



International Civil Aviation Organization

MID Region Flight Procedure Programme Steering Committee

Second Meeting (MID FPP SC/2)
(Abu Dhabi, UAE, 15 - 16 June 2022)

Agenda Item 2: MID FPP Work Plan for the Year 2022

UPDATED MID FPP WORK PLAN FOR THE YEAR 2022

(Presented by the Secretariat)

SUMMARY

This paper presents the reviewed and adjusted Work Plan 2022 after the MID FPP SC/1 meeting.

Action by the meeting is at paragraph 3.

REFERENCES

- Summary of Discussion (SoD) of MID FPP Steering Committee (SC/1)

1. INTRODUCTION

1.1 The MID FPP has officially started operations in January 2022 as the ICAO MID Office managed to secure the required funds to support the launching of the Programme and cover the expenses at least of the first year.

1.2 In coordination with the ICAO Technical Cooperation Bureau (TCB), the MID FPP Manager has initially assumed his duties remotely as of 17 January 2022 and arrived to Abu Dhabi, UAE, on 13 May 2022 in order to report physically on duty in the MID FPP premises starting 17 May 2022.

1.3 The first meeting of the MID FPP Steering Committee (SC/1) was successfully held virtually on 26 and 27 January 2022, using MS Teams.

1.4 The meeting was attended by a total of fifty-seven (57) participants from fifteen (15) States (Bahrain, Egypt, France, Iran, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria UAE and Yemen) and three (3) International Organizations (ICAO, IATA and IFATCA) in addition to ICAO AFI and APAC FPP Managers and ICAO Headquarters (TCB and PCI).

2. DISCUSSION

MID FPP Work Plan for the Year 2022

2.1 Generally, the Work Plan Y2022 will focus on (1) capacity building activities and (2) 2.1 provision of services based on the current capabilities/resources available within the Programme considering the contribution of Donor States and Partners.

2.2 The MID FPP SC/1 meeting reviewed and adjusted the Work Plan for Y2022 with the specific requests received from States, in particular, Kuwait and Oman for the provision of airspace design assistance and PANS-OPS training, respectively.

2.3 In order to address the needs of Participating States while complying with the ICAO Resolution A37-11 and ASBU APTA Thread/Elements, the MID FPP training program is dedicated to States building up their IFPD capabilities as well as courses covering PBN database and charting requirements.

2.4 The training package proposed for 2022 has two-folded purpose (1) PANS OPS package for States developing basic & PBN procedure design capabilities and (2) providing to procedure design experts fundamental ARINC 424, Path and Termination (P/T) knowledge and its requirements interaction with design and charting.

2.5 As the ARINC 424 coding rules has become the “industry norm” for path description in PBN Instrument Procedures, the respective courses are intended to attract and respond to States awareness for “adjacent” PBN domain i.e. procedure coding and its tabular description.

2.6 The solution for the PANS OPS training courses package (option 1 and 2, refer to **Appendix A**) is leveraging the collaboration and shared experience chance between the regional FPPs.

2.7 The MID FPP Work Plan 2022 is also considering the aspect of sound technical assistance including support for specific requests coming from States. These services are including a broad spectrum of assistance activities being e.g., charting, elements of procedure coding evaluation, drafting PBN implementation national plan or support in writing PBN tender requirements, etc.

2.8 Within the frame of the assistance services in the Work Plan 2022, a particular note is the proposal that MID FPP and ICAO MID specialists would provide in Country, based on Active States’ request, expertise support of PBN implementation, oversight and regulatory approval guidance, etc.

2.9 In regard of consultancy service within the Work Plan 2022, MID FPP is performing an analysis, design and validation of RNAV 1 ATS routes implementation within Kuwait FIR.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) discuss and review the updated MID FPP Work Plan for the year 2022 as outlined in **Appendix A** to this Working Paper,
- b) decide on the PANS OPS training course option as described in the Work Plan 2022; and
- c) approve the MID FPP Work Plan for the year 2022.

“Updated MID FPP Work Plan for the Year 2022”

MID FPP Objectives for Year 1 (2022)

The **Year 1** (Phase I) will be an important year for the MID Region Flight Procedures Programme (MIDFPP). The purpose of the Program is to provide opportunity to use the available training activities and services proposed by the Program for Participating States.

