



International Civil Aviation Organization

**TWELFTH MEETING OF THE PERFORMANCE BASED NAVIGATION
IMPLEMENTATION COORDINATION GROUP (PBNICG/12)**

(Beijing, China 16- 18 December 2025)

Agenda Item 4: States' PBN Implementation Progress and the challenges faced by the States and lessons learnt.

INITIATIVE FOR RNP (VPT) IMPLEMENTATION BY THAILAND

(Presented by name of States/Administration)

SUMMARY

This paper presents an overview of Thailand's initiative to leverage Performance-Based Navigation (PBN) capability through the implementation of Required Navigation Performance (RNP) with Visual Segment (VPT) instrument approach procedures at an aerodrome where other instrument approach procedures are not feasible.

1. INTRODUCTION

1.1 Although RNP APCH implementation reaches 96% (25 of 26) for all international airport runway ends and 85% (44 of 52) for domestic public airports, a small number of runway ends in Thailand, especially those with physical limitation and challenging surrounding terrain remain without instrument approach available.

1.2 To improve accessibility and PBN implementation to as many runway ends as possible, Thailand's Performance-Based Navigation (PBN) sub-working group comprising members from the regulator, ANSPs, airlines, airport operators, and the military—has agreed to study solutions for implementing instrument approaches at runway ends that currently have none.

1.3 In 2023, ICAO issued Circular 359, Development of Procedures for Visual Maneuvering with Prescribed Tracks using Required Navigation Performance, providing best practices and guidance for States and operators in developing procedures that include an instrument path followed by a visual path defined by RNP waypoints to promote stabilized approaches and prescribed visual maneuvering to a designated runway.

2. DISCUSSION

2.1 Based on joint studies and discussions with relevant stakeholders, RNP (VPT) has been identified as a more suitable option than RNP AR for the following reasons:

- The authorization process for RNP (VPT) is significantly simpler than for RNP AR. According to Circular 359, authorization for RNP (VPT) is not airport-specific, which reduces regulatory burdens for airlines.

- The procedure design for RNP (VPT) is based on Document 9905, which is familiar to IFPD service providers, and most qualified designers who have already completed RNP AR training.

