



International Civil Aviation Organization

**THE THIRD MEETING OF PERFORMANCE BASED NAVIGATION
IMPLEMENTATION COORDINATION GROUP (PBNICG/3)**

Bangkok, Thailand, 08 – 10 March 2016

Agenda Item 05: States PBN Implementation Progress

PBN IMPLEMENTATION IN FIJI

(Presented by Fiji)

SUMMARY

This paper presents the progress of PBN Implementation in Fiji. The paper also provides a summary on work done towards PBN implementations in the domestic area in Fiji.

1. INTRODUCTION

1.1 At the 37th session of the ICAO Assembly in its Resolution A37-11 amendment from A36-23, States and Planning and Implementation Regional Groups (PIRGs) were tasked to appoint PBN focal points, develop PBN implementation plans and implement PBN in accordance with the timelines established in those plans.

1.2 Since 2008 Fiji has progressed on PBN compliance with A37/11 (superseded A36/23) on the appointment of the focal person and a Fiji PBN Implementation Plan with progressive updates at PBNTF and PBNICG.

2. DISCUSSION

PBN Implementation Update

2.1 Fiji has appointed two new PBN Focal Persons in 2015 and they are Mr. Ivan Wong, Airports Fiji Limited's Co-Head of Operations and Mrs. Sereima Bolanavatu, Airports Fiji Limited's Head of Telecommunications - Safety, Standards and Training. The new appointees together with CAA inspector Mr. I Tabakaucoro will be responsible for advancing Fiji PBN initiatives through 2016 and beyond.

2.3 Fiji's PBN Plan published in 2010 has undergone several reviews with the final review before the update to ICAO APAC RO planned after April 2016.

PBN Design Review Progress

2.4 RNP-AR is still being considered for Nadi RWY 20 due to terrain. In addition to accessing feasibility of RNP-AR design, consultation with airlines and holistic integration of RNP-AR into overall airspace usage for Nadi is being progressed. This integration activity is identified as part of PBN implementation in late 2016.

2.5 The following are short-term design, scope of works and deployment work plan revised from 2015 due to technical and resource constraints:

Nadi Airport		
RWY 02	2016	<ul style="list-style-type: none"> RNP APCH with Baro VNAV for South Arrival RNP APCH with Baro VNAV with RF to shorten North arrival Update ILS procedure as necessary to connect to PBN STAR
RWY 09	2016	RNP APCH with Baro VNAV
RWY 27	2016	Explore RNP APCH LNAV including option for offset
RWY 20	2016	<ul style="list-style-type: none"> In 2015 national carrier Fiji Airways explored RNP AR feasibility coordinated with the CAA to obtain RNP AR Ops Approval, to also assist operations in RNP AR destinations. In 2016, AFL to review the integration of RNP AR 20 into the airspace use
Precision Approach	2016	<ul style="list-style-type: none"> CAAF, AFL and Fiji Airways to study feasibility of GLS for Nadi and develop implementation plan for Nadi-Sydney GLS city-pairs
STAR	2016	RNAV 1
SID 20	2015	RNAV 1 – implemented JUL 2015
SID 27	2016	RNAV 1
SID 02	2016	Explore RNAV 1
SID 09	2016	Explore RNAV 1

Step	Activities	Completion date
1	Procedure Design & Documentations	by 31 March 2016
2	Ground Validation	by 31 May 2016
3	Flight Validation	by 29 July 2016
4	AIRAC AIP Publication	15 Sept 2016
5	ATC training	between Sept to Nov 2016
6	ATM System adaptation update	between Sept to Nov 2016
7	Effective Date	10 Nov 2016

Labasa Airport		
RWY 13	2016	RNP APCH – LNAV planned for JUL 2016
SID 31	2016	Explore RNAV 1

Step	Activities	Completion date
1	Procedure Design & Documentations	by 31 Mar 2016
2	Ground Validation	by 29 April 2016
3	Flight Validation	by 12 May 2016
4	AIRAC AIP Publication	2 June 2016
5	ATS training	between June to July 2016
6	ATM System adaptation update	between June to July 2016
7	Effective Date	21 Jul 2016

