



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 3: Global and Regional PBN Updates and States' PBN Implementation Progress

PBN IMPLEMENTATION SUPPORT ACTIVITIES BY ICAO APAC RSO

(Presented by the Secretariat)

SUMMARY

This information paper provides a summary of PBN implementation support activities being provided by the ICAO Asia and Pacific Regional Sub-Office (RSO). The ICAO APAC RSO was established in June 2013 aiming to provide implementation support assistances to APAC States and Administrations in ATM enhancement activities. In addition to PBN, the RSO also provides assistances to States in several ATM enhancement areas which are strategically linked to PBN, including Airspace optimization and management (AOM) and Air Traffic Flow Management and Collaborative Decision Making (ATFM/CDM).

1. INTRODUCTION

1.1 The Asia Pacific region was the world's largest air transport market in 2013 with a 32% share of total capacity representing an increase of +7% over 2012. The APAC traffic is expected to grow at 6.4% in 2014.

1.2 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.

2. DISCUSSION

2.1 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).

2.2 The ICAO APAC RSO Strategic Framework consists of four strategies, namely

- A. Improve **Safety and Efficiency of Flight Operations** through Innovative Procedures;
- B. Enhance **Airspace Capacity and Efficiency** to Accommodate Asian Aviation Growth;
- C. Optimize **ATM Operations** via Collaborative Management of Traffic Flow; and
- D. Ensure **Continuous Improvement of Organizational Performances** by Proper Managements of Quality, Work Plans, Resources and Developments of Team-members' Capacity

2.3 The RSO organization structure consists of Airspace Organization and Management Unit (AOM), Air Traffic Flow Management and Collaborative Decision Making Unit (ATFM/CDM) Unit, Administrative Unit and Flight Procedure Programme (FPP). The APAC FPP is established in 2009 with a goal of developing States' capabilities in the instrument flight procedure domain, focusing in the areas of procedure design and related procedure design training. As mandated in its Programme Document, the APAC FPP is now under operational supervision by ICAO APAC RSO and is co-located with the Sub-Office.

2.4 The RSO is led by a Chief of Regional Sub-Office (P-5 position) recruited by ICAO. Chief, Regional Sub-Office reports directly to the ICAO Regional Director of the APAC Office in Bangkok, and works closely with the Air Navigation Bureau at ICAO HQ, particularly as they relate to Aviation System Block Upgrades (ASBUs) and ATM issues.

2.5 Since June 2013, the ICAO APAC RSO has provided ATM implementation support to APAC States and Administrations as followings:

Airspace Organization and Management (AOM) and Performance-based Navigation (PBN)

- **Terminal Airspace**
 - Assisted Bangladesh, Fiji, Malaysia, Myanmar and Sri Lanka in effective airspace design using PBN for terminal airspace
 - Assisted Bangladesh, Cambodia, Fiji, Laos PDR, Malaysia, Maldives, Mongolia, Myanmar, Sri Lanka and Thailand in implementations and validations of PBN procedures in coordination with the APAC FPP
- **Domestic and International En-route**
 - 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
 - Facilitated the first meeting of South China Sea Major Traffic Flow Review Group (SCS-MTFRG/1) in Malaysia
- **PBN Operational Approval**
 - In cooperation with IATA, conducted trainings in PBN Operational Approval for regulators, airlines and ANSPs in Myanmar and Fiji
 - Provided assistances on PBN Operational Approval to Bhutan
- **Airspace Optimization and Management**
 - Supported ICAO/IATA/CANSO PBN Global Go-Team visits and PBN Airspace Design Workshops in Thailand and China
 - Conducted an Airspace Design Review for Fiji with participations from other Pacific

- Island States
- Conducted a workshop on Civil Military Coordination and Flexible Use of Airspace for APAC States
- Entrusted by ICAO IFPP to develop PBN Procedure Construction Manual
- **Implementation Trainings**
 - Conducted ATC training supporting PBN deployment in Bangladesh and Myanmar
- **Global and Regional Harmonization and Prioritization**
 - In coordination with ICAO ANB and APAC RO, facilitated an establishment of the PBN Implementation Coordination Group under APANPIRG to support, harmonize and prioritize PBN implementations within the APAC Regions.
 - In coordination with ICAO ANB, assisted the establishment of Africa Flight Procedure Programme

Air Traffic Flow Management and Collaborative Decision Making (ATFM/CDM)

- Conducted a project assessment for ATFM/CDM implementation project in Shanghai in coordination with CAA China
- Assisted China, Japan and ROK on the establishment of North-Asia Regional ATFM Harmonization Group (NARAHG).
- Coordinated with ASEAN and Bangladesh, India, Myanmar, Thailand (BIMT) States on their on-going ATFM activities and initiatives
- Conducted a briefing to China to gain better understanding of China's plan for planning and implementation of ASBU, ATFM and CDM.
- Conducted a trial course on Introduction to ATFM/CDM to IATA and its airline members
- Conducted ATFM Workshop – Asia Pacific in October 2014 in preparation for the Fourth APAC ATFM Steering Group Meeting
- Conducted a Seminar on Basic Capacity Enhancement Concepts and Developments of ATFM for APAC States in Myanmar

2.6 APAC States and Administrations may contact Mr. Noppadol Pringvanich (Chief, Regional Sub-Office) at npringvanich@icao.int to request possible implementation support during their relevant ATM improvement initiatives.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited:
- a) to note the information contained in this paper; and
 - b) to encourage APAC States and Administrations to seek the support of ICAO APAC RSO during their implementations of PBN and related areas such as AOM and ATFM/CDM; and
 - c) to discuss about any other implementation support that may be required to expedite PBN implementation within the APAC Region.
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