



| ICAO

CAPACITY & EFFICIENCY



Overview of the Asia-Pacific and African FPPs

Erwin Lassoij

PBN Programme Manager

ICAO HQ, Montreal, Canada



Presentation Outline

- Background
- FPP Responsibilities
- Structure and Governance
- Current Status

Flight Procedures Programme (FPP)

“the Regional Centre of Excellence in procedure/airspace implementation, focusing on PBN”

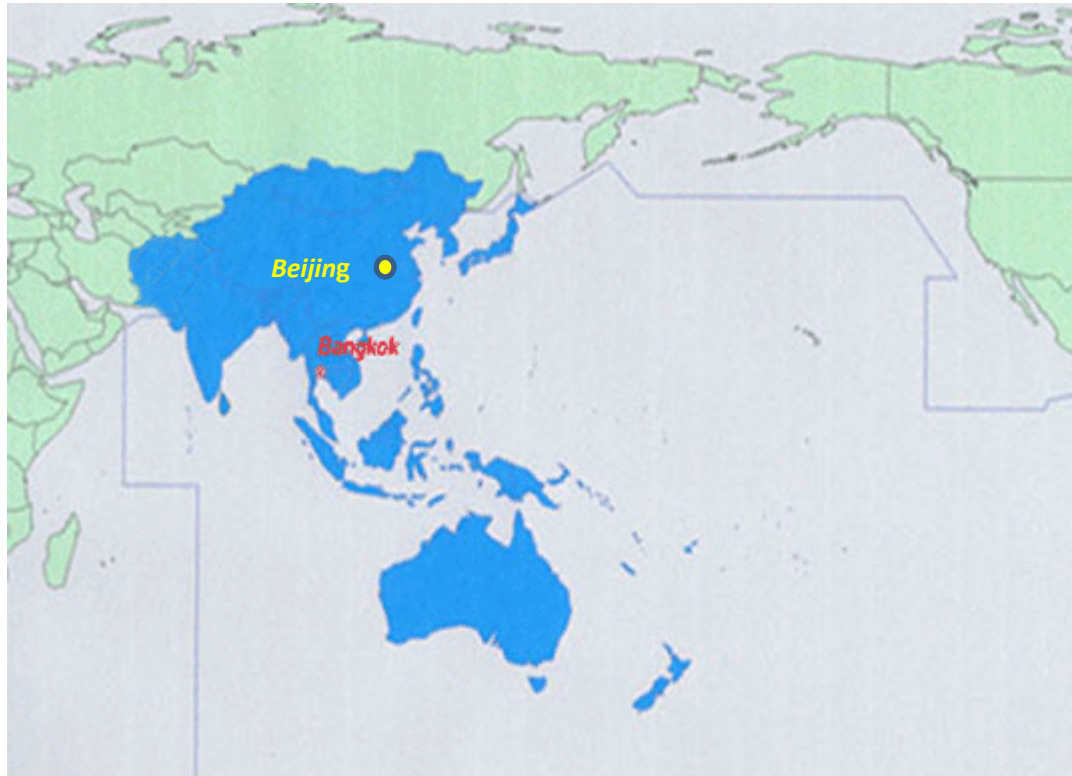
To provide

- Direct design and implementation support as needed
- Necessary capacity building for States and other stakeholders for sustainable development

ICAO Oversight

- monitor implementation of the programme (ANB)
- provide technical support to its experts in the performance of their duties (ANB);
- Manage the programme in accordance with the ROM, Chapter 5 (ICAO RO); and
- provide financial account management (TCB);

Asia Pacific Flight Procedures Programme (APAC FPP)



Why Asia-Pacific?

“Highest rate of aviation growth, young fleet, safety and environmental issues”

Requirement for a vehicle to:

- Increase and expedite PBN implementation (large number of airports affected)
- Address State PBN Instrument design issues
 - Lack of training, QA, regulatory oversight, automation tools
 - Slow rate of design and publication
- Improve safety and efficiency (environmental) through availability of PBN procedures with vertical guidance

Why APAC FPP?