The Work Plan Y2022 will focus on (1) capacity building activities and (2) provision of services based on the current capabilities/resources available within the Programme considering the contribution of Donor States and Partners.

In order to propose a variety of training activities and services addressing the needs of Participating States while complying with the ICAO Resolution A37-11 and ASBU APTA Thread/Elements, the MID FPP training program is composed of workshops, training courses, and supporting activities.

MID FPP Steering Committee (SC/1) meeting (26 - 27 January 2022) reviewed and adjusted the initial draft Work Plan for Y2022 with the specific requests received from States e.g. Jordan, Kuwait, and Oman for the provision of IFP services, including training, assistance and consultancy.

The SC/1 meeting also noted with appreciation the support to be provided by DGAC France to the MID FPP within the frame of the Technical Agreement (TA) signed with ICAO.

Consequently, the updated MID FPP Objectives for year 2022 are as follows:

- Commence Phase I MID FPP operations on **17 January 2022**.
- Organize PANSOPS Training course activities *.
- Organize one (1) PBN Oversight & OPS Approval Training course.
- Conduct two (2) PBN Workshops.
- Organize two (2) PBN procedure coding/charting courses.
- Provide specific assistance and consultancy for IFPs and Airspace design to States.

* **Note:** Initially, PANSOPS training modules for 2022 were subject to ENAC availability. ENAC cannot provide any support to MIDFPP in 2022 due to lack of resources. The option is to have online training delivered by APAC FPP instructor (Option 1) or by Africa FPP in Dakar (Option 2).

Description of MID FPP Activities for 2022

1) PBN Implementation Workshop (5 days), [Date/Quarter 3]

Description: This PBN Implementation Workshop is intended to assist States/Administrations in developing and/or enhancing their national PBN Implementation Plan and move forward with actual PBN implementation. The Workshop will also provide updated information regarding global PBN activities and how PBN can be an enabler for enhancing ATM operations. During the workshop, the participants with assistance from MID FPP facilitators will develop a list of short-term action items aiming to develop and/or enhance their PBN Implementation Plan and advance their on-going PBN implementations and deployments. The list of action items along with relevant recommendations will then be submitted to their States Authorities. Participants to this workshop should be representatives from all aviation stakeholders with an interest in PBN implementation.

- Facilitator: MIDFPP Manager & ICAO/IATA Experts, partner organizations.
- Sponsorship: Industry/Stakeholders
- Material: FPP programs
- Facility: Virtual/Physical (TBD)

2) CDO/CCO PBN workshop, (2 days), [13-14 June/Q2]

Description: Continuous Climb and Descent Operations (CCOs and CDOs) are aircraft operating techniques enabled by airspace design, instrument procedure design and facilitated by air traffic control (ATC). This workshop is aimed at Air Traffic Controllers and Procedure Designers who would like an insider view of the flight crew perspective on continuous descent & climb operations. The workshop be organized in collaboration with ICAO MID to provide necessary knowledge about the ICAO provisions on the subject and share experience and best practices on CCO/CDO implementation by States/Airspace Users.

- Instructor: Pool of experts (IATA, ICAO, States)
- Sponsorship: UAE (Host)
- Material: Presentations (ICAO MID & States)
- Facility: Physical/MID FPP premises
- Funding: Free of charge

3) PBN Oversight & Ops Approval Course (4 days), [Date/Quarter 3]

Description: The course is based on ICAO Doc. 9997 “*PBN Operational Approval Manual*” and conducts to support States in developing their operational approval capability for approving PBN operations and air operators in obtaining PBN OPS approvals.

This training introduces PBN and its purpose and the way PBN specifications are introduced in the oversight process. It focuses on the quality assurance processes associated to procedure design activities and the enforcement of PBN operations by aircraft operators and the associated oversight.

The purpose of the course is to provide experienced flight operations inspectors, personnel from CAA (or National Supervisory Authority), procedure designers and air operators’ staff with a comprehensive understanding of the requirements for PBN operational approval. The course is open to participants involved in PBN flight operations.

