



International Civil Aviation Organization

The Ninth Meeting of the ICAO Asia/Pacific Performance-Based Navigation Task Force (PBN/9)

Bangkok, Thailand, 27-30 March 2012

Agenda Item 5: State/Industry Updates

PBN IMPLEMENTATION STATUS IN NEPAL

(Presented by Nepal)

SUMMARY

This paper presents the most up-to-date PBN Implementation status in Nepal including the implementation of RNP-1 STARs and RNP AR APCH at Tribhuvan International Airport (TIA). This paper also highlights the on-going approval of RNP APCH Approach at Biratnagar Airport and the plan for other PBN procedures at major airports in the coming years.

This paper relates to Strategic Objectives of ICAO like enhancing the Global Civil Aviation Safety and fostering the harmonized, environment friendly and economically viable development of international civil aviation and relates to Global Plan Initiatives in the area of RNP/RNAV (Performance Based Navigation) Applications.

1. INTRODUCTION

1.1 Nepal developed the Nepal PBN Implementation plan which is in line with the Resolution A36/23 adopted by ICAO Assembly in its 36th Session held in September 2007 and with the Asia/Pacific Regional PBN implementation Plan developed by ICAO Asia/Pacific PBN Task Force.

1.2 By introducing PBN technology, CAAN wants to enhance safety and provide a more efficient use of airspace thus improving capacity, predictability, operational efficiency, and reducing environmental impact.

1.3 The implementation of RNP AR APCH at TIA is a step forward to grasp the opportunities as envisaged in the Sub-Para 1.2.

2. DISCUSSION

2.1 Nepal intends to put its all possible efforts to go in line with the Nepal PBN Implementation Plan. Some steps have been taken to implement the PBN concept in domestic as well as international airports as mentioned in the later paragraphs.

2.2 Implementation of RNP-1 STARs and RNP AR APCH at Tribhuvan International Airport (TIA) Kathmandu, as per Nepal PBN Implementation Short Term Plan (2010-2012):

2.2.1 The decision to implement RNP AR APCH at Tribhuvan International Airport, Kathmandu, as an alternate to the current VOR Approach, was taken on 31st March 2011 when COSCAP, ICAO FPP, CAAN, Airbus, QUOVADIS and all major International Operators met in a PBN Implementation workshop.

2.2.2 Airbus agreed to financially and technically support CAAN in the implementation process. QUOVADIS thus performed an on-site data survey of obstacles and designed the procedure whose preliminary design was submitted in August 2011.

2.2.3 CAAN published the PBN Operational Handbook in November 2011.

2.2.4 The detailed design of the RNP-1 STARs and RNP AR APCH developed by QUOVADIS was approved by CAAN on December 2011. The final design is the result of regular and fruitful interactions/communications between CAAN, TIA ATC, QUOVADIS and the operators which gave final shape to the procedure based on the inputs of all. The procedure is in final stage of approval by CAAN and will be published through AIP SUPP on AIRAC Date Cycle 5 April 2012.

2.2.5 Qatar Airways, the launch operator of the procedure, successfully performed a Trial Flight of the procedure with an Airbus A320 on 19 March 2012.

2.3 As per Short Term PBN Implementation Plan (2010-2012), Nepal is going to introduce PBN procedures in Approach and Terminal operations at some of the major domestic airports. As an initiation, RNP APCH Procedure for Biratnagar Airport has been designed as an overlay procedure of existing VOR DME Z RWY 09 and flight validated by Aeronautical Radio of Thailand Ltd in December 2011. The flight validation report is under approval process by CAAN. Once it is approved, the procedure will be published through AIP SUPP on AIRAC Date Cycle in 2012.

2.4 CAAN is planning to introduce RNP APCH (LNAV) procedure at Chandragadhi Airport and Gautam Buddha Airport (Bhairahawa) next year and continue in other major airports in the coming years.

2.5 In order to design and maintain Nepal PBN procedures as per the National Implementation Plan, two procedure designers of CAAN are undergoing a PBN training program at the French Civil Aviation University (ENAC).

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any other relevant matters.

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