



*International Civil Aviation Organization*

**THE SIXTH MEETING OF PERFORMANCE BASED NAVIGATION  
IMPLEMENTATION COORDINATION GROUP (PBNICG/7)**

*(Video conference, 21 – 23 October 2020)*

Agenda Item 4: States' PBN implementation progress

**PBN IMPLEMENTATION STATUS IN CHINA**  
(Presented by CAAC)

**SUMMARY**

This paper presents the update of PBN implementation status in China .

**1. INTRODUCTION**

**PBN Road Map of China**

1.1 “PBN Road Map of China” was issued in 2009, it determined the steps by which PBN can be gradually implemented in China. According to this road map, China need to publish the PBN procedures, including RNAV, RNP APCH and RNP AR, for all existed airports by the ends of 2016. Any new opened airports in the future should be equipped with PBN procedures.

1.2 CAAC is responsible for overall PBN implementing plan of China. Its seven regional subbranches are responsible for the PBN implementing task of individual region. According to the initial targets of the road map, major international hubs, including Beijing, Shanghai, Guangzhou, etc, will provide RNAV SIDs and STARs, to facilitate different aircraft with various PBN capabilities. RNAV+ILS procedures are also provided for approach. Regional and/or domestic airports will provide RNP SIDs and STARs, as well as RNP APCH procedures for approach. CAAC had achieved its initial targets in 2016.

1.3 As required by ICAO, CAAC had adjust its targets in 2017, which required to supplement and publish RNP APCH procedures for major international hubs. By the end of 2018, CAAC and its subbranches had completed the RNP APCH procedure design for Guangzhou, Shenzhen and Xi'an, etc, which will be published in succession in 2019. Till now, Beijing/Capital, Beijing/Daxing, Shanghai/Pudong, Shanghai/Hongqiao and many other major airports have implemented RNP APCH procedures.

**2. DISCUSSION**

**Terminal / Approach Implementation**

2.1 By 8th October, 2020, CAAC has published 500 PBN approach procedures for 246 airports and 532 runways in China. The detailed information is shown below:

Table 1 Approach PBN Implementation Status

Total number of airports		Total number of runways	
246		532	
International	Domestic	International	Domestic
70	176	180	352
PBN approach procedures			Total number of airports without PBN approach procedures
LNAV/VNAV	LNAV ONLY	RNP AR	19
456 (Total) 164 (International airports) 292 (Domestic airports)	11 (Total) 6 (International airports) 5 (Domestic airports)	33 (Total) 11 (International airports) 22 (Domestic airports)	

**En-route Implementation**

2.2 By 8th October, 2020, CAAC had 707 air routes implemented PBN operation in China, including RNAV and RNP. The general information is shown below:

Table 2 En-route PBN Implementation Status

Total number of routes		Total number of PBN operation routes	Total number of conventional routes
1032		753	279
RNAV2	RNP1	RNP10	RNP4
626	17	3	107

**3. ACTION REQUIRED BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this papers; and
- b) discuss any relevant matters as appropriate.

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