



# African Flight Procedure Programme

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## AFPP ACTIVITY REPORT, 2016, 4<sup>th</sup> Quarter

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The objective of this paper is to report on the activities of the African Flight Procedure Programme (AFPP) during 4<sup>th</sup> Quarter of Year 2016 and provide highlights of 2016 AFPP programme of activities.

### AFPP MEMBERSHIP

Angola, Botswana, Burkina Faso, Cabo Verde, Cameroon, Chad, Comoros, Congo, Cote d'Ivoire, Djibouti, DRC, Gabon, Gambia, Ghana, Guinea Bissau, Guinea Equatorial, Kenya, Madagascar, Mali, Mauritania, Mozambique, Niger, Nigeria, Roberts FIR (Guinea, Liberia and Sierra Leone), Senegal, Tanzania, Togo, Uganda, Zambia and Zimbabwe.

	total	APS	US	Pending APS	Pending US	Last signature
<b>2016, Q4</b>	30	26	4	2		Roberts FIR and Zambia

Roberts FIR (in name of Guinea, Liberia and Sierra Leone) and Zambia joined the AFPP as APS.  
Egypt and Somalia requested information to become Members of the African Flight Procedure Programme.

PROGRAMME ACTIVITIES, 4<sup>TH</sup> QUARTER 2016

TITLE	TEXT	Q4 ACTIVITY	INITIATION	STATUS	EXPECTED COMPLETION
<b>ASSISTANCE TO STATES</b>					
<b>National PBN Implementation Plan</b>	<b>Outcomes:</b> National PBN Plan developed and submitted to ICAO WACAF Regional Office.				
	<b>Cameroon</b> After assistance to Cameroon CAA (CCAA) to develop the National PBN Implementation Plan of Cameroon through the National PBN Committee, the consolidated Plan was signed by CCAA DG on November 2016 and submitted to ICAO Regional Office.	Assistance for consolidation of the Plan. Follow-up for Submission of the Plan.	2016 Work Programme	Completed	
	<b>Mali</b> Assistance to Mali CAA (ANAC-Mali) started in 2015 for consolidation and finalization in November 2016 of the National PBN Plan which is under signature process by ANAC-Mali DG.	Assistance for consolidation of the Plan.	2015 Work Programme	On-going	1 <sup>st</sup> Quarter, 2017
	<b>Congo, Guinea and Sao Tome</b> After attendance to a 3-day workshop conducted in French by AFPP experts on request and in collaboration with ICAO WACAF Office, draft copy of the Plan was developed by Congo, Guinea and Sao Tome and Principe CAA. Assistance is provided by the AFPP to consolidate the Plans.	Assistance for consolidation of the Plan.	2016 Work Programme	On-going	1 <sup>st</sup> Quarter, 2017
<b>Chad</b> Assistance to Chad CAA (ADAC-Chad) for consolidating National PBN Implementation Plan by end of March 2017.	Assistance for consolidation of the Plan.	2016 Work Programme	On-going	1 <sup>st</sup> Quarter, 2017	

TITLE	TEXT	Q4 ACTIVITY	INITIATION	STATUS	EXPECTED COMPLETION
<b>Instrument Flight Procedures Implementation Process (conventional and PBN)</b>	<b>Outcomes:</b> Regulatory approval of instrument flight procedures at international and domestic airports in State.				
	<p><b>Mali</b> Assistance provided to Mali CAA (ANAC-Mali) related to instrument flight procedure (conventional and PBN) implementation process and based on the Quality Assurance process, including regulatory approval of PBN flight procedures designed by ASECNA for 3 airports in the North East of Mali (Gao, Timbuktu and Tessalit) on MINUSMA request. 9906). Procedures approved by ANAC-Mali in November 2016 and published in ASECNA AIP in December 2016.</p>	Follow-up for PBN flight procedures approval and publication.	2015 Work Programme	Completed	
	<p><b>Cameroon</b> Assistance provided in June 2016 to Cameroon CAA (CCAA) based on the Quality Assurance process (Doc 9906) including regulatory approval of PBN flight procedures designed by AFPP for Maroua International Airport. Assistance. Process was slowed by issues for procedure validation (see section "Procedure Design, IFPD Cameroon"). Finalization of approval process is expected by 1<sup>st</sup> Quarter 2017.</p>	Assistance to develop conventional and PBN flight procedures approval process.	2015 Work Programme	On-going	1 <sup>st</sup> Quarter, 2017
<p><b>Djibouti</b> Due to implementation of PBN flight procedures at Djibouti International Airport, training about Quality Assurance Implementation process was provided by the AFPP experts to Djibouti Airport and Civil Aviation Authority on December 2015. Follow-up assistance raised issues related to step 8 of Quality Assurance process, preflight evaluation (ground validation) and flight validation actions. Air France provided positive conclusions for flight procedures validation step. Regulatory approval process finalized implementation by August 2016. But issues are still existing for ATC to operate PBN procedures.</p>	Assistance to start operations of PBN flight procedures.	2015 Work Programme	On-going	1 <sup>st</sup> Quarter, 2017	

