



ICAO

*International Civil Aviation Organization***The Tenth Meeting of System Wide Information Management Task Force (SWIM TF/10)***Bangkok, Thailand, 20 – 23 May 2025***Agenda Item 9:** Next Meeting date and any other business**CNS-RELATED ASBU IN ASIA/PACIFIC SEAMLESS ANS PLAN**

(Presented by the Secretariat)

SUMMARY

This paper summarized the discrepancies observed in the Asia/Pacific Seamless ANS Plan Versio 4.0 and proposed plans for their resolutions.

1. INTRODUCTION

1.1 The Twenty Seventh Meeting of the Communications, Navigation and Surveillance Sub-group (CNS SG/27) of Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) was held at the ICAO APAC Regional Office, Bangkok, Thailand, from 28 August to 1 September 2023. The meeting webpage containing all resources can be accessed at: <https://www.icao.int/APAC/Meetings/Pages/2023-CNS-SG-27.aspx>

1.2 The Twenty-Eighth Meeting of the Communications, Navigation and Surveillance Sub-group (CNS SG/28) of APAC Air Navigation Planning and Implementation Regional Group (APANPIRG) was held at the ICAO APAC Regional Office, Bangkok, Thailand, from 1-5 July 2024. The meeting webpage containing all resources can be accessed at: <https://www.icao.int/APAC/Meetings/Pages/2024-CNS-SG-28.aspx>

1.3 The Thirty-Fifth Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/35) was held at the ICAO Asia and Pacific Regional Office in Bangkok, Thailand, from 25 to 27 November 2024. The Meeting adopted the Asia/Pacific Seamless ANS Plan by Conclusion 35/1. The meeting webpage containing all resources can be accessed at <https://www.icao.int/APAC/Meetings/Pages/2024-APANPIRG-35.aspx>

1.4 This paper shares information about some discrepancies observed in CNS-related ASBU mentioned in the Asia/Pacific Seamless ANS Plan Version 4.0 as published in the ICAO APAC eDocument webpage (<https://www.icao.int/APAC/Pages/eDocs.aspx>).

2. DISCUSSION

2.1 In CNS SG/27 (2023), the ICAO Secretariat, responsible for finalizing the Asia/Pacific Seamless ANS Plan Version 4.0, presented the draft and related outcomes by WP/28 and proposed an update of the Performance Improvement Plan of the Asia/Pacific Seamless ANS Plan for initial review by CNS SG. A draft proposal for revising the Asia/Pacific Seamless ANS Plan *Section 7 – Performance Improvement Plan* was shared for Meeting review.

2.2 The CNS SG/27 Meeting noted that the draft Section 7 was presented to the Seventh Meeting of the AOP Sub-Group (AOP/SG/7, Bangkok, Thailand, 03 – 06 July 2023). The proposed revisions of all sections of the Plan were also planned to be presented to the MET and ATM Sub-Groups of APANPIRG for discussion before being presented to APANPIRG/34 for approval under a formal Conclusion. The CNS SG/27 Meeting was invited to review and provide feedback to the Secretariat on the proposed revision of the Asia/Pacific Seamless ANS Plan, **identify Priority 1 ASBU elements** identified in **the new performance expectations**, and comment on a Secretariat proposal to revise the numbering format of performance expectations.

2.3 ICAO Secretariat CNS section informed that SWIM TF already shared the SWIM-related ASBUs to be included in the next edition of Asia/Pacific Seamless ANS Plan as per APANPIRG Conclusion APANPIRG/33/9 “The Asia-Pacific SWIM Implementation Timeframe and inclusion of the Asia/Pacific SWIM Implementation in the Asia/Pacific Seamless ANS Plan” in 2022. ICAO Secretariat CNS section added that, except for SWIM-related ASBUs, other ASBUs require Member States' observations, feedback, and consent before CNS SG agrees to incorporate them into the next version of the Plan.

2.4 The Meeting appreciated the ICAO’s effort in conducting a preview of the Asia/Pacific Seamless ANS Plan. The Meeting noted that proposed CNS-related ASBUs for the next version of the Asia/Pacific Seamless ANS Plan were not yet discussed or consulted with relevant Point of Contact / CNS contributory bodies as per the agreed process in APANPIRG/33 (refer to paragraph 2.14 of WP/28). Therefore, it was impractical for CNS SG to provide comments on proposed modifications related to CNS-related ASBUs, new ASBUs to be added in phase 4, and which of the new block 2 ASBUs should be included in phase 5.

