



SAFE SKIES.
**SUSTAINABLE
FUTURE.**

**Twenty-seventh Meeting of the Africa-
Indian Ocean Planning and Implementation
Regional Group (APIRG/27)**

*East London, South Africa, 4 – 8
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WP/03C- Update on the African Flight Procedure Programme



WP/03C2 – PBN implementation Status



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○ Background

○ PBN elements

○ Implementation status

○ Implementation challenges

ICA088 ○ Action by the meeting

Assembly Resolutions

□ 2007 – A3623:

- ☞ Introduction of the Performance –based Navigation (PBN) concept;
- ☞ PBN Implementation Plans required by 2009;
- ☞ PBN implementation for:
 - En-route and Terminal;
 - Approach procedures for all instrument runways either as primary or backup to ILS by 2016 with intermediate milestones.

□ 2010 – A3711:

- ☞ Complete national PBN implementation plans as a matter of urgency.
- ☞ Superseded A36-23.

APIRG Conclusions

❑ 2007 – APIRG 16:

☞ **Concl. 16/2:**

- Establishment of a PBN task Force to develop the AFI PBN Roadmap.

☞ **Concl. 16/3:**

- State to develop national plans based on the regional roadmap.

☞ **Concl. 16/4:**

- States to nominate PBN focal points.

❑ 2009:

- ☞ Dedicated workshop and guidance on the development of the plans provided.

APIRG Conclusions

□ 2010 – APIRG 17 :

☞ Concl. 17/47:

- PBN plan template provided to States;
- State to complete NPIPs as soon as possible.

☞ Concl. 17/48:

- Implementation tools provided: Action Plan Templates, project management; reference to others.

□ 2022 – APIRG 22 :

☞ Concl. 22/07:

- Robustness of NPIP;
- Funding for NPIP development or revision.

☞ Concl. 22/08:

- Implementation of Continuous Descent and Continuous Climb Operations (CCO/CDO);
- Capacity building on CCO/CDO.

❑ PBN implementation must start with:

- ☞ NPIP development;
- ☞ WGS-84 implementation (prerequisite).

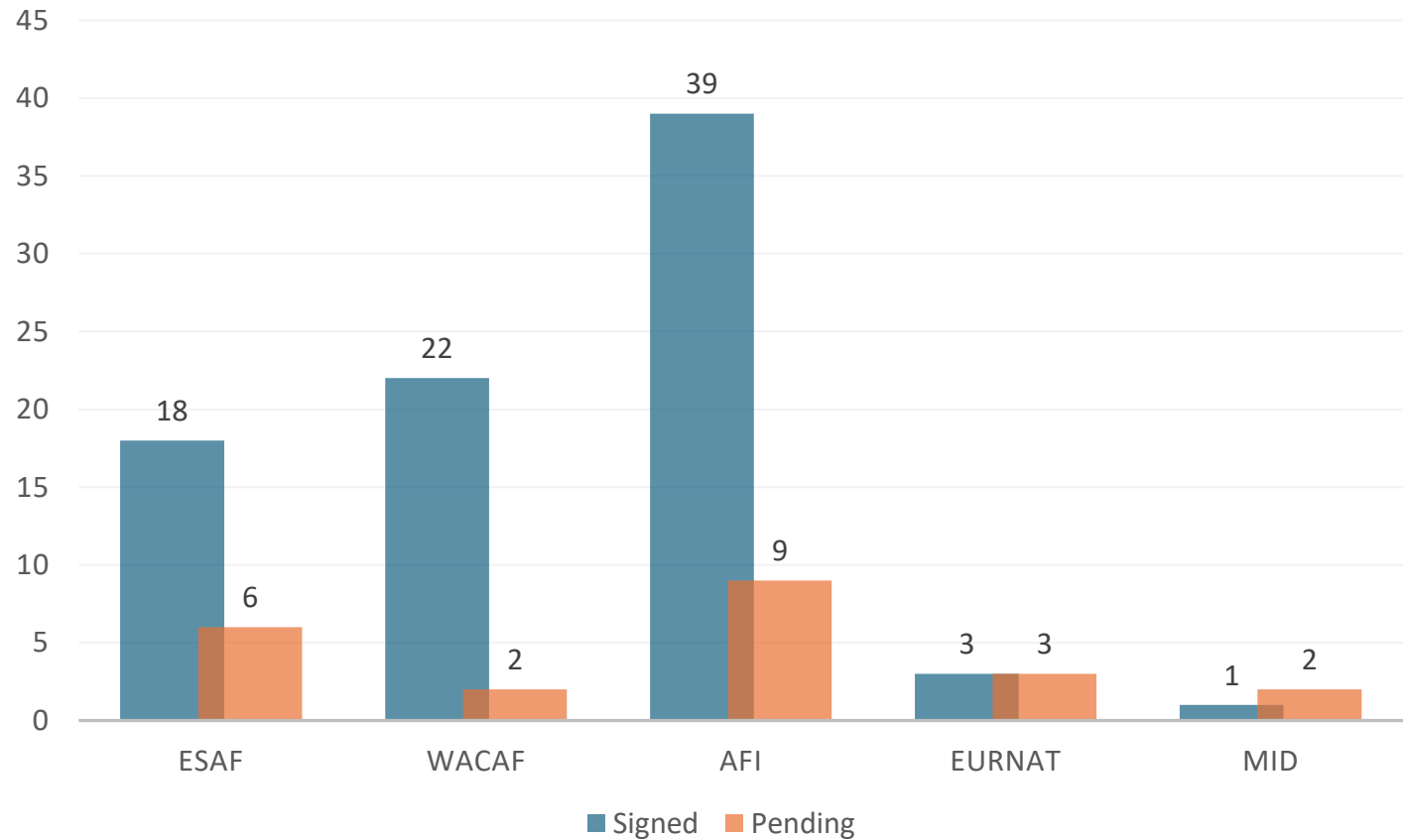
❑ Followed by PBN procedures in:

- ☞ Terminal area (Arrival and Departures routes);
- ☞ Approach Area:
 - Approach procedures with vertical guidance (APV);
 - Approach procedures without vertical guidance (LNAV only).