TITLE	TEXT	Q4 ACTIVITY	INITIATION	STATUS	EXPECTED COMPLETION
<b>AIRBUS Project</b> Instrument flight procedures implementation process	<b>Outcomes:</b> capabilities acquired by States (Guinea, Liberia and Sierra Leone) and Roberts FIR for Airspace Management and oversight of Instrument Flight Procedures implementation.				
	<b>Guinea, Liberia, Sierra Leone</b> Instrument flight procedures implementation global process to be developed for an African State, based on PBN flight procedures at an airport. Activity presented by AIRBUS during AFPP SC/1. Freetown International Airport selected for PBN flight procedures implementation. States of Guinea, Liberia and Sierra Leone, members of ROBERTS FIR, involved in the Project, as all activities related to instrument flight procedures implementation are part of the Project (design, training, assistance). AIRBUS delivered final and positive decision on September 2016 after Introduction meeting held in Sierra Leone, 7-9 September 2016, with all involved stakeholders. Project Management is under development between AIRBUS, AFPP, States and Roberts FIR. Kick-off meeting will be conducted on 16-20 January 2017.	Definition and consolidation of Terms of Reference for activity.	2016 Work Programme	On-going	4 <sup>th</sup> Quarter, 2017

TITLE	TEXT	Q4 ACTIVITY	INITIATION	STATUS	EXPECTED COMPLETION
<b>INSTRUMENT FLIGHT PROCEDURE DESIGN</b>					
<b>Instrument Flight Procedure Design (conventional and PBN)</b>	<b>Outcomes:</b> Conventional and PBN Flight procedures implementation at International and Domestic airports.				
	<p><b>Cameroon</b> Conventional and PBN flight procedures design for Cameroon CAA at Maroua International Airport. Design finalized by AFPP in April 2016. Implementation process presently slowed as CCAA had issue to find an aircraft and experts to participate in step 8 of Quality Assurance process related to the preflight evaluation (ground validation) and flight validation actions. The activity was done in September 2016 coupled to ATC training by AFPP expert. Approval process is launched to be finalized by 1<sup>st</sup> Quarter 2017.</p>	Assistance to develop conventional and PBN flight procedures approval process.	2016 Work Programme	On-going	1 <sup>st</sup> Quarter, 2017
	<p><b>Botswana</b> To respond to request from Botswana CAA, proposal sent for review and design for PBN flight procedures at 4 International Airports (Francistown, Gaborone, Kasane and Maun). Technical and financial proposals were validated and accepted by Botswana CAA. Design will be conducted by AFPP designers. Timetable for activity is under preparation, to start activity in end of February 2017 for 9 months.</p>	Definition and consolidation of Terms of Reference for activity.	2016 Work Programme	On-going	3 <sup>rd</sup> Quarter, 2017

TITLE	TEXT	Q4 ACTIVITY	INITIATION	STATUS	EXPECTED COMPLETION
<b>TRAINING COURSES</b>					
<b>Flight Procedure Design PBN Course (session 2B)</b>	<p><b>Outcomes:</b> State capability developed for conventional and PBN flight procedures design.</p> <p>Training related to PBN procedures, for participating experts to become PANS OPS instrument flight procedures designers. 20-day session for course, dedicated to PBN procedures, as part of the 2016 AFPP Work Programme. Venue was AFPP premises in Dakar, Senegal, from 21 November to 16 December 2016. Expertise and facilitation was provided by AFPP PANS OPS Instructors.</p> <p>Contents of the course was purchased to ENAC, France, after success of Call for Tenders.</p> <p>12 experts from 8 States and Organization participated to the course.</p>	Flight procedures design PBN course conducted for 12 experts.	2016 Work Programme	Completed	