2.5 As a way forward, the CNS SG/27 Meeting agreed to form a “**CNS-related ASBUs review Ad-hoc Group for the next edition of Seamless ANS Plan,**” which was tasked to review the proposed ASBUs, prepare a list of CNS-related ASBUs to include in the Plan, share an interim report to APANPIRG/34, and seek consent from CNS SG/28 (2024). *Australia, China, Hong Kong China, India, Malaysia, New Zealand, Singapore, Thailand, and the United States* volunteered to join the Ad-hoc Group. Other interested member states were invited to share their willingness to join the ad-hoc group via email at snibhani@icao.int or yluo@icao.int

2.6 The Meeting also requested all Member States to nominate a Point of Contact (PoC) to review CNS-related updates that will be proposed by the Ad-hoc Group and share PoC information with the ICAO Secretariat by email at yluo@icao.int or snibhani@icao.int. Additionally, it was recommended that a review of the proposed draft version of the Asia/Pacific Seamless ANS Plan be initiated.

2.7 The ad-hoc group did offline discussions by email and met virtually on 26 September 2023 and finalized the list of CNS-related ASBUs. The list was circulated with member States/Administrations by ICAO APAC State Letter Ref.: T 8/2.15 –AP139/23(CNS) dated 04 October 2023 on Subject: The list of CNS-related ASBUs to incorporate in the next version of the Asia/Pacific Seamless ANS Plan. Response to the letter was incorporated in the revised list, and the list was finalized, which is provided in **Appendix A**.

2.8 The final list was shared with the ICAO secretariat responsible for incorporating all comments in February 2024. The finalized list was also presented to the CNS SG/28 (2024) meeting.

2.9 In CNS SG28, by [WP/17](#), the ICAO Secretariat, responsible for finalizing the Asia/Pacific Seamless ANS Plan, presented the progress of the update of the draft Asia/Pacific Seamless ANS Plan Version 4.0 for review and approval by APANPIRG/35. The CNS SG28 Meeting noted that

the circulation of Draft Asia/Pacific Seamless ANS Plan V3.2.2 to POC for feedback from States was shared in April 2024. The deadline for feedback from States/Administrations by email was 10 June 2024. In response, only four States/Administrations provided feedback. In addition, the deadline for the Reporting of Asia/Pacific Seamless ANS Plan Version 3.0 implementation status by States/Administrations through the Seamless ANS Reporting Tool Portal was 31 May 2024, for which only 11 States /Administrations provided comprehensive reporting.

2.10 It was added that an update of the draft Asia/Pacific Seamless ANS Plan would include feedback from States/Administrations and an analysis of the implementation of the Asia/Pacific Seamless ANS Plan was in progress. It was added that, with the lack of enough data, it was not possible to present an adequate analysis of the status of implementation of the operational requirements in the APAC region as recommended in the Asia/Pacific Seamless ANS Plan.

2.11 In addition, the paper added that feedback provided by ATM/SG/11 and CNS SG/27 Ad-hoc review group, both during and since the Meeting and including the FF-ICE SWG outcomes, was included in Draft Asia/Pacific Seamless ANS Plan Version 3.2.2. The States/Administrations were urged to submit the Asia/Pacific Seamless ANS Plan Version 3.0 implementation status and provide feedback on the draft Asia/Pacific Seamless ANS Plan Version 3.2.2 through the respective PoCs as soon as possible.

2.12 Furthermore, the finalized draft Asia/Pacific Seamless ANS Plan Version 4.0 was presented to APANPIRG/35 for adoption, which was adopted by the APANPIRG/35 meeting by Conclusion 35/1, which is provided in **Appendix B**.

2.13 Recently, it was observed that the priorities of some CNS ASBUs finalized by *CNS-related ASBUs review Ad-hoc Group for the next edition of the Seamless ANS Plan* were not correctly reflected in the published Asia/Pacific Seamless ANS Plan Version 4.0. This discrepancy could be due to an inadvertent mistake when compiling feedback from all sources.

