International Civil Aviation Organization

Thirteenth Meeting of Performance Based Navigation Implementation Coordination Group (PBNICG/13)

(Bangkok, Thailand, 14-16 October 2026)

Agenda Item 2: Global and Regional PBN Updates

GLOBAL AND REGIONAL PBN IMPLEMENTATION UPDATE

(Presented by Secretariat)

SUMMARY

This paper presents an update on global and Asia/Pacific Performance-based Navigation (PBN) implementation at international airports, based on ICAO iSTARS data, comparing 2025 and 2026 status for approach, SID and STAR procedures and progress against the targets of Assembly Resolution A37-11. It also reviews the PBN-related priorities of the Asia/Pacific Seamless ANS Plan Version 4.0 and the USOAP Protocol Questions related to PBN, and invites States to share their challenges and lessons learned in achieving full PBN implementation.

1. INTRODUCTION

1.1 ICAO Assembly Resolution A37-11 urges States to complete a PBN implementation plan as a matter of urgency to achieve:

a) implementation of RNAV and RNP operations (where required) for en route and terminal areas;

b) implementation of approach procedures with vertical guidance (APV) (Baro-VNAV and/or augmented GNSS), including LNAV only minima, for all instrument runway ends, either as the primary approach or as a back-up for precision approaches by 2016, with intermediate milestones of 30 per cent by 2010 and 70 per cent by 2014; and

c) implementation of straight-in LNAV only procedures for instrument runways at aerodromes where there is no local altimeter setting available and where there are no aircraft suitably equipped for APV operations with a maximum certificated take-off mass of 5 700 kg or more.

1.2 Through the Asia and Pacific Ministerial Declaration on Civil Aviation (Beijing & Delhi Declarations), States committed to implement ICAO Standards and Procedures for Air Navigation Services (PANS) and the Asia/Pacific Seamless ANS Plan, including prioritized GANP elements, focusing as a matter of priority on, among others, PBN implementation in accordance with Assembly Resolution A37-11 on Global PBN Goals.

1.3 This paper provides the latest PBN implementation statistics for the Asia/Pacific (APAC) Region compared with the global picture, and reviews the PBN-related elements of the Seamless ANS Plan Version 4.0 and the USOAP Protocol Questions (PQs).

2. DISCUSSION

PBN implementation status

2.1 The statistics below are taken from ICAO iSTARS data for international airports. APAC implementation continued to increase in 2026 across most procedure types, as shown in Figure 1.

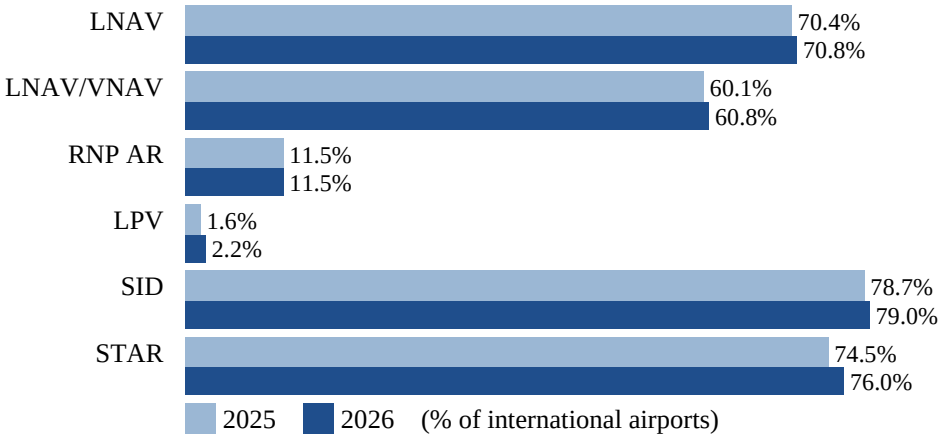


Figure 1. APAC PBN implementation at instrument runways international airports, 2025 vs 2026 (source: ICAO iSTARS)

2.2 Based on the number of instrument runways, APAC has attained 74.9% of instrument runways implementing PBN, which remains below the global average of 80.3%.

2.3 Based on the number of States meeting the Assembly Resolution A37-11 targets, 28 of the 39 APAC member States (71.79%) have reached the Resolution targets, which is above the global average of 67.38%.

Global Air Navigation Plan & Asia/Pacific Seamless ANS Plan

2.4 The Global Air Navigation Plan (GANP, Doc 9750) provides the global strategic framework for the harmonization and modernization of air navigation systems, enabling States and stakeholders to address future air traffic growth and technological developments while maintaining safety, efficiency and sustainability. To facilitate a better understanding of the Aviation System Block Upgrade (ASBU) framework, ICAO has moved the GANP from a document-based format (5th edition) to a web-based platform (6th edition), with Volume II available through the ICAO GANP portal.

2.5 APANPIRG Conclusion 36/5 adopted a corrigendum to the Asia/Pacific Seamless ANS Plan Version 4.0. The Plan allocates priorities to its elements based on their importance in promoting Seamless ANS:

a) **Priority 1** – critical upgrade: elements whose implementation would bring the most benefit to the region and are essential to achieve the service level required globally;

b) **Priority 2** – recommended upgrade: elements which would bring benefits to the region and are generally to be implemented from 2025, although States are encouraged to implement earlier if beneficial; and

c) **Priority 3** – elements which may not be universally implemented in the Asia/Pacific Region.

2.6 Within the Asia/Pacific Region, the expected priority of implementation is set out in the Asia/Pacific Seamless ANS Plan. The Priority 1 PBN-related elements, which States are expected to implement first, are PBN approach procedures with vertical guidance (APTA-B0/1), RNAV 1 or RNP 1 SID/STAR (APTA-B0/2), aircraft-based augmentation systems (NAVS-B0/3) and the navigation minimal operating network (NAVS-B0/4).

USOAP Protocol Questions related to PBN

2.7 USOAP CMA assesses the effective implementation including PBN. Relevant Protocol Questions (PQs) evaluate whether States have established and effectively implemented the regulatory, operational, safety and oversight arrangements necessary to support safe PBN operations.

2.8 PBN-related PQs cover navigation specifications, safety assessments, procedure design capability, flight procedure oversight, staff competency, training, surveillance, and quality assurance of instrument flight procedures. States are encouraged to use these PQs as a self-assessment tool to strengthen regulatory oversight and support sustainable PBN implementation.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper and take action as appropriate;

b) encourage States to exchange information on challenges, best practices and lessons learned in PBN implementation, including the regulatory framework, safety assessment and oversight arrangements

c) encourage States to report their PBN implementation progress for ANS Seamless monitoring through their State Focal Points.

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