



ICAO

International Civil Aviation Organization

**Twelfth Meeting of the Air Traffic Management Sub-Group
(ATM/SG/12) of APANPIRG**

Bangkok, Thailand, 23 – 27 September 2024

Agenda Item 5: ATM Systems (Modernization, Seamless ATM, CNS, ATFM)

OUTCOMES OF CNS SG28

(Presented by ICAO Secretariat)

SUMMARY

This paper presents the latest outcomes of significant discussions done in various CNS contributory bodies meetings on different matters in the CNS area under the CNS SG umbrella that may interest the ATM Sub-group.

1. INTRODUCTION

1.1. The Twenty-Eighth Meeting of the Communications, Navigation and Surveillance Sub-group (CNS SG/28) of Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) was held at the ICAO APAC Regional Office, Bangkok, Thailand, from 1 to 5 July 2024. The Meeting was joined by **120** participants from **25** States/Administrations, **3** International Organizations and **6** participants from industry partners. The Meeting was chaired by Mr Richard Wu, Deputy Director-General of Civil Aviation, Civil Aviation Department, Hong Kong China.

2. DISCUSSION

Key Discussion

2.1 The Meeting noted verbal updates on the progress of the Asia and Pacific (APAC) Air Navigation Service Provider (ANSP) Committee (AAC) after the CNS SG/27 Meeting and key outcomes from the technical working groups established under the oversight of the Air Traffic Management and Regional Airspace Safety Monitoring Advisory Sub-Groups of APANPIRG, as well as other information relevant to the CNS Sub-Group shared by ATM SG Secretariat.

2.2 The Meeting noted the **Decision ATM/SG/10-3: Establish FF-ICE Operational Requirements Small Working Group** to prepare a set of harmonised operational requirements of Flight and Flow Information for a Collaborative Environment (FF-ICE) and recommend an approach to devise an FF-ICE implementation strategy for APAC, aligned with APAC Seamless ANS objectives.

2.3 The CNS SG28 Meeting was informed that in the AAITF/19 Meeting, detailed statistical data on old NOTAMs and very old NOTAMs was provided for the APAC Administration. APAC Administrations were invited to take immediate action to ensure full compliance with NOTAM procedures in ICAO Doc 10066 *Procedures for Air Navigation Services – Aeronautical Information Management* (PANS-AIM) and **Conclusion ATM/SG/6-14**, and to ensure the consistent distribution of NOTAMN, NOTAMR, NOTAMC and NOTAM Checklists to international NOTAM Offices and

multinational NOTAM processing units. It was added that the list of recommended services in the initial APAC Common SWIM Information Services was further reviewed and modified by SWIM TF/9. Realising a need for further discussion, the AAITF/19 Meeting agreed to **form an Ad Hoc group to discuss this subject's technical and operational aspects** rather than reaching a consensus at AAITF/19. Lastly, the AAITF/19 adopted *Decision AAITF/19-3: Establish APAC Common SWIM Aeronautical Information Services Ad hoc Group*.

2.4 ICAO Secretariat informed that the Asia/Pacific ATS Inter-facility Data-link Communication Implementation Task Force (APA TF) was the responsible contributory body in the APAC region for supporting AIDC implementation. However, the APA TF was dissolved in 2021 and the remaining tasks of APA TF were passed over to the APAC ATM Automation System Task Force (ATM AS TF). ATM AS TF was invited to produce a pictorial map to show the latest update for the AIDC implementation against Hotspots in the Region in the next CNS SG/29 Meeting. **ACTION ITEM 28-1.**

APAC Region IWXXM Implementation

2.5 To review the IWXXM implement status and gauge the readiness of the APAC Region for full implementation of IWXXM data exchange, a Draft Conclusion for the *Review of APAC Region IWXXM Implementation Status/ Readiness* was appraised by ACSICG/11 and MET/IE WG/22. CNS SG28 adopted the draft Conclusion:

Conclusion CNS SG/28/01 (ACSICG/11/02) - Review of APAC Region IWXXM Implementation Status/ Readiness	
What: States / Administrations provide ICAO an update on the status and readiness dates for the following: (a) AMHS with FTBP/IHE and configuration for single body part; (b) AMHS connection(s) will have sufficient capacity to support IWXXM exchange;	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: As per Amendment 79 to Annex 3 (applicable November 2020), States/ Administrations are required to exchange meteorological information in IWXXM form.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 05-Jul-2024	Status: Adopted by Sub group.
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: XX	

2.6 It was informed that a group of operational COM experts from *Australia, Fiji, Hong Kong China, Singapore, and the USA* will develop educational material to manage the distribution of IWXXM information when primary AMHS link failure occurs. In addition, a group of communication and MET experts would develop a checklist of steps required to operationalise the IWXXM exchange.

