



ICAO

International Civil Aviation Organization

**Eleventh meeting of the Performance Based Navigation
Implementation Coordination Group (PBNICG/11)**

Bangkok, Thailand, 27 March to 29 March 2024

Agenda Item 5: Any other Business

Authorizations for PBN operations

(Presented by IATA)

SUMMARY

This paper presents a proposal to simplify and standardise authorizations and FPL notations for PBN capabilities and their related interpretations.

1. INTRODUCTION

1.1 At the ICAO APAC SAIOSEACG2 meeting in March 2023 the group discussed results from a recent IATA survey that included airlines' PBN capabilities and how to accurately depict them.

1.2 In the discussions there was inconsistency from both States and Airspace Users with interpretations of whether a stringent PBN approval is automatically approval for a less stringent capability.

1.3 In some scenarios, flights that notify in their FPL operational approval of their most stringent PBN capability may not have access to a route with a lesser standard if operational approval for the lesser capability is not specifically listed as well. This could also result in missed opportunity to apply the most appropriate and efficient separation standards.

1.4 IATA presented WP17 at ATM/SG/11 proposing that the group, and APANPIRG, support simplification and standardisation of the interpretation and application of authorizations for PBN operations that provided authorization for all lesser capabilities than the most stringent approved, provided operators qualified for those operations as prescribed in the relevant regulations. IATA further proposed that each States' regulations should be aligned to match this standardisation. RNP AR APCH and RNP AR DP would still require separate specific approval.

1.5 IATA also proposed that ATM/SG and APANPIRG support the interpretation that notation of the most stringent PBN capability in the FPL indicated authorization for all lesser capabilities until otherwise specifically notified. A Draft Conclusion was proposed in this regard.

1.6 ICAO informed the meeting that this subject should be considered under CNS Sub-Group and as such be first discussed by the PBNICG11 meeting in 2024, where the proposed Conclusion/Decision would be discussed and considered.

2. DISCUSSION

2.1 The Executive Summary of the 4th Edition PBN Manual (ICAO Doc 9613) included the statement:

Because specific performance requirements are defined for each navigation specification, an aircraft approved for a particular navigation specification is not automatically approved for any other navigation specification. Similarly, an aircraft approved for an RNP or RNAV specification having stringent accuracy requirements (e.g. RNP 0.3 specification) is not automatically approved for a navigation specification having a less stringent accuracy requirement (e.g. RNP 4).

2.2 But then para 2.4 of the same document stated:

When establishing a PBN operational approval environment, States should also consider the other operational approvals relevant to CNS/ATM. Currently there are up to about 20 operational approvals that may be needed by each aircraft. Establishing approval procedures that are efficient and minimize overhead for both operators and regulators are important considerations.

2.3 Obviously, the Executive Summary statement quoted in 2.1 clearly said that a stringent PBN approval is not automatic approval for a less stringent capability, however the statement from 2.2 (paragraph 2.4 of the Manual) suggested it is open to the individual Regulators how they administer it. Certainly, some interpretations shared in the SAIOSEACG2 meeting and post-meeting discussions understood that the approval includes all lesser capabilities as well.

2.4 Subsequently, a new 5th edition of the PBN Manual, as an advanced unedited version, became available, in which the Executive Summary statement quoted in 2.1 above is retained in the Foreword/PBN Terminology. In its Foreword, the following is also written regarding operational approval:

Authorizations for PBN operations

An authorization entitles an operator, owner or pilot-in-command to undertake the authorized operations. Authorizations can take the form of approvals, specific approvals, or acceptances. PBN operations require different levels of authorization depending on the navigation specification in use: RNP AR APCH or RNP AR DP require a specific approval, whereas most other PBN operations require an approval. The widely used term 'operational approval' is most commonly used when referring to the issuance of a specific approval. In this manual, reference to the process of granting an operator permission to conduct PBN operations will therefore be referred to as an 'operational authorization'.

2.5 The second statement in 2.2 above is removed from Edition 5 but similar intent is captured in the Implementation Guidance of all the navigation specifications where the following note is written:

Where appropriate, States may refer to previous operational authorizations in order to expedite this process for individual operators where performance and functionality are applicable to the current request for operational authorization.

2.6 In view of the above, it is open to the individual Regulators how authorizations for PBN operations are administered, except for RNP AR APCH and RNP AR DP, where the specific authorization is required.

2.7 At least one State in APAC currently does not require operators to seek authorization for most of the PBN operations, except RNP AR APCH and RNP AR DP, providing the operators qualify for those operations as prescribed in their Regulations.

2.8 IATA proposes that CNS SG and APANPIRG support simplification and standardisation of the interpretation and application of authorizations for PBN operations that provide authorization for

all lesser capabilities than the most stringent approved providing operators qualify for those operations as prescribed in their relevant Regulations. Each States' Regulations should be aligned to match this standardisation. RNP AR APCH and RNP AR DP would still require separate specific approval.

2.9 IATA also proposes that CNS SG and APANPIRG support the interpretation of notation of the most stringent PBN capability in the FPL indicates authorization for all lesser capabilities until otherwise specifically notified.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate; and,
- c) Agree to the draft **Conclusion/Decision** as presented or appropriately amended.

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| Draft Conclusion/Decision PBNICG/11-X: PBN Operational Authorizations | |
| What: 1. That CNS SG and APANPIRG support simplification and standardisation of the interpretation and application for PBN operational authorizations that provide authorization for all lesser capabilities than the most stringent approved as long as operators qualify for those operations as prescribed in their Regulations. Each States' Regulations should be aligned to match this standardisation. RNP AR APCH and RNP AR DP would still require separate specific approval. 2. That CNS SG and APANPIRG support the interpretation of notation of the most stringent PBN capability in the FPL indicates authorization for all lesser capabilities until otherwise specifically notified. | Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical |
| Why: Simplification and standardisation of the interpretation and application for PBN operational authorizations. | Follow-up: <input checked="" type="checkbox"/> Required from States |
| When: 28-Mar-24 | Status: Draft to be adopted by Subgroup |
| Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: | |