- To address A36-23
 - States and PIRGs to develop PBN implementation plans and implement PBN in accordance with the timelines established on those plans
- Supported by the APANPIRG/19
 - Conclusion 19/27 - That ICAO continue to develop the concept of a Flight Procedure Design Office taking into account proposals submitted by States with emphasis on the role, responsibility and financial mechanisms
- China selected as Host Administration

Background

Letter of Intent

- Signed March 2009
- “accelerate implementation of PBN”
- “develop States capabilities in the instrument flight Procedure Domain”
 - Procedure design
 - Regulatory oversight
- “be a center of excellence in the field of instrument procedure design”
- Estimated duration 7-8 years
- Initial period; 3 years
- Host State: China
- Location: CAAC, Beijing
- Estimated Programme Cost: US\$234,000
- Estimated Start date: August 2009

PRODOC (Phase I)

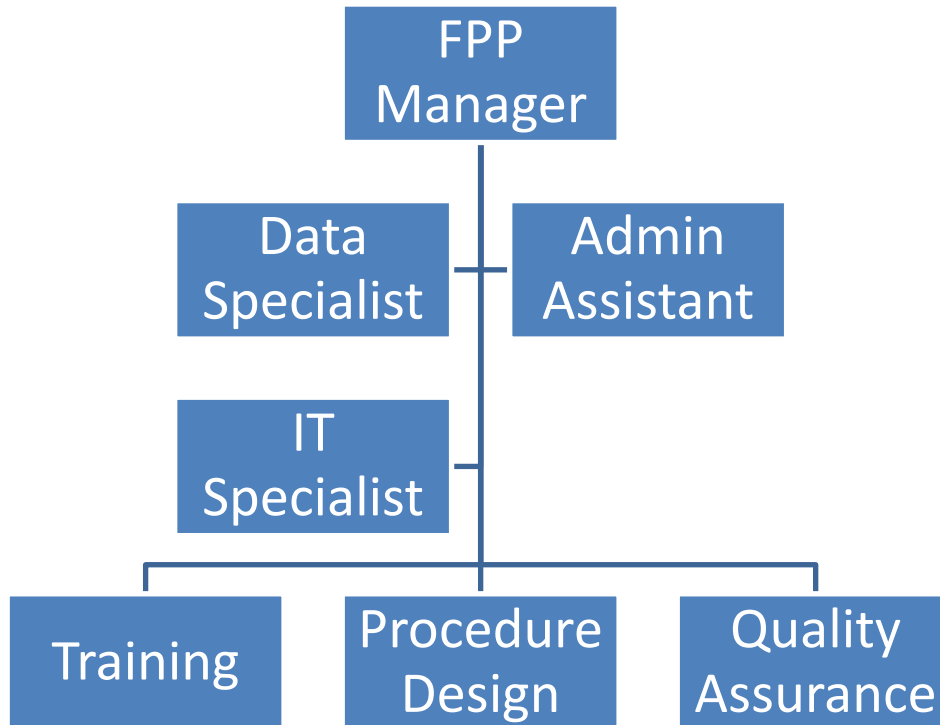
- Signed Jan/Feb 2010
- FPP Role:
 - To serve as a means to assist Participating States to address specific instrument procedure design issues and problems that they are currently facing.
- Staff Requirement
 - One manager (ICAO)
 - 3 Procedure Designers (Secondments – 2 from CAAC)
 - 1 data specialist, 1 admin assistant, 1 IT specialist (All from CAAC)
- Governance through Steering Committee comprised of Active Participating States
- Estimated programme cost: US\$514,600



APAC FPP Responsibilities

- Assist State Procedure Designers in developing their procedures
- Develop procedures for States that have no IFP design capability
- Assist States with Quality Assurance of Instrument Flight Procedures
- Provide Quality Assurance
- Provide OJT to procedure designers
- Provide other training as required
- Assist with ground and flight validation
- Assist States with data origination
- Provide States access to procedure design software applications at the FPP location
- Provide States access to electronic terrain and obstacle data storage as needed during training

APAC FPP – Structure



Unique Regional Notes

A: RSO does Airspace Design

B: COSCAP does Ops Approval

APAC FPP – Governance

APAC FPP Governed by Steering Committee made up of
Active Participating States, ICAO and Host Nation

Active Participating States (10)

- Australia
- China
- China, Hong Kong
- China, Macau
- French Polynesia (France)
- Philippines
- Republic of Korea
- Singapore
- Sri Lanka
- Thailand

User Participating States (7)

- Democratic People's
Republic of Korea
- Fiji
- Mongolia
- Myanmar
- Pakistan
- Tonga
- Vietnam