Correspondence Group for AMHS to SWIM Transition

2.7 The Meeting was informed that considering the lack of information for **AMHS to SWIM transition at the regional level**, the ACSICG/11 Meeting formed a **Correspondence Group (CG)** to study the transition strategy for the region by experts from volunteer States/Administrations, industry partners and concerned international organisations. This AMHS to SWIM transition CG (ATSCG) will study relevant issues, including the AMHS/SWIM gateway, guidelines, and profiles, focusing on developing use cases for different scenarios. The ATSCG will monitor the progress of the SWAMWAY Study Group of ICAO EUR NAT/AST TF. Fiji, Hong Kong China, Japan, Singapore (Lead), Thailand,

and the USA agreed to join ATSCG, and Frequentis agreed to provide an expert to act as a consultant. The ICAO Secretariat will consult IATA and CANSO for additional support.

Other SWIM TF/8 and SWIM TF/9 Key Outcomes

2.8 The following **Draft Decision** was adopted CNS SG/28 for APANPIRG/35 adoption:

Draft Decision CNS SG/28/02 (Decision SWIM TF/08/01) Information Management Panel consider the adoption of SWIM Discovery Service as a Global Standard for Globally Interoperable Service Discovery		
What: To propose to the Information Management Panel (IMP) to consider adopting the SWIM Discovery Service (SDS) as a global standard for globally interoperable service discovery.	Expected impact: <input checked="" type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical	
Why: Considering that APAC regional SWIM will also be part of global SWIM and that SDS was studied and tested by the SWIM TF, the consideration of IMP on the possible adoption of SDS as a global standard is required to ensure cross-regional interoperability of SWIM service discovery,	Follow-up:	<input type="checkbox"/> Required from States
When: 5-Jul-24	Status: Draft to be adopted by PIRG	
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input checked="" type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SWIM TF		

2.9 For the need to have a candidate baseline standard for SDS to support APAC SWIM implementation within the 2024-2030 target implementation timeframe, the following Draft Decision was adopted by SWIM TF/8 for CNS SG/28 consideration, which was adopted by CNS SG/28:

Decision CNS SG/28/03 (Decision SWIM TF/08/02) Candidate Baseline SWIM Discovery Service Standard for APAC		
What: To position the SWIM Discovery Service (SDS) specification as a candidate baseline standard for APAC SWIM implementation.	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: A candidate baseline standard for SDS is needed to support APAC SWIM implementation within the regionally-agreed target implementation timeframe of 2024-2030.	Follow-up: <input type="checkbox"/> Required from States	
When: 5-Jul-24	Status: Adopted by Subgroup	
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: SWIM TF		

2.10 Nominated by Singapore and seconded by USA, Dr Amornrat Jirattigalachote, Strategic Planning Manager (Engineering), Policy and Strategy Management Bureau of AEROTHAI, was re-elected as a Co-Chair of the SWIM TF in the SWIM TF/9 Meeting.

2.11 The SWIM TF/9 Meeting noted that during the ATFM/SG/14 Meeting, it was **agreed to establish a standard FIXM version** for exchanging cross-border information between operational ATFM systems in the APAC region. It was recognised that implementing a new system could be a time-consuming process, and changing the version during the implementation phase would only add complexity. The Meeting was informed that a process for version change is needed to provide a platform for ANSPs to implement the capability to discuss their concerns regarding the change.

2.12 The SWIM TF/9 Meeting requested ATFM SG to formulate the detailed change process to revise a commonly agreed FIXM version for the cross-border ATFM-related information exchange and share it with the SWIM TF/10 Meeting next year for further deliberations.

2.13 The ATFM/SG/14 agreed that FIXM v4.3 should be formalised as an agreed-upon version to support information exchange between operational ATFM systems. The draft conclusion ***Draft Conclusion ATFM/SG/14-01 – APAC Regional FIXM 4.3*** was presented to SWIM TF. The SWIM TF/9 Meeting provided support to the draft conclusion for further adoption by ATM SG/12.