TITLE	TEXT	Q4 ACTIVITY	INITIATION	STATUS	EXPECTED COMPLETION
<b>WORKSHOPS</b>					
<b>Aeronautical Data Origination for IFP Design</b>	<b>Outcomes:</b> provision of knowledge on development of aeronautical data for IFP design to personnel in charge of procedures design and implementation oversight.				
	<p>Knowledge to States in developing capability for aeronautical data collection, including obstacles and terrain, for instrument flight procedures implementation.</p> <p>The 3-day workshop, part of the 2016 AFPP Work Programme, hosted by ICAO WACAF Regional Office in Dakar, Senegal, from 16-18 November 2016.</p> <p>Facilitation provided by KCAA/EASA, AFPP and ASECNA experts, conducted in English.</p> <p>25 experts from 15 States and Organizations participated to the workshop.</p>	<p>Aeronautical Data Origination for IFP Design conducted for 25 experts with expertise from AFPP Member States.</p>	2016 Work Programme	Completed	
<b>PBN Airspace Design Concept</b>	<b>Outcomes:</b> provision of PBN Concept for Airspace Design for CAA and ATM personnel.				
	<p>Knowledge to CAA and ATM personnel of the PBN Concept for Airspace Design.</p> <p>The 10-day workshop, part of the 2016 AFPP Work Programme, hosted by Tanzania CAA in Dar Es Salaam, Tanzania, on 24 October – 04 November 2016.</p> <p>Facilitation provided by ICAO HQ and AFPP experts, conducted in English.</p> <p>27 experts from 9 States and Organizations participated to the workshop.</p>	<p>PBN Airspace Design Concept conducted for 27 experts.</p>	2016 Work Programme	Completed	

TITLE	TEXT	Q4 ACTIVITY	INITIATION	STATUS	EXPECTED COMPLETION
<b>OTHER ACTIVITIES</b>					
<b>AFPP Phase II Task Force</b>	Composition of Task Force for AFPP Phase II: Tanzania (Coordinator), Kenya, Ghana and Cote d'Ivoire (APS representatives), France and AIRBUS (Donors), AFCAC and ASECNA. Meeting organized during the 3 <sup>rd</sup> AFPP Steering Committee meeting, 23 November 2016, Livingstone, Zambia. Report provided to TF members. Next meeting, 25-27 January 2017, Nairobi, Kenya.	Organization of the first meeting of the AFPP Phase II Task Force. Report distributed to TF Members.	2016 Work Programme	On-going	1 <sup>st</sup> Quarter, 2017
<b>3<sup>rd</sup> AFPP Steering Committee</b>	Meeting was hosted by Zambia CAA in Livingstone on 23-24 November 2016. Zambia has joined the AFPP Programme as an Active Participating State (APS). Report to be provided to all African States members. Next meeting on April 2017, venue to be defined.	Organization of the 3 <sup>rd</sup> meeting of the AFPP steering Committee.	2016 Work Programme	Completed	

**PROGRAMME ACTIVITIES, to be launched during upcoming months**

TITLE	TEXT	Q4 ACTIVITY	INITIATION	STATUS	EXPECTED COMPLETION
<b>ASSISTANCE TO STATES</b>					
<b>Instrument Flight Procedure Implementation Process (conventional and PBN)</b>	<b>Outcomes:</b> Regulatory approval of instrument flight procedures at international and domestic airports in State.				
	<b>Equatorial Guinea</b> Assistance to be provided for Equatorial Guinea CAA related to instrument flight procedure (conventional and PBN) implementation process, including regulatory approval of PBN flight procedures designed by ASECNA for Bata International Airport. Assistance based on the Quality Assurance process (Doc 9906). Follow-up to be conducted.	Initial contact with Civil Aviation Authorities.	2016 Work Programme	Preparation	(Phase II) 4 <sup>th</sup> Quarter, 2017
<b>INSTRUMENT FLIGHT PROCEDURE DESIGN</b>					
<b>Instrument Flight Procedure Design (conventional and PBN)</b>	<b>Outcomes:</b> Conventional and PBN Flight procedures implementation at International and Domestic airports.				
	<b>Cameroon</b> To respond to request from Cameroon CAA for design for PBN flight procedures at Bafoussam International Airport. Technical and Financial Proposal was provided to CAA.	Development of Technical and Financial Proposals.	2016 Work Programme	Preparation	(Phase II) 4 <sup>th</sup> Quarter, 2017
	<b>Zimbabwe</b> To respond to request from Zimbabwe CAA for design for PBN flight procedures at Harare and J.M. Nkomo International Airports and possibly at Chiredzi and Kariba airports, information was provided to CAA.	Development of Technical and Financial Proposals.	2017 Work Programme	Preparation	(Phase II) 4 <sup>th</sup> Quarter, 2017

