



ICAO

*International Civil Aviation Organization***Twenty Eighth Meeting of the Communications/
Navigation and Surveillance Sub-group (CNS SG/28)
of APANPIRG***Bangkok, Thailand, 1 July – 5 July 2024***Agenda Item 9:** Regional implementation review and updates

9.4 Beijing Declaration implementation related to CNS

BEIJING DECLARATION IMPLEMENTATION IN CNS

(Presented by the Secretariat)

SUMMARY

At the first ICAO's APAC Ministerial Conference on Civil Aviation in Beijing, China, in 2018, the APAC Ministers in charge of civil aviation formalised their shared commitments to high-priority aviation safety and efficiency objectives. This paper shares a snapshot of the current implementation progress of the APAC Member States' commitments outlined in the Beijing Declaration in the field of Air Navigation Services.

1. INTRODUCTION

1.1 At the first ICAO's APAC Ministerial Conference on Civil Aviation in Beijing, China, from 31 January to 1 February 2018, the Ministers in charge of civil aviation endorsed the Declaration of Asia/Pacific Ministerial Conference on Civil Aviation (Beijing), also known as the Beijing Declaration, formalising their shared commitments on high-priority aviation safety and efficiency objectives. They agreed to pursue cooperative progress on goals relating to aviation safety oversight, State Safety Programme (SSP) implementation, aerodrome certification, independence of accident investigation authority, the timely implementation of the Asia/Pacific Seamless Air Traffic Management Plan, and the sharing of information and best practices for air navigation and search and rescue services.

1.2 The objectives of the Beijing Declaration were to assist the Civil Aviation Authorities in demonstrating to their Ministers the current challenges and needs for resources, including human resources and funding to cope with the traffic growth. It also established a high-level commitment to the public, industry, and investors.

1.3 This paper shares the current implementation status of the APAC States' commitments to the Beijing declaration, based on data collected by the ICAO Secretariat up to June 2024 in the area of Air Navigation Services.

2. DISCUSSION

2.1. The Ministers' commitment to Air Navigation services defined in the Beijing Declaration is as follows:

2.1.1 Commit to implementation by 2022 of the Asia/Pacific Seamless Air Traffic Management (ATM) Plan to enhance ATM capacity and harmonisation in the Region, including a focus on:

- (a) Transitioning from Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM) System;
- (b) Performance Based Navigation (PBN) implementation;
- (c) Common ground/ground telecommunication infrastructure to support Air Navigation Services (ANS) applications;
- (d) An enhanced level of civil/military cooperation;
- (e) Enhanced surveillance capability including Automatic Dependent Surveillance-Broadcast (ADS-B) technology;
- (f) Air Traffic Flow Management/Collaborative Decision Making (CDM) implementation for high density airports; and
- (g) Air navigation in national planning frameworks such as National Development Plans (NDPs) supported by National Air Navigation Plans.

2.1.2 Promote sharing of best practices in the provision of ANS, including Aeronautical Search and Rescue (SAR), Meteorological Services for International Air Navigation (MET) and Air Traffic Flow Management (ATFM) through regional cooperation and enhanced coordination.

2.2. The current implementation status of the APAC States' commitments to the Beijing declaration for CNS is as follows:

a) Performance Based Navigation (PBN)

Commitment: "Commit to implementation by 2022: PBN implementation."

Indicators :

1. Percentage of PBN Approach procedures on international runway ends.
2. Percentage of PBN SIDs/STARs on international runway ends.

Note: The Assembly Resolution A37-11 urges States to implement PBN Approach procedures and PBN SIDs/STARs at all IFR runway ends by 2016. As the Secretariat uses the ICAO official data from iSTARS, the information for international aerodromes is only displayed.

