



International Civil Aviation Organization

**The First Meeting of ICAO Asia/Pacific Performance based Navigation
Implementation Coordination Group (PBNICG/1)**

Beijing, China, 10-12 March 2015

Agenda Item 6: Implementation of PBN in Domestic En-route Airspace

Agenda Item 7: Regional and Sub-regional Implementations of PBN in En-route Airspace

**PBN IMPLEMENTATION SUPPORT FOR DOMESTIC AND SUB-REGIONAL
EN-ROUTE DEVELOPMENT**

(Presented by the Secretariat)

SUMMARY

This information paper provides a summary of PBN implementation support activities on PBN en-route developments and enhancements being provided by the ICAO Asia and Pacific Regional Sub-Office (RSO).

1. INTRODUCTION

1.1 The ICAO Council, at the sixth meeting of its 194th Session held on 14 November 2011, agreed to establish a Regional Sub-office (RSO) of the Asia and Pacific (APAC) Office, aiming to enhance support to ICAO Member States in the APAC Regions. The People's Republic of China was approved as the host State of the ICAO APAC RSO by the Council at its 197th Session held in November 2012. In addition to China as the host State, since the commence of its operation, the APAC RSO has received financial and in-kind contributions, including seconded personnel, from Japan, Malaysia, Republic of Korea, Singapore and IATA.

1.2 The RSO engages in project-oriented activities aiming to support States and Administrations in their air traffic management enhancement projects. In accordance with the job description to the Chief of the RSO which was approved under the authority of ICAO Secretary General, the project areas which are in scope of the RSO activities include but not limited to Airspace organization and management (AOM), Collaborative decision making (CDM), Air traffic flow management (ATFM), Flexible Use of Airspace (FUA) and Performance-Based Navigation (PBN).

2. DISCUSSION

2.1 Regarding PBN en-route development, since June 2013, the ICAO APAC RSO in cooperation with IATA has provided support to States as following

- Through a PBN Design Session, assisted Bangladesh, India, Myanmar and Thailand to their on-going review of international route structure and aircraft separation over Bay-of-Bengal
- Through a PBN Design Session, supported Mongolia in the review and enhancement of

international and domestic PBN route structure

- Entrusted by States in Mekong sub-regions, including Cambodia, Lao PDR, Myanmar, Thailand, Vietnam, to facilitate international and domestic route structure reviews within the sub-region

2.2 During a PBN Design Session, participants from a State or a group of States will review the followings:

- Flow of traffic among entry/exit points and city pairs
- existing and planned CNS Infrastructure
- PBN approval and fleet readiness status

2.3 Following the review, the participants of the design session, with technical consultations from ICAO APAC RSO, are expected to jointly developed a design proposal of enhanced/realigned route structure and associated implementation work plan, which may include:

- an application of suitable longitudinal separation on existing routes;
- an enhancement of traffic flow through realignment of current route;
- an establishment of PBN parallel routes as appropriate;
- a revision of the current FL allocation scheme as appropriate;
- a review of sectorization as necessary;
- a review of Letters of Agreement as necessary;

The participants are also encouraged to develop a presentation on the outputs of the PBN design session so they may effectively communicate with relevant aviation stakeholders within their respective States and organizations.

2.4 An example output of a PBN design session can be found in **Attachment A**.

2.5 APAC States and Administrations may contact Mr. Noppadol Pringvanich (Chief, Regional Sub-Office) at npringvanich@icao.int to request possible implementation support during their domestic and sub-regional PBN en-route development.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) encourage APAC States and Administrations to seek the support of ICAO APAC RSO during their implementations of PBN for domestic en-route; and
- c) encourage APAC States to consider forming sub-regional groups between three to five States to engage in sub-regional review of ATS route and consider requesting ICAO APAC RSO to facilitate their activities through a PBN design session.

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