2.14 The Meeting agreed that Task 4 leads, along with contributors, will evaluate FIXM v4.3's suitability to support ATFM, A-CDM, and integrated ATFM/A-CDM operations. Based on the outcomes of the analysis, a FIXM v4.3 extension may be proposed for consideration by the next Meetings of ATFM SG and SWIM TF.

2.15 The Meeting discussed the possibility of including the latest applicable versions of AIXM, FIXM, and IWXXM in the common APAC information services list. However, it was concluded that the appropriate bodies to discuss and agree on this matter are ICAO AAITF, FF-ICE Ad-hoc Group and MET/IE WG. The Meeting decided to propose that these contributory bodies consider deciding on the applicable version of information exchange models during a review of relevant common APAC SWIM Information Services to be submitted to them by SWIM TF.

2.16 Considering the benefits of making the draft version of APAC SWIM Technical Infrastructure Profiles available for States/Administrations to refer to as guidance to assist in their SWIM development and implementation, the SWIM TF/9 Meeting presented the revised draft of APAC SWIM Technical Infrastructure Profiles for consideration by CNS SG/28 which was adopted by the CNS SG/28 Meeting:

Decision CNS SG/28/04 (Decision SWIM TF/09/01) –APAC SWIM Technical Infrastructure Profiles v1.0	
What: The APAC SWIM Technical Infrastructure Profiles v1.0 provided in Appendix A is adopted as a living document for immediate use by APAC States/Administrations.	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: To assist APAC States/Administrations in their SWIM development and implementation, guidance specific to the operational environment within APAC is required. The draft APAC SWIM Technical Infrastructure Profiles v1.0 is matured enough to be immediately used by APAC States/Administration.	Follow-up: <input type="checkbox"/> Required from States
When: 5-Jul-24	Status: Adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SWIM TF	

2.17 The SWIM TF/9 Meeting noted the need for a **dedicated group** to support APAC Member States/Administrations in implementing recommendations being developed by the TFP. SWIM TF requested CNS SG to provide guidance, especially for the **group responsible for implementing information security provisions in the APAC region**. With the expectation that the *Manual on Information Security* is to be published in the second half of 2024, later than the time of the CNS SG/28, the Meeting discussed that the APAC States/Administration would need adequate time to study and understand the content and recommendations contained in the manual before making a decision on the appropriate way forwards. Therefore, it was advised that the discussion on forming a dedicated group be deferred to the CNS SG/29 Meeting in 2025. It was anticipated that, by the next CNS SG/29 Meeting, most States/Administrations would have enough details and knowledge to share their views on the need for a formal group along with the required expertise and ToR.

2.18 Information about the amendments of the ICAO provisions in various Annexes and the Procedures for Air Navigation Services (PANS) concerning the initial implementation of the flight and flow — information for a collaborative environment (FF-ICE) services and SWIM, applicable from 28 November 2024 was discussed. To enjoy the full benefits of FF-ICE services, all States were encouraged to implement the minimum set of FF-ICE services as soon as possible following the ICAO provisions that become applicable on 28 November 2024.

2.19 In response to a question about proposed timelines to cater to a mixed-mode environment where both the current flight plan (FPL2012) and the FF-ICE flight plan co-exist, the Meeting was informed that a global cessation of the ICAO 2012 Flight Plan by 2034 is recommended by ICAO Secretariat for consideration of the AN-Conf/14 to be held from 26 August to 6 September 2024 in Montréal, Canada. If the AN-Conf/14 agrees to the recommendation, the timeline for a complete migration to the FF-ICE flight plan would be 2034. The ICAO Secretariat will share further information in the next Meeting. USA reminded the need for close coordination and consultation with airlines, SITA and ARINC to ensure the smooth transition from FPL2012 to FF-ICE.

2.20 The Meeting noted that the SRWG/8 Meeting adopted the example forms for GNSS RFI Reporting to States through the Decision **SRWG/8/5 – GNSS Interference Reporting Form for APAC** and **Conclusion SRWG/8/6 - APAC Regional Aeronautical Radio Frequency Management Guidance Material Edition 1.1**.