ASBU Element	Proposed Priority by CNS-related ASBUs Review Ad-hoc Group	Priority Published in Seamless ANS Plan Version 4.0
NAVS-B0/1 SBAS	Priority 1	Priority 2
NAVS-B0/2 GBAS	Priority 1	Priority 2
NAVS-B0/3 ABAS	Priority 1	Priority 2
NAVS-B0/4 MON	Priority 1	Priority 2

2.14 It is also noted that if a Priority 1 was assigned to the above NAVS ASBU elements, it would require a consequential review and amendment to the following paragraphs in the Asia/Pacific Seamless ANS Plan Version 4.0:

- Paragraph 5.6 (Table 1: Asia/Pacific ASBU Block 0, Block 1 and Block 2 Priority) related to APTA-B0/3 to be reviewed, due to the inconsistency in prioritization of related ASBU elements [NAVS-B0/1 to B0/2 (Priority 1) against APTA-B0/3 (Priority 3)];
- Paragraph 5.10 to be amended: **NAVS-B0/1** to **B0/4** to be included as Priority 1 elements;
- Paragraph 7.7 (refer below) to be amended: the current text in Seamless ANS Plan Version 4.0 suggested that those NAVS-B0/1 to B0/4 are recommended upgrade

(i.e. Priority 2).

- 7.7 SBAS, GBAS, ABAS and 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: the application of GNSS and its augmentations such as GBAS Landing System (GLS) is recommended where these systems were economically beneficial.

Note 2: 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.*

2.15 After internal coordination within the ICAO Secretariat, it was decided that the responsible ICAO Secretariat would share the issues associated with proposed changes in the priorities of NAVS ASBUs with the responsible contributory bodies. These included GBAS-SBAS ITF and PBNICG. It was also decided that the ICAO secretariat will share this information with all contributory bodies under CNS for their information and necessary action. Based on the outcomes of the discussion with relevant contributory bodies, the plan to correct the list of CNS-related ASBUs and other impacted ASBUs, if any, will be finalized and shared with the CNS SG/29 meeting planned to be held from 16-20 June 2025.

2.16 The information was shared with the GBAS SBAS ITF/7 meeting held from 14-16 May 2025 in the ICAO APAC Office, Bangkok, Thailand by [WP/02](#). The Meeting was informed about a comparison of the priorities adopted by CNS SG/28 based on a proposal from the CNS-related ASBUs Review Ad-hoc Group for the next edition of the Seamless ANS Plan and the priorities published in the Asia/Pacific Seamless ANS Plan Version 4.0. The Meeting was proposed following these changes:

ASBU Element	Approved Priority by CNS SG/28	Priority Published in <i>Asia/Pacific Seamless ANS Plan Version 4.0</i>
NAVS-B0/1 to B0/4 SBAS, GBAS, ABAS, MON	Priority 1	Priority 2

Figure 1: Proposed Priorities vs. Published Priorities

2.17 Referring to the Fourteenth Air Navigation Conference (AN-Conf/14) (Montréal, 26 August to 6 September 2024) **Recommendation 2.2/2 – Addressing GNSS interference and contingency planning** and the DGCA/59 Conference (Cebu, Philippines, 14 to 18 October 2024) **Action Item 59/15**, proposed changes to the priorities of NAVS-B0/3 ABAS and NAVSB0/4 MON to Priority 1 was presented to the GBAS/SBAS ITF/7 Meeting.

2.18 Recognizing the fact that not all ASBU NAVS module Block 0 elements may be implemented as Priority 1 in the Asia/Pacific Region, the ICAO Secretariat proposed considering the splitting of the elements from a 'Thread' (see **Figure 2**) into individual elements (see **Figure 3**) to ensure that appropriate Priority is assigned to each element.

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

Figure 2: Priority Published in *Asia/Pacific Seamless ANS Plan Version 4.0*

Functional Category	Element	Description	Priority	Responsibility for Review
Technology	NAVS-B0/1	GBAS	2	CNS SG
	NAVS-B0/2	SBAS	2	
	NAVS-B0/3	ABAS	1	
	NAVS-B0/4	MON	1	

Figure 3: Proposed New Priority

2.19 The GBAS SBAS ITF/7 discussed the revised priorities and agreed to modify them as amendments in the plan v4.0. The ICAO Secretariat is debating the way forward and the need for change in Seamless ANS Plan v4.0. The outcomes of the discussion will be shared with the CNS SG/29 meeting planned to be held from 16 to 20 June 2025

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) note the information in this paper;
- b) request States/Administrations to review CNS/other ASBUs in the Seamless ANS plan and share any discrepancies, if any; and
- c) discuss any matters as appropriate.
