



INTERNATIONAL CIVIL AVIATION ORGANIZATION

Ninth Meeting of the AASPG Airspace and Aerodrome Operations Sub-Group (AAO/SG9)

Nairobi, Kenya, 13-17 July 2026

Agenda Item 3: Achievements in AOP and ATM/SAR

UPDATE ON THE AFI PBN AORTA PROJECT MANAGEMENT TEAM (PMT) (Presented by AFI PBN AORTA PMT)

SUMMARY
This working paper outlines activities related the AFI PBN AORTA Project Management Team (PMT). The AFI PBN AORTA PMT aims at enhancing airspace efficiency, safety, and capacity through the implementation of Performance-Based Navigation (PBN) within the AFI region. The paper highlights progress made in supporting States, improving airspace structures, and strengthening regional coordination in PBN implementation.
REFERENCE(S): 1. AASPG Handbook 2. AAO/SG8 Report 3. Doc 9750, Global Air Navigation Plan 4. Doc 4444 – PANS-ATM 5. AASPG/1 Report
Related ICAO Strategic goal(s): (a)- Every Flight is Safe and Secure (c)- Aviation Delivers Seamless, Accessible, and Reliable Mobility for All

1. INTRODUCTION (HISTORY)

1.1 The AFI PBN AORTA Project Management Team (PMT) is a regional coordination Team established under AASPG to support the implementation of Performance-Based Navigation (PBN) across the Africa-Indian Ocean (AFI) region. Its primary role is to assist States in planning, developing, and harmonizing PBN operations to modernize airspace management and improve overall aviation performance. The key objectives of the PMT include reviewing the AFI PBN Implementation Plan, optimizing ATS route networks, enhancing the design and implementation of PBN-based arrival and departure trajectories (PBN SID with/without CCO and PBN STAR with/without CDO) and PBN-based instrument approach procedures (such as RNP APCH with Baro VNAV, RNP APCH LPV, RNP AR), improving operational efficiency and safety, promoting harmonization across Flight

Information Regions (FIRs), and reducing fuel consumption and environmental impact.

2. DISCUSSION

2.1 Between AAO/SG8 and AAO/SG9, The AFI PBN AORTA Project Management Team (PMT) has:

- a) supported States in developing National PBN implementation plans;
- b) promoted harmonization of PBN implementation across FIR boundaries;
- c) conducted capacity-building initiatives, including workshops and training in Bujumbura in January 2026 and Accra in April 2026;
- d) reviewed the AFI region PBN implementation plan, proposed and validated the revised targets and timelines;
- e) review of AFI ATS route structures and rationalization of conventional routes;
- f) Tracked PBN implementation progress across States of the AFI region,
- g) conducted gap analysis and performance assessments, prepared regular progress reports for ICAO and stakeholders.

2.2 The AFI PBN AORTA Project Management Team reviewed the AFI PBN implementation plans aligning it with ICAO Global Air Navigation Plan (GANP) and established timelines, milestones, and reporting mechanisms for PBN deployment. The PMT reviewed the AFI ATS route structures, rationalizing conventional routes to improve efficiency. 284 existing regional ATS routes (upper and lower) reviewed. 62 proposed for deletion in the upper airspace and 11 in the lower airspace. The remaining 211 were considered either still valid or valid with proposed modifications. 45 new regional ATS routes were proposed for inclusion in the regional air navigation plan volume II. Newly proposed area of routing # 7 (Middle East-WACAF-South America) and 8 (Middle East to Eastern Africa) validated and Area of routing # 5 amended and extended to Eastern Africa to accommodate emerged traffic flow from East African States such as Ethiopia, Kenya, Uganda, Tanzania.

The AFI PBN implementation plan was validated with the following proposed targets and timelines:

NEAR TERM-2027-2028

(NPPI=100%, RNAV RTE=75%, CCO/CDO=75%, RNP APCH APV BARO=80%),

MEDIUM TERM-2029-2031

(UPDATED NPPI=100%, RNAV RTE=90%, CCO/CDO=90%, RNP APCH APV BARO=100%)

LONG TERM-2032-BEYOND

(UPDATED NPPI=100%, RNAV RTE=90%, CCO/CDO=100%, RNP APCH LPV=50%)

2.3 The main challenges included limited technical capacity: shortage of skilled personnel for PBN design and validation, regulation, and implementation, funding constraints: inadequate and inconsistent financial resources for projects and training, data limitations: poor availability and quality of aeronautical and terrain data; regional disparities; Uneven implementation across States of the AFI region affecting harmonization.

2.4 Planned activities from AAO/SG9 to AAO/SG10

- Assist States with Accelerated PBN implementation to achieve the targets set out in the revised AFI PBN Implementation Plan.
- Optimize airspace through redesign and better regional harmonization.
- Support Free Route Airspace (FRA) and User Preferred Routes (UPR) implementation and connexion to terminal trajectoires.
- Strengthen capacity by organizing workshops for targeted training and skill development.
- Track PBN implementation through regular progress reporting.
- Monitor ATS routes update and upgrade

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Note the progress made by the AFI PBN AORTA PMT;
- b) Encourage States to accelerate PBN implementation and address identified gaps in accordance with the Revised AFI PBN implementation Plan;
- c) Support capacity-building initiatives and resource mobilization; and
- d) Provide further guidance on enhancing regional coordination and implementation.
