AIC

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PERFORMANCE BASED NAVIGATION OPERATIONAL APPROVAL

1. INTRODUCTION

- 1.1 This AIC is issued in the exercise of the powers conferred under Section 24o of the Civil Aviation Act 1969.
- 1.2 Performance Based Navigation (PBN) specifies that aircraft RNAV (area navigation) and RNP (Required Navigation Performance) system performance requirements be defined in terms of accuracy, integrity, continuity and functionality, which are needed for operations in the context of a particular airspace concept. Performance requirements are identified in navigation specifications, which also identify the choice of navigation sensors and equipment that may be used to meet the performance requirements. RNP are navigation specifications based on RNAV that includes the requirement for performance monitoring and alerting.
- 1.3 Pursuant to regulation 59 of the Civil Aviation Regulations (CAR) 1996, the Director General shall define the navigation system, operating procedures and equipment for any aircraft to fly in on airspace specified by him. This AIC sets forth the means that would be acceptable to the Director General for the purpose of complying with this regulation.
- 1.4 Guidance for PBN Operational Approval are provided by ICAO Doc 9613, PBN Manual, as amended from time to time or directed otherwise by the Director General. The current specific approvals provided in ICAO Doc 9613 are:
 - (1) RNP 10
 - (2) RNP 4
 - (3) RNP 2
 - (4) RNP 1
 - (5) A-RNP
 - (6) RNP 0.3
 - (7) RNP APCH LNAV
 - (8) RNP APCH LNAV/VNAV

- (9) RNP AR APCH
- (10) RNAV 5
- (11) RNAV 1 and RNAV 2

2. REGULATORY REQUIREMENTS

- 2.1 No Operator shall operate an aircraft along ATS routes, on an instrument approach procedure or in a designated airspace where a navigation specification has been prescribed unless:
 - The Operator has received authorisation from the Director General; and
 - ii. The aircraft is equipped with the navigation equipement to enable it to operate continuously in accordance with the prescribed navigation specification
- 2.2 No person shall serve nor shall any Operator use a person as a flight crew member or flight operations officer unless he or she has completed the appropriate PBN operation training approved by the Director General.
- 2.3 An Operator shall apply to the Director General for Operational Approvals in accordance with the guidance provided by ICAO in ICAO Doc 9613. Operational approval will be granted by the Director General in the form of an Operations Specifications (OPSPEC).
- 2.4 Operators who have an existing OPSPEC authorizing PBN approach operations are authorised to continue their operations (including RNAV IAP) until 31 December 2013. Such Operators shall demonstrate to the Director General their compliance for relevant PBN approach operations as required by the requirements in ICAO Doc 9613 prior to 31 December 2013.
- 2.5 Operators who have an existing approval for B-RNAV and/or P-RNAV are authorized to continue their operations for RNAV 5 and/or RNAV 1, respectively, until 31 December 2013. Such Operators shall apply to the Director General for the reissue of OPSPEC authoring RNAV 5 and RNAV 1 operations prior to 31 December 2013.
- 2.6 For non-AOC holders, to conduct PBN operations, their aircraft must be appropriately equipped and pilots appropriately trained.

3. DEMONSTRATION OF COMPLIANCE

- 3.1 All operators must provide an OPSPEC and Operations Manual amendment for approval by the Director General in order to provide information and instruction with PBN approval. This information should include:
 - (1) Aircraft navigation/PBN capability;
 - (2) Operation Manual and operating procedures for PBN operations;
 - (3) Fligth crew's and dispatcher training records; and
 - (4) Management procedure of navigation database as necessary.

4. This circular is issued for guidance and compliance.

DATO' AZHARUDDIN ABDUL RAHMAN.

Director General

Department of Civil Aviation

Malaysia