Space-Based VHF

2.21 Singapore updated the Meeting on the progress of the technical and regulatory studies of space-based VHF communications (voice and data) in the frequency band 117.975-137 MHz. Singapore informed that there are two companies working in parallel with the launch of prototype satellites with VHF payload for PoC demonstrations between 2023 and 2025: Skykraft, an Australian space services company and Startical, a joint venture of Enaire and Indra. Both companies plan to launch a constellation of satellites specifically designed for ATM to provide space-based VHF communications and ADS-B surveillance services with global coverage. The Meeting noted that to conduct the PoC demonstration, the ICAO regional office will need to assign appropriate VHF frequencies so that verification tests can take place. ICAO Secretariat supplemented the ICAO Position in WRC-23 Agenda Item 1.7 to prevent undue constraints on existing VHF systems operating in the AM(R)S, the ARNS, and adjacent frequency bands. Australia also supplemented that additional measures have been considered to avoid interference with existing VHF facilities.

Guidance Material to Protect Radio Altimeters from Potentially Harmful Interference

2.22 The ICAO Secretariat informed that it has been working with FSMP and the ICAO MID Regional Office Radio Altimeter (RADALT) Action Group (AG) to develop and finalise guidance material to protect radio altimeters from potential harmful interference from new cellular broadband technologies such as 5G. On 19 January 2024, the draft Circular 360 *Guidance on Safeguarding*

Measures to Protect Radio Altimeters from Potential Harmful Interference was at the final stage of development/publication in the ICAO HQ. The Meeting noted that in June 2024, the ICAO **Circular 360** was approved by and published under the authority of the Secretary-General. The official publication is available at the [ICAO store](#) in digital or printed format for USD 33.

SELCAL32 Survey

2.23 ICAO Secretariat presented information about a survey conducted by the ICAO APAC Office to assess the readiness of ANSP's Flight Plan (FPL) processing systems handling SELCAL32 and request member States/Administrations to submit the response. The paper shared the background of the issues of SELCAL addresses shortage and the survey need to evaluate the preparedness of ICAO member States for the implementation of Annex 10 Amendment 91 concerning the selective calling system (SELCAL) that became applicable on 3 November 2022 and identify any associated challenges. The Meeting noted that the survey was shared with Member States/Administrations by State Letter Ref.: T 8/4.3: AP072/23 (CNS) dated 6 June 2024. The information and data received through the survey will be used to gauge the readiness of the States/Administrations' flight plan processing systems to handle SELCAL32.

PBNICG/11 Updates

2.24 By WP/07 in the PBNICG/11 Meeting, Australia presented an overview of issues encountered when implementing RNP separation standards across FIR boundaries within the framework of APAC plans. Considerations for improving seamless RNP separation, including review of RNP designation requirements, the provision to States of more information on RNP designation and changes to RNP separation standards (ICAO Doc 4444) to accept other means of compliance, were discussed. The PBNICG/11 Meeting requested CNS SG to share the paper with ATM SG to deliberate on the issues raised in the paper and to provide guidance to review the application of RNP separation within Doc 4444 PANS-ATM to include transition from RNP routes or airspace to other route or airspace to improve the seamless nature of boundaries.

2.25 The Meeting noted the concerns raised by Australia in [WP/07 of PBNICG/11](#) titled "*Implementation of PBN Separation across FIR boundaries*" and Australia updated the Meeting that the subject had been discussed in the Separation and Airspace Safety Panel (SASP) 39th Working Group Meeting held in Montréal, Canada from 6 to 17 May 2024 titled "*Issues with the requirement to 'designate' airspace or ATS routes for the application of some performance-based separation standards where RNP is specified*". **The Meeting requested the ICAO Secretariat to share both papers with ATM SG for their review and deliberation on the issues** raised in the paper and provision of the necessary guidance to review the application of RNP separation within Doc 4444 PANS-ATM to include a transition from RNP routes or airspace to other routes or airspace to improve the seamless nature of boundaries.

2.26 The Meeting was informed that IATA proposed simplifying and standardising authorisations and FPL notations for PBN capabilities and their related interpretations in the PBNICG/11 Meeting. After deliberations, the PBNICG/11 Meeting drafted the Draft Decision PBNICG/11-03: PBN Operational Authorizations/Approvals for CNS SG/28 adoption. The Meeting suggested sharing the information and concerns communicated by IATA, supported by PBNICG, with relevant HQ panels for further discussion. Therefore, the CNS SG/28 Meeting agreed not to adopt the proposed draft decision with the consent from IATA.