- Instructor: MIDFPP manager
- Sponsorship: NIL
- Material: FPP programs
- Facility: Virtual/Physical (TBD)

4) ICAO PANS-OPS Instrument Procedures Design: Foundation skills/SIDs, (2 weeks). [2nd half July/Q3]

Description: The course is based on ICAO PANS-OPS criteria and aims to support States/Administrations in developing their basic procedure design capability by providing fundamental knowledge regarding procedure design criteria. This initial course is focused on all basic concepts (conventional & PBN concept) as well as conventional and PBN departures. The instruction consists of exercises, in-class exercise, or homework.

This module task exercise is focused on the Conventional SID as well as PBN SIDs.

At the end of the course, each participant will be individually assessed, and the outcome of the assessment will then be reported to each participant and his/her agency.

- Instructor: APAC FPP
- Sponsorship: MIDFPP
- Material: APAC FPP
- Facility: Online

5) ICAO PANSOPS Instrument Procedure Design Course: 2D Approach, NPA & RNP APCH (2 weeks). [2nd half August/Q3]

Description: The course aimed to support States/Administrations in developing their PBN procedure design capacity. This course is considered as the second step of a thorough training to design IFR procedure. The module covers conventional and PBN 2D type of approach design, non-precision approach design as well as

A-3

holdings/en-route criteria. For Module 2, the task exercise is for a VOR approach and RNP APCH (2D) procedures and a holding.

At the end of the course, each student will be individually assessed, and the outcome of the assessment will then be reported to each student and his/her agency.

The course is open to participants who have successfully completed the 1st module of Instrument Procedure Design course: “Foundation skills/SIDs “.

- Instructor: APAC FPP
- Sponsorship: MID FPP
- Material: APAC FPP
- Facility: Online

6) ICAO PANSOPS Instrument Procedure Design Course: Conventional and PBN 3D approach design, ILS, APV Baro-VNAV, SBAS/GBAS criteria (2 weeks). [19 – 30 Sep/Q3]

Description: The course aimed to support States/Administrations in developing their PBN procedure design capacity. This course is considered as the third step of a thorough training to design IFR procedures.

For Module 3, the practical task consists of an ILS and Baro-VNAV procedures. Furthermore, a Coding table and a sample chart must be made by the trainees.

At the end of the course, each student will be individually assessed, and the outcome of the assessment will then be reported to each student and his/her agency.

The course is open to participants who have successfully completed the 1st and 2nd modules of the Instrument Procedure Design Course.

- Instructor: APAC FPP
- Sponsorship: MID FPP
- Material: APAC FPP
- Facility: Online

7) ICAO PANSOPS Instrument Procedure Design Course: RNP AR Refresher course (5 days). [7 – 11 Nov/Q4]

Description: The course aimed to support States/Administrations in developing their PBN procedure design capacity. The course covers underlying principles and procedure design criteria of RNP AR Approach as laid down in ICAO Design Manual Doc.9905. The knowledge of criteria is presented to trainees followed by practical exercise for the implementation of the criteria. The last two days of the course will include discussion on industry examples of RNP AR design.

The course is open to participants who have successfully completed, at least, the training module covering design criteria of PBN Baro-VNAV and/or it is addressed to senior design experts as refresher course.

- Instructor: APAC FPP
- Sponsorship: MID FPP
- Material: APAC FPP
- Facility: Online

8) PBN Navigation Database Course (Path Terminator, coding rules), (3 days). [Date/Q4]

Description: Reference to and use of the Navigation System Database Standard, ARINC 424, the Path and Termination (P/T) concept has become the “industry norm” for path description in Instrument Procedure definition. As a result, it is imperative that the procedure designers understand these rules and provide a design intent that reflects those requirements.

Primarily, the course is addressed to procedure designers and airspace planning experts. However, since PBN concept is a cross-domain model, the course material is also referring to AIS & Charting experts involved in the State AIP production.

- Instructor: MID FPP
- Sponsorship: MID FPP
- Material: MID FPP
- Facility: Virtual/Physical (TBD)

**9) Inter-relationship PBN Design – Coding – Chart Naming Convention/AIP Course, (3 days).
[Date/Q4]**

Description: The course is not simply intended to familiarize the participants with ARINC 424 standard and its database coding requirements, but additionally, it will be bringing the inter-disciplinary overview on each database element, where applicable, perceived from design, charting and/or AIS/AIP perspective. The course content is including rich number of examples illustrating the inter-dependency between the three domains. The course is addressed to procedure designers/airspace planning professionals as well as to AIS & Charting experts involved in the State AIP production.

