



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**SIXTH MEETING OF THE PERFORMANCE BASED NAVIGATION
TASK FORCE (PBN/TF/6)**

Hong Kong, China, 3 – 5 February 2010

Agenda Item 4: PBN Implementation Issues

4.3

**FMS CODING ISSUE ENCOUNTERED
DURING THE DEVELOPMENT OF RNP APCH
PROCEDURES**

(Presented by Hong Kong, China)

SUMMARY

This paper presents the most up-to-date PBN Implementation status in Hong Kong, China.

1. INTRODUCTION

1.1 The ICAO PBN TF developed a regional Implementation Plan for the Asia Pacific Region. ICAO requires States to implement various RNP/ RNAV procedures in accordance with specific timelines. To achieve these targets, States are obliged to develop and publish relevant procedures and operators are urged to be appropriately equipped to meet the requirements.

2. DISCUSSION

2.1 Doc 8168 stipulated that in case more than one RNP APCH procedures are designed for the same runway. Suffixes “x”, “y”, or “z” should be used to differentiate different RNP APCH procedures. Such naming convention will increase the length of the procedure identification. At the moment, most FMS on board are not able to accept inputs of procedure identification with more than 6 digits. Only very few aircraft types equipped with the latest version of FMS models can accept the procedure identification with more than 6 alpha-numeric.

2.2 To reap the most benefits of PBN procedures, it is often desirable for more than 1 RNP ACPH procedure to be developed for a runway. The limitation on the current on board FMS identified above may delay the implementation process and cause confusion to flight crews as well as ATC. Upgrading of older versions of FMS to comply with the latest naming convention will take a long time to complete, with a cost consideration on the part of airline operators.

2.3 The FMS compatibility factor needs to be considered in the PBN implementation plan when States contemplate the overall implementation strategy .

3. ACTION BY THE MEETING

3.1 The meeting is requested to:

- a) take note of the limitation of FMS in inputting the RNP procedure identifications in accordance with the ICAO procedure naming convention as stipulated in Doc 8168;
- b) advise States to take into account the FMS compatibility factor in formulating the PBN implementation strategy;
- c) request ICAO to provide more guidance to help States and operators in resolving the FMS limitation.

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