Guidance Document for Implementing GBAS in the APAC Region

2.27 GBAS/SBAS ITF/6 endorsed the draft conclusion for further endorsement by CNS SG/28 on the draft guidance document for implementing GBAS in the APAC Region, which was adopted by CNS SG/28:

Conclusion CNS SG/28/08 (GBAS-SBAS ITF 06/01) - Guidance Document for Implementation of GBAS in the APAC Region	
What: The Guidance document for implementing GBAS in the APAC Region developed by the APAC GBAS/SBAS ITF is ready.	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: To guide States for the implementation of GBAS	Follow-up: <input type="checkbox"/> Required from States
When: 5 July 2024	Status: Adopted by CNS SG
Who: <input checked="" type="checkbox"/> CNS Sub group <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

Flight Inspection Guidance Material

2.28 The Meeting reviewed the proposed modification and adopted the following draft Conclusion for Flight Inspection Guidance Material adoption:

Conclusion CNS/SG/28/09 - Update of Flight Inspection Guidance Material (FIGM)	
What: That, the Edition 4.0 of the Flight Inspection Guidance Material (FIGM) is 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 FIGM is subject to regular review and update in the light of on-going development of flight inspection standards and recommended practices.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 5-Jul-24	Status: 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:	

General Strategy on Assignment of and Migration to SI Code

2.29 SURICG Co-chair explained the rationale for amending the General Strategy on Assignment of and Migration to SI Code in the APAC Region. He explained that unlike the situation in Europe, where II code 14 is reserved for research/test radar, and II code 15 is reserved for military radar, in which a centralised military agent coordinates the assignment, the situation in APAC is different. Therefore, reserving II codes 14 and 15 is not practicable for the region. The Meeting adopted the following draft Conclusion:

Draft Conclusion CNS/SG/28/10 (SURICG/9/1) Update of the General Strategy on Assignment of and Migration to SI Code in the APAC Region		
That:	<p>1. The ICAO APAC regional office will manage the assignment of II codes 14 and 15 and their matching SI codes like the rest of the II and SI codes.</p> <p>2. Revised General Strategy on Assignment of and Migration to SI Code is adopted.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input checked="" type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
Why: A study by SURICG concluded that reservation of II codes 14 and 15 and their matching SI codes for research/test radars and military radars on a region-wide basis is not practicable in APAC.	Follow-up: <input type="checkbox"/> Required from States	
When: 5-Jul-24	Status: Draft to be adopted by PIRG	
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		

Inconsistencies of Aircraft Address (AD) and Target Identification (ID) between Surveillance Data and Flight Plan

2.30 Hong Kong China proposed the incorporation of outcomes of the Workshop on ICAO Aircraft Address (AD) and Target Identification (ID) in Surveillance Data and Flight Plan, which was held in conjunction with SURICG/8 in June 2023, into ADS-B Implementation and Operations Guidance Document (AIGD), with the purpose to raise the awareness of AD/ID discrepancy issues within the aviation community and provide stakeholders with recommendations to mitigate the discrepancies. The SURICG/9 Meeting reviewed and suggested publishing the guideline as a standalone document rather than incorporating it into AIGD since the issue did not just affect ADS-B but also Mode S in general, and endorsed the following draft Conclusion for CNS SG/28 adoption, which was adopted by CNS SG/28:

Conclusion CNS/SG/28/11 (SURICG/9/2) - Guideline on addressing inconsistencies of Aircraft Address (AD) and Target Identification (ID) between Surveillance Data and Flight Plan		
What: APAC guideline on addressing inconsistencies of ICAO Aircraft Address (AD) and Target Identification (ID) between Surveillance Data and Flight Plan is adopted.	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>	
Why: The guideline consolidated the outcomes of the Workshop on ICAO Aircraft Address and Target Identification between Surveillance Data and Flight Plan held in June 2023.	Follow-up: <input type="checkbox"/> Required from States	
When: 05-July-24	Status: Adopted by Subgroup	
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX		

ATMAS IGD

2.31 The ATMAS TF/5 Meeting noted that China cooperated with the ad-hoc working group and developed the draft (Edition 1.4) of the ATMAS IGD. The revised draft (Edition 1.4) of the ATMAS IGD was circulated to Member States/Administrations for review and comments on 11 May 2024. Suggestions from New Zealand and Hong Kong China were endorsed by the ATMAS TF/5 Meeting. The ATMAS TF/5 Meeting adopted the **Conclusion ATMAS TF/05/01 - ATMAS IGD Edition 1.4**.