- Instructor: MID FPP
- Sponsorship: MID FPP
- Material: MID FPP
- Facility: Virtual/Physical (TBD)

Provision of specific assistance and consultancy for IFPs/Airspace design to States [States, dates]

Description: The MID FPP will provide support to member States through consultancy service (based on specific requests coming from States). These services are including a broad spectrum of support being:

(1) by helping or lending provision in activities that one State is unable to perform due to lack of resources/tools i.e., technical assistance as follows:

- Charting, elements of procedure coding evaluation,
- Drafting PBN implementation national plan,
- Visit States for support of PBN implementation, oversight and regulatory approval guidance, etc.
- Help writing tender requirements, etc.

(2) by giving expert advice - consultancy service - on subjects, for example:

- Establishing new route(s) or procedures,
- Restructuring national airspace or part(s) of it,
- Guidance in validating the procedure fly-ability from FMS perspective (path terminator, coding tables, charting naming convention),
- Support in project tender specifications evaluation or validation, etc.

Moreover, a training request from a User State should also be considered as a specific request for service category.

To be noted that the above services are dependent upon the “diversity” and availability of the pool of experts established by the Programme as well as in attracting industry/organization partnerships. For the specific requests included in the present Work Plan – refer the Matrix below.

- Funding by: States participating or Donors

Matrix

| Subject/Duration | | Work Plan Y2022 | | | | | | | | | | | | Notes |
|--|--|-----------------|---|---|----|---|---|----|---|---|----|----|----|--|
| | | Q1 | | | Q2 | | | Q3 | | | Q4 | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 1 | PBN Implementation Workshop/ 5 days | | | | | | | | | | | | | 1 st half August |
| 2 | CDO/CCO workshop/ 2days | | | | | | | | | | | | | 13-14 June/Q2 (2 days) |
| 3 | PBN Oversight and Ops Approval Course/ 4 days | | | | | | | | | | | | | |
| 4 | ICAO PANSOPS Instrument Procedures Design “Foundation skills/SIDs”/ 2 weeks | | | | | | | | | | | | | 2 nd half July, APAC Instructor |
| 5 | ICAO PANSOPS Instrument Procedure Design Course “2D Approach, NPA & RNP APCH”/ 2 weeks | | | | | | | | | | | | | 2 nd half August APAC Instructor |
| 6 | ICAO PANSOPS Instrument Procedure Design Course “Conventional and PBN 3D approach design, ILS, APV Baro-VNAV, SBAS/GBAS criteria”/ 2 weeks | | | | | | | | | | | | | 19 – 30 September, Part of APAC plan |
| * | Module 1: Conventional FPD including NPA, PA and Conventional Departures | | | | | | | | | | | | | Option 2: 4 weeks, on-site Dakar, limited seats |
| * | Module 2: PBN including APV Baro-VNAV (SBAS & GBAS not included) | | | | | | | | | | | | | Option 2: Scheduled for Y2023 |
| 7 | ICAO PANSOPS Instrument Procedure Design Course “RNP AR Refresher Course”/ 5 days | | | | | | | | | | | | | 7 – 11 November, Part of APAC Plan |
| 8 | PBN Navigation Database Course (Path Terminator, coding rules)/ 3 days | | | | | | | | | | | | | 2 nd half November |
| 9 | Inter-relationship PBN Design – Coding – Chart Naming Convention/AIP Course/ 3days | | | | | | | | | | | | | 1 st half December |
| Provision of specific assistance and consultancy for IFPs/Airspace design to States: | | | | | | | | | | | | | | |
| | - Kuwait: New RNAV1 routes implementation project | | | | | | | | | | | | | 155 days (10.03–22.09) |
| | - Oman (PANSOPS training, 6 people) | | | | | | | | | | | | | TBD with State |
| | - Assist in PBN oversight/audit at national level | | | | | | | | | | | | | |