Source: iSTARS (Integrated Safety Trend Analysis and Reporting System)

Current implementation:

Charts 1. PBN (Approach) Update, as of January 2024 (as per iSTARS)

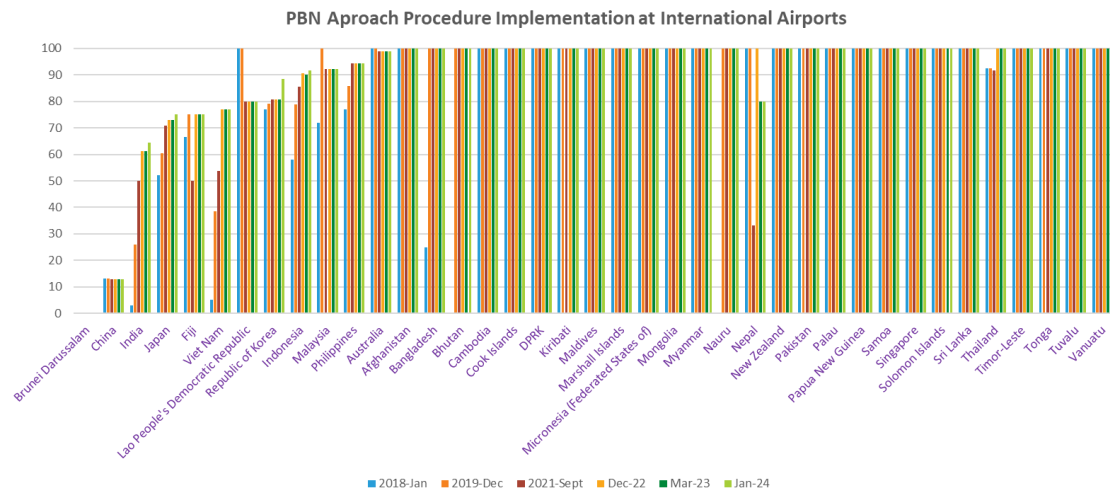


Chart 2. PBN STAR Update, as of Jan 2024 (as per iSTARS)

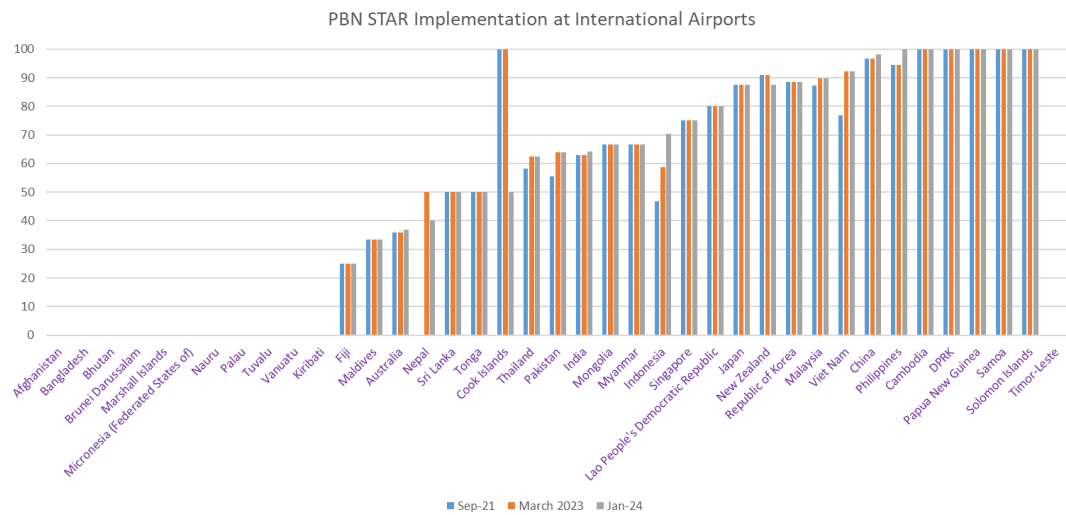
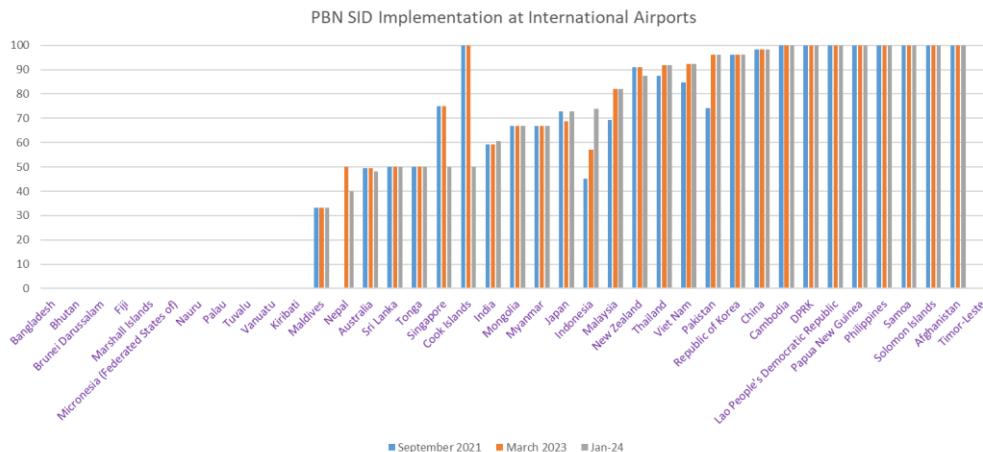


