



INTERNATIONAL CIVIL AVIATION ORGANIZATION
AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
TWENTIETH MEETING (APIRG/20)
(Yamoussoukro, Cote d'Ivoire, 30 November - 2 December 2015)

Agenda Item 2.2: Air Traffic Management and Search and Rescue (ATM/SAR)

IMPLEMENTATION OF PERFORMANCE-BASED NAVIGATION (PBN)

(Presented by Secretariat)

SUMMARY	
This working paper presents the outcome of the Fourteenth Meeting of the Air Traffic Management/Aeronautical Information Management/Search and Rescue (ATM/AIM/SAR SG/14) with respect to PBN implementation, for endorsement by the APIRG, and proposes action to be taken by the meeting on the draft Conclusions and Decisions.	
Action by the Meeting is in paragraph 3 .	
REFERENCE(S): <ul style="list-style-type: none">- ICAO Assembly Resolution A37-11- APIRG/19 Report- ATM/AIM/SAR SG/14 Report	
<i>Strategic Objective(s):</i>	This Working Paper is related to strategic objectives A, B and C .

1. INTRODUCTION

1.1 The Fourteenth Meeting of the Air Traffic Management/Aeronautical Information Management/Search and Rescue (ATM/AIM/SAR SG/14) was held at the ICAO WACAF Regional Office in Dakar, Senegal from 11 to 14 May 2015.

1.2 This paper provides the outcome of the deliberations of the ATM/AIM/SAR/14 meeting on issues related to implementation of performance-based navigation (PBN) in the AFI Region, as per ICAO Assembly Resolution A37-11 (PBN Goals).

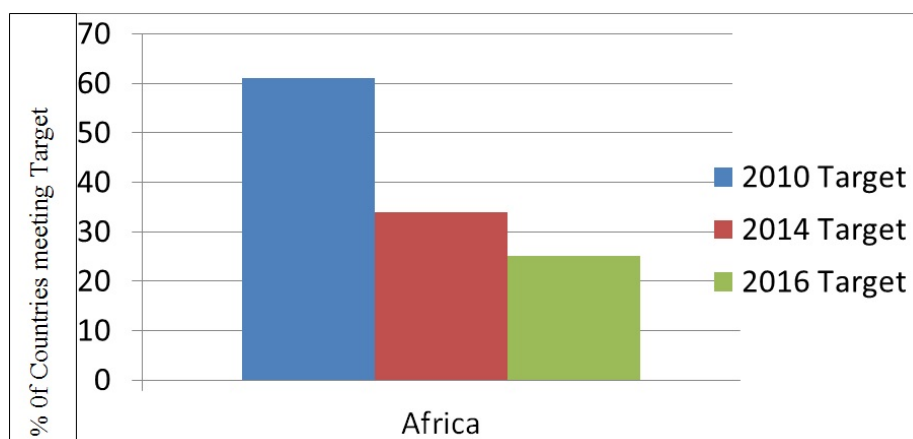
2. DISCUSSION

Status of implementation of PBN in the AFI Region

2.1 The Sub-Group recalled that there had been various implementation support efforts by APIRG and the Secretariat to facilitate implantation PBN. In addition, the African Flight Procedures Programme (AFPP) was established in 2013 (WP/11B of this meeting refers).

2.2 Notwithstanding, it was noted that progress remained slower than the goals set by ICAO Assembly in its Resolution A37-11. Notably, while the goal in Resolution A36-23 (replaced by Resolution A37-11) for the development of PBN implementation plans was 2009, the number of States that had developed PBN implementation plans remained below 20. Furthermore, many of the plans still required significant improvements and were not formally adopted and funded by the respective States.