Each Active Participating States contributes \$USD 20K annually
to overall funding of the programme

User Participating States pay for use of FPP services

APAC Steering Committee

Responsibilities

- Approve annual work program
- Oversee implementation of the annual programme
- Assess annual work programme performance
- Approve FPP Strategic Plan
- Approve FPP Annual budget
- Determine fee schedule for services and training
- Review progress of FPP at specific points (after each phase) and determine strategic direction

APAC FPP Status

- Operations since 2009 in Beijing, China
- 20+ Member States and increasing
- Conducted training for more than 1000 participants from 20+ States
- On-going supports for PBN implementation projects/ capability building in more than 15 States
- \$USD 20K contribution per Active Participating State
- Phase III currently under review (2017-2020)



Africa Flight Procedures Program (AFPP)



Africa FPP Background

Letter of Intent

- Signed November 2012
- ICAO, ASECNA, DGAC France
- “to enhance sustainable instrument flight procedure capability in Participating States”
- “focus on the implementation of PBN operations in African States but will also address the needs of those States regarding conventional procedures”
- “Envisioned to be a not-for-profit programme of excellence in the field of PBN Implementation
- Programme will foster all aspects of PBN implementation
 - Training
 - Instrument procedure design
 - Airspace design
 - Validation and quality assurance
 - Operational approval¹”
- Initial period; 3 years
- Host Organization: ASECNA
- Location: Dakar Senegal
- Sponsor: DGAC France
- Estimated Programme Cost: US\$234,000
- Estimated Start date: June 2014

Africa FPP Background

PRODOC (Phase I)

- Signed May 2014
- FPP Role:
 - To assist States to develop sustainable capability in the instrument flight procedure domain so as to meet their commitments un A37-11 for PBN implementation and their obligation for quality of their IFPs.
- Staff Requirement
 - One manager (ICAO) – Provided by DGAC France
 - Chief , Procedure Designer (ASECNA)
 - Chief Operational Training (State Secondment)
 - 1 Procedure Designer (ASECNA)
 - 1 admin assistant, 1 IT specialist (ASECNA)
 - 1 Data specialist (State Secondment)
- 3 types of members:
 - Active Participating State (Financial Contribution)
 - User State
 - Observer State
- Governance through Steering Committee comprised of Active Participating States
- Estimated programme cost: US\$750,600

Strategic Objectives

a regional, sustainable solution for:

- PBN and IFP Procedure Design Capability
- Proper PBN Ops Approval Process
- Efficient integration of PBN into African airspace infrastructure

An African FPP customized for Africa by Africa

- Supported by the AFI RAN in 2008
- Re-energized at the recent Assembly Resolution A38-7:
 - *“States are urged to support the establishment of the AFI Flight Procedures Programme (FPP) Office with seconded personnel and financial assistance as a matter of urgency to expedite the implementation of PBN in the region.”*

An African FPP customized for Africa by Africa

Formula:

- Run by ICAO ESAF/WACAF
- Seconded Personnel from ESAF and WACAF areas
- Contributions from States and Donors
- Governed by African Steering Committee

Status

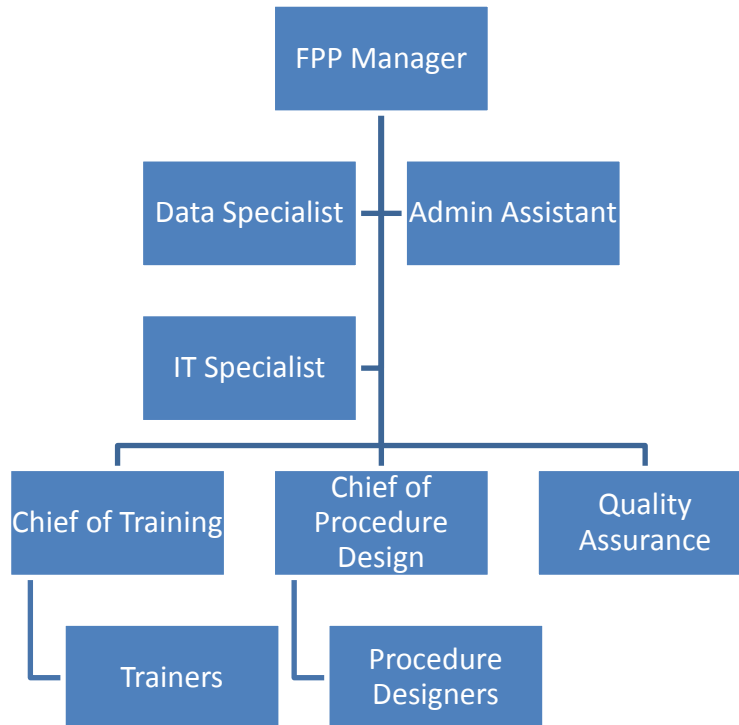
- Open for business - 2 June 2014
- Initial 3-year duration, renewable
- Dakar, Senegal, hosted by ASECNA



