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
- Benoîr 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
• 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
ATM Requirements

• The idea of a Guided Visual Approach should be developed further
• Phraseology 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 15\textsuperscript{th}
  – 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 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
Regulatory and Certification Requirements

- 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
• Top Down Bottom Up
Summary – Is There a Silver Bullet to Expedite PBN

PBN

Just Do It