An Expert Group within ATMAS TF to Review the Core AIDC Messages in the IGD

2.32 A paper proposed establishing a select AIDC group to reassess the core AIDC messages in AIDC IGD, drawing from Singapore's experience in the technical testing of exchanging ABI, CDN, and MAC messages. As different ATM automation systems have their design considerations concerning the handling of Field 15 (Route) of the Flight Plan, a possible solution would be to allow AIDC messages to be configurable concerning the inclusion of Field 15. To achieve this, there was a need to review the core AIDC messages in the AIDC IGD to enable States in the APAC region to progress with AIDC implementation. The ATMAS TF/5 Meeting appreciated the experience shared by Singapore and agreed to form an expert group within ATMAS TF to review the core AIDC messages in the IGD. China, Hong Kong China, Malaysia, Pakistan, Philippines and Singapore joined the group voluntarily, which will work offline and conduct online Meetings when necessary. Singapore will act as the group's rapporteur.

AIDC Implementation Issues

2.33 The number of AIDC implementation issues reported by Member States/ Administration, based on fault categories are as shown in the table below:

Fault Categories	ATMAS TF/5 (2024)		
	Issues Reported	Closed	Open
a. Communication Link	9	9	0
b. ATM System	65	56	9
c. AIDC Message	23	22	1
d. Airspace Design/Procedures	13	12	1
e. Other	6	4	2
Total	116	103	13

2.34 The Meeting appreciated Indonesia's efforts in consolidating the report and presenting the working paper and encouraged all States/Administrations to continue to update/report the AIDC implementation issues.

APAC Seamless ANS Plan

2.35 This paper presented the progress of updating the APAC Seamless ANS Plan V4.0 for review and approval by APANPIRG/35. APAC Administrations wishing to participate in the review of the Seamless ANS Plan provided their PoC details. Circulation of Draft Seamless ANS Plan V3.2.2 to PoC for feedback from States was shared in April 2024. The deadline for Feedback from States by email was 10 June 2024. In response, only four States/Administrations provided feedback. In addition, the deadline for reporting the APAC Seamless ANS Plan V3.0 implementation by states through the APAC Seamless ANS Reporting Tool Portal was 31 May 2024, for which only five states submitted implementation status through the portal. The States/Administrations were urged to submit the Seamless ANS Plan implementation Status and provide feedback on the draft Seamless ANS Plan V 3.2.2 through the respective PoCs at the earliest.

2.36 The Meeting requested that the States/Administration submit the implementation status and provide feedback to the APAC Seamless ANS plan as soon as possible after further review. It was added that the feedback and reports will be collated and used to update the plan and presented at the ATM SG Meeting in September. The Meeting approved the draft Seamless ANS Plan V 3.2.2.

2.37 Regarding the proposal for the formulation of an APAC Seamless ANS Planning group, the ICAO secretariat stated that due to the continuous nature of APAC Seamless ANS plan update process to be done every three years to ensure harmonisation with Global Air Navigation Plan, it is not practical to have a new group.

APAC Seamless ANS Reporting Tool

2.38 The paper presented the outcome of the ICAO Workshop on APAC Seamless ANS Reporting Tool held from 17 to 19 April 2024 at the ICAO APAC Regional Office. The Meeting recalled the APANPIRG/34 **Conclusion APANPIRG/34/1** - APAC Regional Seamless ANS Reporting Form 3.0 and Cloud-based Seamless ANS Implementation Progress Reporting and **Conclusion APANPIRG/34/2** - ICAO HQ Support for Regional ANS Implementation for the reporting of Seamless ANS implementation progress through the Reporting Portal by not later than 30 June 2024, and then at least once a year by not later than 28 February each year.

2.39 The Meeting noted that after this Workshop, States were reminded to report the Seamless ANS implementation progress through the Reporting Portal by not later than 30 June 2024, to review and update the POC list, and to review the Draft Seamless ANS Plan V4.0 and provide comments to ICAO Regional Office by 31 May 2024. However, as of today, few responses have been submitted on the portal. The Meeting noted that ICAO APAC could organise another webinar using this reporting tool, if necessary, with support from Hong Kong and China.