National PBN Implementation Plans (NPIPs)

- ☐ Total number of States : 54
- ☐ States with NPIPs : 44 (81%)
 - ☞ ESAF : 18 (75%)
 - ☞ WACAF : 22 (92%)
 - ☞ EURNAT : 3 (100%)
 - ☞ MID : 1 (33%)
- ☐ Pending NPIPs
 - ☞ Burundi
 - ☞ Djibouti
 - ☞ Egypt
 - ☞ Eritrea
 - ☞ Eswatini
 - ☞ Lesotho
 - ☞ Libya
 - ☞ South Sudan

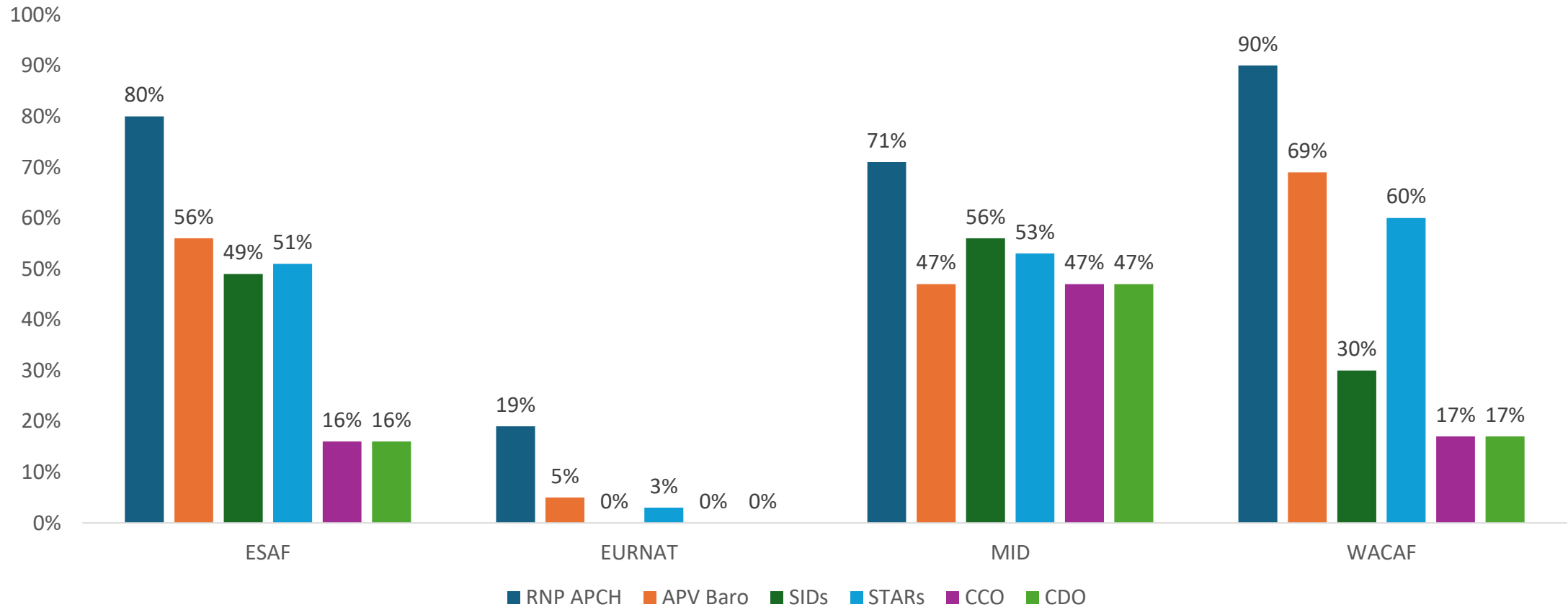


PBN Flight Procedures

- ❑ Figures based on the list of international aerodromes required in the regional Air Navigation Plans.
- ❑ Source electronic Air Navigation Plan (eANP) of each Region.
- ❑ Number of runways ends:

# Runways	ESAF	EUR/NAT	MID	WACAF
# RWYs	195	104	38	120
# Instrument RWYs	138	74	34	107

PBN Flight Procedures



PBN Flight Procedures

□ Conclusion:

- ☞ The implementation rate is globally satisfactory;
- ☞ # Aerodromes without Terminal PBN flight procedures : 61
- ☞ # States without Terminal PBN flight procedures :
 - Burundi, Eswatini, Libya, Sao Tome and Principe, Tunisia, Zimbabwe.

- ❑ African States are facing recurrent issues with the PANS-OPS:
 - ☞ Instrument flight procedures:
 - are based on Navaid that must be calibrated on a periodic basis;
 - Shall approved by the CAA prior to their implementation;
 - are design using WGS-84 data that shall be revised maximum every five years.
 - Shall be revised maximum every five years.
- ❑ Inability to abide by these rule are the main cause of the recurrent Safety Significant Concerns which resolution is costly.

□ The meeting is invited to:

☞ Take note of the information;

☞ Develop the national PBN implementation plan implement AR37-11 provision;

☞ Call upon States to take anticipated measures to comply with the ICAO safety requirements for instrument flight procedures' implementation.

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Thank You

