International Civil Aviation Organization

MIDANPIRG AIM Sub-Group

Third Meeting (AIM SG/3) (Cairo, Egypt, 15 - 18 May 2017)

Agenda Item 4: AIM Planning and Implementation in the MID Region

PBN CHARTING

(Presented by the Secretariat)

SUMMARY

This working paper provides update on the PBN Approach Procedures' naming convention.

Action by the meeting is at paragraph 3.

REFERENCES

- ICAO electronic bulletin Ref.: EB 2017/05 dated 6 January 2017
- MIDANPIRG/16 Report

1. Introduction

1.1 The meeting may wish to note that the Amendment 6 to the *Procedures for Air Navigation Services* — *Aircraft Operations* (PANS-OPS, DOC 8168) introduced a change to the approach charts by introducing the "PBN Requirements Box" and a change in chart identifications for performance-based navigation (PBN) approaches (transition from RNAV to RNP approach chart identification)..

2. DISCUSSION

- 2.1 The meeting may wish to recall that the PBN SG/2 meeting (Sharm El Sheikh, Egypt, 22-25 February 2016) noted that the inconsistencies between the aeronautical charts, PBN operational approvals and avionics displays have created confusion for pilots and air traffic controllers. It was highlighted that any approach using GNSS is in fact an RNP approach due to the requirement for onboard monitoring and alerting. Consequently, as part of PBN procedures naming convention, only the term RNP will be permitted instead of RNAV (GNSS) and/or RNAV (GPS); and RNP (AR) instead of RNAV (RNP), as of 1 December 2022.
- 2.2 ICAO Circular 336, *Area Navigation (RNAV) to Required Navigation Performance (RNP) Instrument Approach Chart Depiction,* was issued in support of Amendment 6 to provide guidance on the change, in particular managing the risks involved during the transition period.

However, since adoption of Amendment 6, concerns have been raised regarding the implementation of this change. The attention of the 39th Session of the Assembly was drawn to these concerns, and ICAO was encouraged to update the guidance available and develop a regionally coordinated transition plan to support the effective rollout of the change.

- 2.3 It is to be noted that, in order to address concerns related particularly to transition arrangements and potential confusion for operators being faced with variations in chart titling during the transition period, Circular 336 is to be replaced by new guidance material. This new material, which will also use feedback provided by early adopting States, will contain a redesigned risk assessment and extensive guidance for transition planning covering key considerations such as consultation, communication planning and impact assessment.
- 2.4 The new transition planning guidance material will emphasize the need for connection and synchronization between global, regional and State transition planning. The guidance is expected to be available in summer 2017. Until the guidance and regional transition plans are available, ICAO, through the electronic bulletin Ref.: EB 2017/05 dated 6 January 2017, recommended:
 - a) States that have already started implementing the chart naming provisions of Amendment 6 to Doc 8168 should not revert back to the old names, but should not continue further implementation until this can be coordinated with the regional transition plan; and
 - b) States planning their implementation of Amendment 6 should wait for the development of the regional transition plan which will be based on the improved guidance material replacing Circular 336.
- 2.5 The meeting may wish to recall that the MIDANPIRH/16 agreed that the MSG Conclusion 5/7 related to the transition plan for the RNAV to RNP Instrument Approach Chart depiction should not be implemented; and invited States to follow the ICAO recommendations provided in the electronic bulletin Ref.: EB 2017/05 dated 6 January 2017 at **Appendix A**.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) follow-up on the global development related to PBN Charting; and
 - b) invite States to follow the ICAO recommendations provided in the electronic bulletin Ref.: EB 2017/05 dated 6 January 2017 at **Appendix A**.



International Civil Aviation Organization

ELECTRONIC BULLETIN

For information only

EB 2017/05 6 January 2017

TRANSITION TO RNP CHART INSTRUMENT APPROACH DEPICTION

- 1. On 13 November 2014, Amendment 6 to Doc 8168, *Procedures for Air Navigation Services Aircraft Operations*, Volume II *Construction of Visual and Instrument Flight Procedures*, presented a change to the approach charts by introducing the "PBN Requirements Box" and a change in chart identifications for performance-based navigation (PBN) approaches (**Attachment**).
- 2. Amendment 6 allows for a transition period between 13 November 2014 and 30 November 2022 during which use of existing and new chart identifications would be acceptable. ICAO Circular 336, *Area Navigation (RNAV) to Required Navigation Performance (RNP) Instrument Approach Chart Depiction*, was produced in support of Amendment 6 to provide guidance on the change, in particular managing the risks involved during the transition period. However, since adoption of Amendment 6, concerns have been raised regarding the implementation of this change. The attention of the 39th Session of the Assembly was drawn to these concerns, and ICAO was encouraged to update the guidance available and develop a regionally coordinated transition plan to support the effective rollout of the change.
- 3. To address concerns related particularly to transition arrangements and potential confusion for operators being faced with variations in chart titling during the transition period, Circular 336 is to be replaced by new guidance material. This new material, which will also use feedback provided by early adopting States, will contain a redesigned risk assessment and extensive guidance for transition planning covering key considerations such as consultation, communication planning and impact assessment.
- 4. The new transition planning guidance material will emphasize the need for connection and synchronization between global, regional and State transition planning.
- 5. The guidance is expected to be available in summer 2017. Until the guidance and regional transition plans are available, the following is recommended:
 - a) States that have already started implementing the chart naming provisions of Amendment 6 to Doc 8168 should not revert back to the old names, but should not continue further implementation until this can be coordinated with the regional transition plan; and
 - b) States planning their implementation of Amendment 6 should wait for the development of the regional transition plan which will be based on the improved guidance material replacing Circular 336.

E-mail: PBN@icao.int

www icao int

Enclosure:

Extract from Amendment 6 to Doc 8168

Issued under the authority of the Secretary General

Tel.: +1 514-954-6718

Fax: +1 514-954-6077

ATTACHMENT to EB 2017/05

TRANSITION TO RNP CHART INSTRUMENT APPROACH DEPICTION

Extract from Amendment 6 to Doc 8168, Procedures for Air Navigation Services — Aircraft Operations, Volume II — Construction of Visual and Instrument Flight Procedures, regarding PBN approach chart identification:

1.4.2.2 Until 30 November 2022, approach charts depicting procedures that meet the RNP APCH navigation specification criteria shall include the term RNAV(GNSS) in the identification (e.g. RNAV(GNSS) RWY 23) or, alternatively, as described in 1.4.2.3.

Note.— ICAO Circular 336 provides guidance to assist States and other stakeholders with the transition from RNAV to RNP approach chart identification.

1.4.2.3 From 1 December 2022, charts depicting procedures that meet the RNP APCH navigation specification criteria shall include the term RNP in the identification (e.g. RNP RWY 23).

Summary of changes to PBN approach chart identification:

RNAV (GNSS) RWY XX becomes RNP RWY XX

RNAV (RNP) RWY XX becomes RNP RWY XX (AR)

— END —