WORKSHOP A – PRACTICAL EXPERIENCES
AND AIR TRAFFIC MANAGEMENT
“All you need to know to create the PBN environment”

SUMMARY

Moderator: David Maynard (CANSO)
19 October 2012
Workshop Aim

• Interactive learning/education workshop

• Explore ATM system needs, issues, and concerns

• Provide practical solutions

• Identify future actions
Workshop Program

1. ATM Requirements
   Franca Pavlicevic
   Eurocontrol

2. Technical Requirements
   James Arrighi
   FAA

3. Training Requirements
   Dennis Kelly
   IFATCA

4. Regulatory Requirements
   Honghai Yang
   CAAC

Approximately 250 Participants
Participating Speakers

Many participated in both Workshops and more than one panel

- Noppadol Pringvanich – ICAO
- Sorin-Dan Onitiu – JEPPESEN
- Bryan Jolly – EASA
- Jeremy Davidson – ICAO
- Doug Marek – FAA
- Walter White – ICAO
- Benoir Routier – DGAC
- Michael Standar – SESAR JU
- Aline Troadec – EUROCONTROL
- Shahidi Hassan – (Mitre
- Jeff Cochrane – NAV CANADA
- Dejan Damjanovic – GeoEye
- Kevin Bethwaite – Airways NZ
- Beat Zimmermann – ANI
- Franca Pavlicevic – EUROCONTROL
- Alan Storm – NATO
- Sebastien Barjou – ENAC
- Jeff Williams – TETRATECH
- Lynn Ray – FAA
- Jeremy Davidson – ICAO
- Bryan Jolly – EASA
- Saulo Da Silva – ICAO
ATM Requirements

• GNSS is accurate
  – is there a plan or initiative to gather lateral performance data to justify a reduction in route spacing

• Mixed mode is being successfully accomplished
  – significant benefits are realized, but
  – accommodating conventional systems means not every possible benefit is achieved
  – Learn from other implementations
  – Identify champions within workforce early
• The idea of a Guided Visual Approach should be developed and in cooperated into ICAO Doc.
• Phraseology is needed in 4444 for CDO and CCO would assist in implementation
• More education on PBN requested
  – further information/education on RNAV/RNP to ILS transitions requested
  – suggestion for additional local and regional workshops
    • Include development activities
    • Adopt an ANSP
• New flight plan codes take effect Nov 15th
  – FPL 2012 and PBN – some confusion still exists and additional changes may be required
  – New codes in rev 4 of 9613 PBN codes are not included (A-RNP, RNP 2, RNP 0.3)

• GNSS signals are very reliable but
  – What about jamming and a backup plan
  – Monitoring vs. recording
    • (SARP - recording addressed in Annex 10 2.1.4.2)

• Harmonize State and ICAO Requirements
Collaboration is key

Market PBN – only when the benefits are understood will acceptance of procedures occur.

All disciplines must be included in the process

Build the training plan as you develop, this will make it more comprehensive.
Training Requirements

- Training needed for all at the delivery point
- Plan for mixed/equipage and capability
- Use simulation capabilities not just briefings
- Provide a PBN Help Desk/on-line forum
• Environment – process must be followed, early communication and outreach to all stakeholders
  – Time consuming but effective
• SMS is a total system
  – Even in design we must take account of potential risk
• FMS memory limitations must be considered
• Determining Sep. Criteria for Free/Direct routes
  – NAV specs are attributed to route rather than an airspace
  – some functionalities disappear
  – additional guidance may be needed
• Single Approval
• Questions arose regarding ICAO PBN Endorsements
Summary –
Is There a Silver Bullet to Expedite PBN

- Clear Vision/Plan
- Business Case (Requirements/Benefits)
- Collaboration - All Stakeholders
- Education - All Stakeholders
- Training - All Stakeholders
- Global Standards and Approval Processes
- Partnerships
- Emergence/Incorporation of New Requirements
- Top Down Bottom Up
Summary –
Is There a Silver Bullet to Expedite PBN

PBN

Just Do It