautical information service providers;;

1b requirements for monitoring of differences from Annex 4 and Annex 15 SARPS;

1c requirements for aeronautical information/data originators;

1d Requirement for AIS quality management systems and processes to be established by all entities in the end-to-end AIS data chain.

2 Ensured National Air Navigation Plans developed in accordance with the Beijing Declaration, and the provisions of the Asia/Pacific Seamless ANS Plan, include the implementation planning for each of the performance expectations of the Regional Plan for Collaborative AIM.

3 Established AIS either as a separate entity within or, ideally, separated from the civil aviation administration in accordance with the guidance provided in ICAO Doc 8126 – AIS Manual Chapter 2 (2.4.1.2 and 2.4.1.3).

4 Developed competency requirements for AIS personnel, including English language proficiency requirements, supported by a program of regular performance assessment.

5 Established regular programs of engagement with all stakeholders.

6 Established quality management processes for aeronautical information under the SARPS in Annex 15.

- 7 Established formal agreements between AIS providers and aeronautical data originators under the relevant SARPS in Annex 15 specifying the content, quality, maintenance and timing of the provision of aeronautical data that required to be promulgated in AIP, and the application of quality management process.
- 8 Provided full access to relevant ICAO Annexes and Documents to all personnel having responsibility for the origination, reception, management, publication and/or distribution of aeronautical information and aeronautical data.
- 9 Ensured full compliance of all aeronautical products with common reference systems in accordance with the relevant SARPS and procedures in Annex 15 and PANS-AIM: WGS-84, MSL/EGM-96 and UTC

Phase 2

- 10 Adapted policy, primary legislation and supporting regulations for Annex 4, Annex 15 SARPS and PANS AIM to support transition to AIM: implementation of digital databases of aeronautical information and production of electronic AIP and other Aeronautical Information Products.
- 11 Adapted training, competency and performance assessment of AIS personnel the establishment and maintenance of digital databases and generation of data sets of aeronautical information, quality management systems, and electronic AIP.
- 12 Implemented and maintained quality management systems encompassing all functions of an AIS.
- 13 Established and maintained digital databases of aeronautical information (PANS-AIM Appendix 1)
- 14 Managed terrain, obstacle and aerodrome mapping data through the establishment of:
 - 14a a terrain database, from which terrain data sets conforming with Annex 15 Section 5.3.3.3 may be generated;
 - 14b an obstacle database, from which obstacle data sets conforming with Annex 15 Section 5.3.3.4 may be generated; and
 - 14c an aerodrome mapping database, from which aerodrome mapping data sets conforming with Annex 15 Section 5.3.4 may be generated.
- 15 Implemented internet-accessible electronic AIP generated from a digital database of aeronautical information.

Phase 3

- 16 Adapted policy, primary legislation and supporting regulations for Annex 4 and Annex 15 SARPS, and PANS AIM procedures to support the automated exchange of aeronautical data in a SWIM environment: Interoperability with meteorological products, Communications networks for the exchange of aeronautical data and Electronic aeronautical charts.
- 17 Adapted training, competency development and performance assessment of AIS personnel to support the automated exchange of aeronautical data in a SWIM environment, and the generation of electronic aeronautical charts.
- 18 Exchanged digital data sets of aeronautical information in a SWIM environment, aligned with ASBU DAIM-B2/1, provided Aeronautical Information briefing with integrated meteorological information and Electronic aeronautical charts.

Color Code:

Green - Increased implementation

Red - Decreased implementation

Dark Blue - No Change

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/3436, 2023/2025)