2.40 The Meeting noted that the tool is new and under upgradation. It lacks several essential notification features. The ICAO Secretariat is working with the ICAO HQ IT team to improve the tool's functionality. It was suggested that when States use the tool, they can share their suggestion for its improvement. Based on users' recommendations and needs, more features can be incorporated into the tool's functionality.

Guidance Document for Achieving High Resilience in Sustaining Operations of Critical Aeronautical Infrastructure

2.41 Hong Kong China outlined the need for a guidance document to consolidate experience from States/Administrations for achieving high resilience in operations of Critical Aeronautical Infrastructure, summarised the core elements for inclusion into the guidance document, and proposed a way forward to developing the guidance document. The Meeting recalled ACTION ITEM 27-11 of CNS SG/27, which requested the ICAO Secretariat to consolidate relevant experience from States/Administrations into a guidance document for future reference.

2.42 Hong Kong China informed that the guidance document aimed to provide States/Administrations with a comprehensive framework with best practices and recommendations for achieving high resilience in supporting round-the-clock CAI (Critical Aeronautical Infrastructure) operations, thereby safeguarding the safety and efficiency of air navigation services. Hong Kong China presented core elements to be included in the guidance document for planning, designing, implementing, and maintaining CAI to achieve high resilience. States/Administrations and international organisations were encouraged to actively participate in developing the guidance document by sharing relevant experience, best practices and recommendations for planning, design, implementation and maintenance of CAI to achieve high resilience. It was added that with the collaborative efforts from the APAC region, the guidance document could be shaped in a way that provides guidelines and recommendations for achieving high resilience in CAI.

2.43 The Meeting requested views from States/Administrations on the organisation of the workshop and potential contributions from them. Australia, China, Hong Kong China, Lao PDR, India, Japan, Singapore, Sri Lanka, Thailand, and the USA shared their support for the workshop and assured their contribution. Hong Kong China shared their offer to host the workshop and suggested that a 1-to 2-day workshop may be conducted along with relevant CNS contributory body Meetings to save travel costs by Member States/Administrations.

Air Navigation Deficiencies

2.44 The Meeting noted that the only outstanding issue was the unreliability of AFS communication between Afghanistan and Pakistan. Pakistan informed that it has joined CRV and is actively coordinating with Afghanistan to restore the communication link between Afghanistan and Pakistan. Pakistan shared the expectation to restore the connection by the end of 2024.

CNS Meeting Plan – 2025

2.45 Following is the tentative schedule for the CNS contributory bodies' Meetings to be held in 2025. The ICAO Secretariat will inform Member States about the exact dates, mode and venue of the Meeting while issuing invitation letters at least three months before the event.

Meetings Plan for 2025				
No.	Name of Meeting	Dates (in 2025)	Mode of Meeting	Location
1.	CRV OG/13 and CRV OG/14	10-15 Feb and Q4 2024	In-Person	Bangkok
2.	WRC27 Workshop	24-25 Feb	In-Person	Bangkok
3.	SRWG/9	26-28 Feb	In-Person	Bangkok
4.	FSMP-WG/20	26 February -7 March	In-Person	Bangkok
5.	Project Team Space-Based VHF (PT-SBV)	11 to 14 March 2025	In-Person	Bangkok
6.	ACSICG/12	24-28 March	In-Person	Bangkok
7.	SURSG/4	-	-	-
8.	SURICG/10 (4 days)	22-25 April	In-Person	USA/Hong Kong China
9.	SBAS/GBAS ITF/ 7	April	In Person	Bangkok
10.	PBNICG/12	No plan to conduct if no PBN officer joins	In-Person/Hybrid	Bangkok
11.	SWIM Activity	19 May	In-Person	Bangkok
12.	SWIM TF/10 (4 days)	20-23 May	In-Person	Bangkok
13.	ATMAS TF /6 (4 days, One day dedicated to AIDC discussion)	2-5 June	In-Person	Bangkok
14.	CNS/SG/29	End of August	In-Person	Bangkok

2.46 The Meeting extended sincere gratitude to Mr. Richard Wu for his dedication and contributions and Services in APAC Region as the Chairperson of CNS Sub Group of APANPIRG from July 2017 to July 2024.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) note the information contained in this paper;
- b) discuss way forward for issues raised by PBNICG/11 Meeting mentioned in section 2.25; and
- c) discuss any relevant matters as appropriate.

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