Africa FPP Responsibilities

- Assist State Procedure Designers in developing their procedures with priority for PBN procedures
- Assist States with Quality Assurance of Instrument Flight Procedures
- Provide training course, refresher course and OJT to procedure designers
- Provide training course and OJT for QA including flight procedure regulatory approval
- Provide training course and OJT for operators approval for PBN operations
- Assist State for PBN Plan implementation through operational assessment, business case and activity planning for PBN implementation
- Assist States with developing PBN related regulations
- Develop procedures implementation for States that have no procedure design capability
- Assist States with data origination
- Assist States with ground and flight validation
- Assist States with operators approval for PBN Operations
- Provide training course and OJT for ATC/ATM and operators about PBN flight procedures operations
- Provide States with any other associated assistance as required
- Provide States access to procedure design software applications at the FPP location
- Provide States access to electronic terrain and obstacle data storage as needed during training

AFPP – Structure



Note

Essential Difference to APAC FPP is:

- No RSO or COSCAP to perform Airspace Design and Ops Approval functions
- Functions incorporated into AFPP

AFPP Expected Outcome

- Increase in robust State PBN Implementation Plans
- Increase in the number of PBN procedures implemented and published in States AIP
- Increase in number of TMAs with approved PBN operations
- Increase in the number of approved local carriers for PBN operations
- Demonstrated evidence for improved safety and efficiency of flight operations

AFPP Governance

- The Steering Committee (SC) is the governing body of the AFPP
- The Members of the SC include a representative from :
 - ICAO;
 - each Active Participating State (APS); and
 - Host Administration (ASECNA)
 - AFCAC
 - Donor States (France)

Active Participating States (26)

Angola, Burkina Faso, Cabo Verde, Cameroon, Comoros, Congo, Cote d'Ivoire, Democratic Republic of Congo, Djibouti, Gabon, Gambia, Ghana, Guinea, Kenya, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Tanzania, Togo, Uganda

User States (3)

Guinea Bissau, Madagascar, Zimbabwe

Steering Committee Roles/Responsibilities

- Role and responsibilities
 - Review & approve Annual work programme;
 - Review & approve Annual budget;
 - Review & approve Annual financial contribution for APS; and
 - Considering request for waiver of financial contribution in lieu of in-kind contribution

And,

- Review of Performance of Programme;
- Review of Programme document, as necessary; and
- In consultation with ICAO Policy,
 - Review and approve fee schedule for services and training

Participation in the AFPP

- **Host Administration**
 - ASECNA
 - Signatory to Programme Document with ICAO
 - Does not constitute State participations
- **Participating States**
 - Signature onto attachment of Programme Document
 - Active Participating States
 - African State
 - Part of Programme Steering Committee
 - Commitment to funding the Programme with Annual financial contribution
 - May be waived through in-kind contribution under agreement by Steering Committee
 - User States
 - African State
 - No commitment to funding the Programme; some free services, other services by service fee
 - Observer States
 - Participating State not necessarily African
 - No commitment to funding the Programme; services by service fee
- **Donors**

Africa FPP Status

- Operations since June 2014 in Dakar, Senegal
- 26 Active Participating States
- Annual State Financial Contribution - \$US 10K
- Conducted training
 - PANS-OPS initial Procedure Design
 - PANS-OPS PBN Procedure Design
 - PBN Ops Approval
- Conducted workshops
 - QA for flight procedure implementation process
 - Airspace Design
 - PBN Training for ATM
- Assisted States in instrument procedure design
 - Cote D'Ivoire
 - Zimbabwe
 - Cameroon
 - Togo
 - Gabon
- On-going support for PBN implementation projects/
capability building
- Phase II currently under review (2017-2020)





ICAO

CAPACITY & EFFICIENCY



Thank You