Chart 3. PBN SID Update, as of Jan 2024 (as per iSTARS)



Analysis: The low percentage of PBN Approach procedures on international aerodromes in some States can be explained by the fact that the ILS Cat I is the main navigation system for landing and no PBN procedures have been published as a backup yet. In addition, delays in PBN procedure approval, lack of resources, and lack of competency of procedure designers may be some reasons for the low PBN implementation status.

States should continue their efforts to use PBN for Approach procedures, arrival/departure procedures and ATS routes to harvest the optimum benefits from this technology, which may reduce operating costs due to the probable rationalisation of navigation aids.

b) Ground telecommunication infrastructure

Commitment: “Commit to implementation by 2022: Common ground/ground telecommunication infrastructure to support ANS applications.”

Indicator: Status of connection to Common aeronautical VPN (CRV) and Aeronautical Message Handling System (AMHS) with File Transfer Body Parts (FTBP) function for IWXXM data

Source: CNS contributory bodies Meetings (CRV OG/ACSICG)

Current implementation:

- 20 States/Administrations (compared to 19 last year) have joined CRV and implemented operations: Australia, Bhutan, China, Hong Kong China, Fiji, India, Indonesia, Japan, Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, PNG, Republic of Korea, Thailand, Singapore, USA and Vietnam. 6 States/Administrations, namely Cambodia, French Polynesia, Macau China, New Caledonia, Myanmar, and Sri Lanka are under the provision to join CRV. However, 4 States, namely Bangladesh, Brunei, Lao PDR, and Maldives, are in the process of joining CRV.
- 28 States/Administrations have implemented AMHS.

Analysis: To fully utilise CRV capabilities, all Member States must join CRV as soon as practicable.

c) Surveillance capability

Commitment: “Commit to implementation by 2022: Enhanced surveillance capability including ADS- B technology.”

Indicator: Number of States providing ADS-B based surveillance service either for separation or situation awareness

Source: CNS contributory bodies Meetings (SURICG)

Current implementation: 32 States/Administrations (compared to 31 last year) installed ADS-B ground stations and 12 States issued ADS-B mandate. 12 States (8 last year) used ADS-B for separation and others for awareness, gap filling and redundancy.

2.2. After analysing the progress, it can be observed that significant efforts are needed from States to reach a satisfactory level of achievement in fulfilling the Beijing Declaration Commitments in Air Navigation Services.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) note the contents of the paper;
- b) collaborate and work towards achieving targets of the Beijing Declaration; and
- c) share their latest implementation status of Beijing's declaration commitments with the ICAO APAC Office so that the progress can be tracked and the status reported accurately in further Meetings.
