

**Twenty Eighth Meeting of the  
Informal South Pacific ATS Co-ordinating Group  
(ISPACG/28)**

**Papeete, Tahiti  
5-7 March 2014**

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**Agenda Item 5.1 Seamless Airspace**

**PBN in French Polynesia**

**Presented by SEAC PF**

**SUMMARY**

This paper provides a general review of progress of PBN activities in French Polynesia.

**1. INTRODUCTION**

- 1.1 Although a national plan has been defined for the implementation of PBN (Performance Based Navigation) operations in France, French Polynesia has chosen to perform its own version in 2012.
- 1.2 The road map defines the working hypothesis which is to be considered by all of the stakeholders over three periods: short term (2012/2014), medium term (2015/2019) and long term (2020 and later)

**2. DISCUSSION**

- 2.1 The PBN implementation, mainly based upon means of Satellite navigation, must be capable of redefining with stakeholders an infrastructure matching the future needs and cost control requirement.
- 2.2 Presentation:



# PBN Program

## French Polynesia



# Progress Report n°1

October 2013  
SNA/PF-DCA

In September 2012 the SNA/PF published a PBN program plan for French Polynesia.

This plan is derived from the French PBN program and is in accordance with the ICAO guidelines of the 'performance based navigation manual' Doc 9613.

Moreover, it was presented to the 'PBN task force' for the ICAO Asia / Pacific region, which is responsible for ensuring the harmonization and monitoring of PBN publications for the APAC region.

Due to its participation in the work of the group, the SNA/PF plays a part in the dissemination and regular updates of the PBN French Polynesia plan throughout the region, in compliance with the established road map.

This progress report validates completed action plans and updates projects to be undertaken.

The objective is to outline an ambitious yet realistic PBN plan, in keeping with the Air Navigation environment of French Polynesia.

### The structure of traffic volume in 2012-2013

Despite decreasing slightly, traffic over this period continues to be divided in the following way:

- \* 88.4% domestic flights
- \* 9.4% international flights
- \* 2.2% transit flights

This information clearly reveals that local airlines are the main actors affected by the forecasted advantages of using the PBN concept.

However, there is also an important international aspect because as French Representative for the South Pacific, the SNA/PF must aim for the same standard of services provided by other states of the region.



Ressources, territoires et habitats  
 Développement durable  
 Énergie et climat  
 Prévention des risques  
 Infrastructures, transports et mer



Présent pour l'avenir

## Tasks undertaken in 2012/2013

### 1. Implementation of a CDM approach

An important step forward was made in May 2013 in the form of pilot/controller meetings involving relevant stakeholders in the Tahiti Faa'a platform. These monthly meetings aim to inform respective parties of their individual roles and also to integrate airspace changes better, particularly those concerning progress linked to the PBN plan.

### 2. Transition strategy

By associating the main local stakeholders in the implementation strategy of RNAV/GNSS procedures, the transition from traditional procedures towards RNAV/GNSS is carried out according to shared operational, training and security requirements:

- \* Activation of the RNAV/GNSS network in the Leeward Islands in partnership with Air Tahiti following cross-sectorial training programs and shared feedback.
- \* Planning meetings for project managers concerning the choice of suggested sites for implementing RNAV/GNSS procedures with Air Tahiti, the DAC/PF operator, the country's aerodromes and the SNA/PF.
- \* SNA/PF participation at meetings organized by the ICAO in the APAC region aiming to integrate the PBN SNA/PF project into the 'seamless' regional system.

### 3. The development of PBN tools in 2012/2013

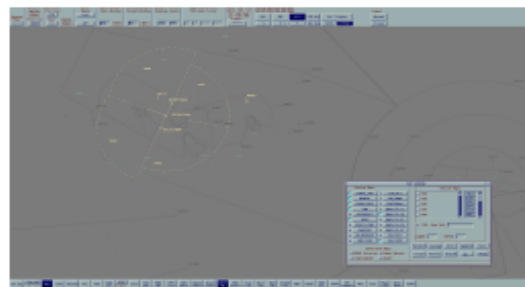
In accordance with the Road Map and on the basis of available funds, the SNA/PF has integrated the development of the PBN plan into its general action plan.

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- \* Publication of RNAV/GNSS procedures for the aerodromes in HIIVA OA, HAO and TUBUAL; a strategy linked to the implementation of at least one RNAV/GNSS per archipelago,
- \* From 01/08/2013 longitudinal separation using the GNSS was implemented, based on the regulatory references : DOC 4444 (§ 5.4.2.3) and Circular 321 AN/183 ICAO,
- \* Reorganization of the IHM Eurocat-X in ATC in order to facilitate CPDLC dialogue and the use of data link procedures,
- \* Cost- benefit analysis of the implementation of ADS-B antennas in addition to VHF deployment via satellite presented to ICAO APAC and DGAC (General Direction of Civil Aviation),
- \* Provision of ADS-B progress in the APAC region.



ATM Eurocat X System : RNAV maps

## Road map for 2013/14

Previously endorsed actions remain in the workload schedule. A permanent dialogue between all stakeholders updates them.

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- \* Contribution to the PBN "seamless" network in the APAC region,
- \* Study and publication of RNAV/GNSS procedures for RANGIROA, NUKU HIIVA, FAKARAVA, TIKEHAU and RURUTU,
- \* Improvement of the RNAV/GNSS network in the Leeward Islands after 6 months in operation,
- \* Ongoing improvements made to data link specifications in the Eurocat-X tool, according to TopSky system roadmap,
- \* Continuation of the study of ADS-B / VSAT installation in French Polynesia.

### 3. ACTION BY THE MEETING

#### 3.1 The meeting is invited to:

- a) Note the information contained within this paper.