3. ACTION REQUIRED BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.



PBN IMPLEMENTATION PROGRESS REPORT

State: FIJI

Date 2/15/2016:

PBN Focal Point

Focal Point: IVAN WONG; SEREIMA BOLANAVATU; ILAITIA TABAKAUCORO

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State PBN Implementation Plan

Status: Developed Submitted Update planned for: 4/29/2016

BPE1	BPE2	BPE3	BPE4	BPE5	BPE6	BPE7	BPE8	BPE9	BPE10	BPE11
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comment: REVIEW DUE 29TH APRIL 2016

Seamless item 110 - Performance-based Navigation (PBN) Approach

Total number of instrument runway ends (international aerodromes ¹):	6
Total number of instrument runway ends (domestic aerodromes):	2

	Number of instrument runway ends - international aerodromes		Number of instrument runway ends – domestic aerodromes		Implementation target	Comment
	Planned	Published	Planned	Published		
APV/Baro	2	-	-	-	11/10/2016	RWY 02/RWY09
APV/SBAS	-	-	-	-	-	-
LNAV only	5	4	14	2	7/21/2016	12 Domestic planned for 2017-2018
RNP AR	1	-	-	-	11/10/2016	RWY 20 Nadi
GLS (if applicable)	-	-	-	-	-	-
Unknown PBN	-	-	-	-	-	-

¹ Aerodromes recorded in the APAC Regional Air Navigation Plan

PBN IMPLEMENTATION PROGRESS REPORT



You opt for a detailed reporting: please go to excel file, sheet “approach”

Comment: REVIEW DUE 29TH APRIL 2016

Seamless item 120 - Standard Instrument Departures/ Standard Terminal Arrivals (SID/STAR)

Your SID and STAR status of implementation are reported by your Seamless ATM points of contact.

Please check with them that they report correctly the % of international aerodromes / TMAs with PBN STAR implemented and the % of international aerodromes / TMAs with PBN SID implemented.



You opt for a detailed reporting: please go to excel file, sheet “terminal”

Comment: RNAV 1 SID 20 HOTEL implemented 23 JUL 15 AIRAC, additional SID with 7NM Lat Separation from STAR implementation planned for 10 NOV 2016 AIRAC

Seamless item 140 - Performance-based Navigation (PBN) Routes

Total number of ATS routes (international and domestic routes) designed since June 2013:	-
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Navigation Specification	# of Planned Routes since June 2013	# of Published Routes since June 2013	Implementation Target (Planned or Actual)	Comment
RNAV 10	0	0	-	32 existing published routes from 2003
RNAV 5	0	0	-	45 existing published routes Domestic Ops Approval pending
RNAV 2	-	-	-	-
RNP 4	0	0	-	32 existing published routes from 2005
RNP 2	-	-	-	-
RNP1	-	-	-	-
RNP AR	1	-	11/10/2016	RWY 20 Nadi
A-RNP	-	-	-	-



You opt for a detailed reporting: please go to excel file, sheet “enroute”

Comment: Flex tracks for RNAV10 approved aircraft with ground monitoring has negated publication of new ATS routes for RNAV10 capable aircraft.

PBN IMPLEMENTATION PROGRESS REPORT

Seamless item 90 - Continuous Descent Operations (CDO) and 100 - Continuous Climb Operations (CCO)

Your CDO and CCO status of implementation are reported by your Seamless ATM points of contact. Please check with them that they report correctly % of international aerodromes/TMA where CDO is implemented and % of international aerodromes where CCO is implemented



You opt for a for a detailed reporting: please go to excel file

Comment: RNAV 1 SID implemented 23 JUL 15 AIRAC, additional SID with 7NM Lat Separation from STAR implementation planned for 10 NOV 2016 AIRAC

Seamless item 290 - UPR and DARP

Number of FIR:	1
Number of FIR where UPR/Flex Tracks are planned:	1
Number of FIR where UPR/Flex Tracks are implemented:	1
Implementation Target (Planned or Actual):	Implemented Flex Tracks 1994; Implemented UPR 2005

Comment: FIR Route shortening exercise conducted in 2009 and 2011. No further ATS route review is envisaged for 2016.

Please send the report to apac@icao.int

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