2.3 The Sub-Group acknowledged the recent development of PBN implementation plans (assessed by the Secretariat as “robust.”) by Namibia and Senegal. With regard to PBN procedures and terminal airspace routes, overall status of PBN implementation against the Assembly Resolution A37-11 is reflected in the figure hereunder:



2.4 The Sub-Group acknowledged the role of users in achieving the present status of PBN implementation in the AFI Region, and, noting the challenges faced by States in completing processes after the design of PBN procedures, encouraged users to be more involved in the stages beyond design and validation of procedures, in particular to support training efforts in order to expedite bringing the intended benefits to users.

2.5 The ATM/AIM/SAR/SG/14 expected that the addition of the AFPP to efforts of APIRG, ICAO Regional Offices and Headquarters would provide for adequate support to African States to move significantly towards achieving the PBN implementation goals set by the Assembly (A37-11). States’ commitment was emphasised.

2.6 It was noted that while many States had designed and publish PBN procedures, air traffic controller (ATC) training and in some cases flight crew training was lagging, and as such delaying the realization of benefits. The Secretariat was encouraging aviation training centres in the region to provide appropriate training, applicable for air traffic controllers’ operational purposes.

2.7 The Sub-Group agreed that in order to facilitate methodical implementation of the Aviation System Block Upgrade (ASBU) modules such as B0-CCO and B0-CDO which are enabled by PBN, States and ANSPs should be urged to develop airspace concepts.

AFI Regional PBN Implementation Plan

2.8 The Sub-Group reviewed and agreed on an updated version of the AFI Regional PBN Implementation Plan, noting that besides editorial improvements, the changes mainly constituted clearer alignment of the Regional Plan with the Assembly Resolution A37-11. Accordingly the ATM/AIM/SAR SG/14 meeting formulated following Draft Conclusion:

DRAFT CONCLUSION 20/XX: UPDATED AFI REGIONAL PBN IMPLEMENTATION PLAN

That:

- a) **The updated AFI Regional PBN Implementation Plan is adopted as at Appendix 2.2A.**

- b) **States and organizations that have not already done so, make all necessary efforts to close the gap on goals set in the Regional Plan, and in this respect strongly consider approaching the AFPP for assistance and advice, in addition to the Regional Offices.**

(Note 1: this Draft Conclusion is intended to supersede APIRG Concl. 19/64)

African Flight Procedure Programme (AFPP)

2.9 The Sub-Group noted the apparent low level of awareness in some States, on the launch of the AFPP in May 2014, and formulated the following Draft Conclusion.

DRAFT CONCLUSION 20/XX: OPTIMIZATION OF THE FUNCTIONS OF THE AFRICAN FLIGHT PROCEDURE PROGRAMME (AFPP)

That, in order to attain optimum benefits from the AFPP and to effectively support progress in the implementation of PBN in the region:

- a) **African States are urged to approach the AFPP to establish how best they could participate in the Programme and to benefit from its establishment;**

- b) **The AFPP take concerted effort to provide information and sensitize States on taking advantage of its establishment and functions and services**

Stakeholder contributions in PBN implementation.

2.10 The Sub-Group acknowledged the role of the African Civil Aviation Commission (AFCAC) in assisting States in the implementation of PBN through mechanisms such as seminars and workshops. The Sub-Group highlighted the importance of coordinated efforts by all relevant stakeholders in the implementation of PBN, through a strategic document. The Sub-Group therefore formulated the following Draft Conclusion:

**DRAFT DECISION 20/XX: REGIONAL PERFORMANCE BASED NAVIGATION (PBN)
IMPLEMENTATION STRATEGY**

That, taking into consideration the low status of PBN implementation in relation to the global goals, ICAO be requested to develop a Regional PBN Implementation Strategy with appropriate strategies to facilitate coordinated efforts of stakeholders including States, ICAO, AFCAC, and airspace users, to enhance the effectiveness of their collective implementation support.

(Secretariat Note: Development of the Regional PBN Implementation Strategy is to take into consideration the AFPP Strategic Plan)

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- (a) Note the information provided in this working paper.
- (b) Endorse the Draft Conclusions and Draft Decisions of the ATM/AIM/SAR SG/14 related to PBN implementation.