TITLE	TEXT	Q4 ACTIVITY	INITIATION	STATUS	EXPECTED COMPLETION
<b>TRAINING COURSES</b>					
<b>Flight Procedure Design Initial Course (session 3A)</b>	<p><b>Outcomes:</b> State capability developed for conventional flight procedures design.</p> <p>Training related to conventional and PBN procedures, for participating experts to become PANS OPS instrument flight procedures designers. Expertise and facilitation will be provided by AFPP PANS OPS Instructors.</p> <p>20-day session for course, dedicated to conventional procedures, as part of the 2017 AFPP Work Programme. Venue will be AFPP premises in Dakar, Senegal.</p>		2017 Work Programme	Preparation	2 <sup>nd</sup> Quarter, 2017
<b>Flight Procedure Design PBN Course (session 3B)</b>	<p><b>Outcomes:</b> State capability developed for PBN flight procedures design.</p> <p>Training related to PBN procedures, for participating experts to become PANS OPS instrument flight procedures designers. Expertise and facilitation will be provided by AFPP PANS OPS Instructors.</p> <p>20-day session for course, dedicated to PBN procedures, as part of the 2017 AFPP Work Programme. Venue will be AFPP premises in Dakar, Senegal or Dar Es Salaam, Tanzania.</p>		2017 Work Programme	Preparation	(Phase II) 4 <sup>th</sup> Quarter, 2017

TITLE	TEXT	Q4 ACTIVITY	INITIATION	STATUS	EXPECTED COMPLETION
<b>WORKSHOPS</b>					
<b>Flight Procedure Design Course for Oversight Service Personnel</b>	<b>Outcomes:</b> Oversight CAA Services capability for approval of IFP implementation project.				
	<p>Knowledge to experts from CAAs (Flight procedures implementation oversight service) on conventional and PBN flight procedures design.</p> <p>20-day workshop as part of the 2016 AFPP Work Programme. Expertise and facilitation will be provided by AFPP PANS OPS Instructors.</p> <p>Due to AFPP PANS OPS Instructors heavy workload, workshop postponed to 2017.</p>	<p>Initial contact to define venue for workshop.</p> <p>Initial development of the workshop content.</p>	2017 Work Programme	Preparation	2 <sup>nd</sup> Quarter, 2017
<b>PBN Operations Approval</b>	<b>Outcomes:</b> provision of training to CAA personnel for State capability to approve Air Operators for PBN Operations.				
	<p>Training related to PBN Operations Approval of PBN Operations by Air Operators</p> <p>The 5-day course, part of the 2016 AFPP Work Programme, is postponed to 2017 agenda, due to difficulties to find an hosting State and external expertise to facilitate the course.</p> <p>Expertise and facilitation would be provided by external consultant and AFPP experts, conducted in English.</p> <p>Training for experts from African States and African Air Operators in order to create an AFPP internal capability regarding this domain.</p>	<p>Initial contact to define venue for workshop.</p> <p>Initial contact for organization of the workshop.</p>	2017 Work Programme	Preparation	(Phase II) 4 <sup>th</sup> Quarter, 2017

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## EXPECTED OUTPUTS

1. Seminars/Workshops/Training sessions would be organized during Year 2016, focusing on "Quality Assurance for Instrument Flight Procedures Implementation", "PBN Airspace Design", "PBN for ATM", "Data Origination", "PBN OPS Approval", "PANS OPS designer training courses" and "PANS OPS design course for CAAs". Detailed sessions on the items would give participants a better knowledge of PBN implementation in order to take the necessary actions in their States to meet the ICAO goals for PBN implementation in Africa. Dedicated activities would be added when necessary during Year 2016.
2. Activities regarding flight procedures design, including PBN, will be conducted during Year 2016, with AFPP designers. Priority will be given to States and airports where PBN procedures implementation level is low. As expressed by ICAO and recent African meetings resolutions, PBN flight procedures will have to be developed for at least one runway end at International Airports by the end of 2016. An action Plan would be developed.
3. National PBN Implementation Plan is a major issue in PBN implementation. It is recommended that every African State develops or reviews its Plan by end 2016. Dedicated assistance would be provided as priority action for 16/24 WACAF States and 15/24 ESAF States for the development and submission of National PBN Plan to the ICAO Regional Offices before end 2016.