



**PBN GO-TEAM VISIT PHASE II**  
Abu Dhabi, UAE  
19-30 January 2014

## SUMMARY OF DISCUSSIONS

### I. General

#### 1. Place and Duration

The PBN Go-Team Visit Phase II was successfully held in Abu Dhabi, UAE, 19-30 January 2014. The event was organized jointly by ICAO and IATA and hosted by the Emirates General Civil Aviation Authority (GCAA).

#### 2. Attendance

The workshop was attended by 33 representatives from States' regulators, airspace planners, procedure designers, air traffic controllers and Communication, Navigation and Surveillance (CNS) experts, airlines and Organizations. The list of participants is at **Attachment A** to this Summary.

#### 3. Agenda

The agenda was developed around the main following topics:

1. Welcome and Opening Remarks.
2. Course Overview and PBN processes.
3. Airspace Handbook.
4. Designing routes.
5. Procedure Design Considerations.
6. CCO and CDO Design Methods.
7. Good Design Practice.
8. Civil/Military cooperation in ATM.
9. Case Study 1
10. Safety Criteria and Assumptions.
11. Validation and Implementation.
12. Case Study 2.
13. Timelines.
14. Routes and Holds.
15. En-route structure and NAV SPECS.
16. Integrating enroute structures.
17. Case Study 3.
18. Review and Next Steps.

A copy of the detailed Agenda/Work Programme is available at the ICAO MID Regional Website.

From extensive feedback it was confirmed that the Agenda was well balanced, informative and interesting and that it met the expectations of the participants.

#### **4. Objective**

The purpose of the PBN Go Team Visit was to support States in enhancing their PBN capabilities in order to improve the Global and Regional PBN implementation. The visit was supposed to provide instructions/discussions in 2 main areas as follows:

- a) Airspace Planning Concept Workshop, 19-30 January 2014; and
- b) PBN Operations Approval, 26-30 January 2014.

Unfortunately, the Operations Approval Course was cancelled due the low level of participation.

## **II. Summary and Outcome of Discussions**

The Airspace Planning Concept Workshop provided a balance between the time allocated to presentations covering the PBN Airspace Planning Concept and a forum for open discussions, exchange of knowledge and experience. Much thought and effort had been put into the development of the presentations by the speakers who have been thanked for the time and effort they dedicated to the Workshop/Go Team and the enthusiasm and commitment to their subjects.

All the presentations are available at: <http://www.icao.int/MID/Pages/2014/PBN%20Go-Team%20Visit.aspx>

The discussions were grouped into three Topics as follows:

### **1. The concept of airspace planning, PBN and the use of PBN in airspace management**

The objective of these sessions was to provide an overview of the development related to the use of PBN Concept in airspace planning.

Presentations were delivered by the following speakers:

- Mr. Joel Morin, Assistant Director, ATM Harmonization & Global Policy, Safety and Flight Operations Division, IATA HQ;
- Mr. Walter White, Consultant, ProSky; and
- Jeffrey Williams, Senior VP, Senior Aviation Advisor, Tetratech

### **2. Case Studies**

During these sessions the participants were divided into two groups, to apply the lessons learned related to PBN, on a generic module, which provided an opportunity for effective discussions and more understandings of PBN, ATM operations and airspace management.

The three Case Studies addressed the following:

1. designed routes in TMA airspace;
2. routes designed for dual airports; and
3. Enroute design and multi-TMA integration practice

### 3. Review and Next Steps

During the final session Mr. Erwin Lassoij, ICAO PBN Manager, provided the meeting with an overview regarding the status of PBN implementation at the global and regional levels. Mr Erwin highlighted the outcome of the PBN Go team Visit Phase II to UAE and encouraged participants to take into consideration the below lessons learned:

- Team concept: diverse points of view and sources of information add strength
- Setting goals and scope early helps insure success
- Smaller projects allow for quick success
- Take advantage of RNAV flexibility to design for shortest route
- Design routes first then design airspace to contain routes
- Design routes to minimize conflicts
- Avoid the 100% trap – 80% of something is better than 100% of nothing
- Right size the airspace according to tasks required
- Avoid CDO route shortcuts to the extent possible
- Shortcut CCO to the extent possible

It was also agreed that the ICAO MID Regional Office to follow up with the MID States and provide the appropriate first level of support. However, ICAO HQ will be providing support to PBN implementation through the issuance of Standards and Guidance Materials and by conducting customized Go Teams.

### III. Closing

The event was closed by Ms. Nancy Graham, ICAO Director of Air navigation Bureau and Mr. Ahmed Al Jallaf, Assistant Director General, ANS, GCAA, UAE, who distributed the Certificates to the participants.

The importance of gathering all stakeholders and providing forums for discussion of PBN issues was highlighted. In this respect, the participants expressed their gratitude to IATA and ICAO for organizing the PBN event and to UAE for hosting the Workshop in Abu Dhabi; and invited ICAO to continue on this pace and organize more PBN Workshops.

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**Attachment A**

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