Agenda Item 5: Operational implementation of new ATM automated systems and integration of the existing systems

Modernisation of the French ATM System in French West Indies and French Guiana

(Presented by French West Indies and French Guiana)

SUMMARY	
This paper is presenting the modernisation of the French ATM System in French West Indies and French Guiana.	
ICAO Strategic Objectives:	*A - Safety* *B - Air navigation capacity and efficiency* *E - Environmental protection*

1 Introduction

1.1 DSNA (French ANSP) has decided to launch a new program to modernize the ATC systems deployed in French oversea sites. DSNA named this program "*seaflight*" which has for 15 year duration.

1.2 Five French oversea sites are concerned by this program, French Guyana is the first facility to be modernized, followed by French West Indies.

1.3 All existing systems will be replaced by an integrated product capable of handling surveillance sensors and AFTN messages into a homogeneous IHM. This modernization is based on an industrial system that already exists or is in the final stages of development.

1.4 A call for tender is published for each site. Three ATM providers have been preselected and will compete. DSNA will choose one of the three offers.

1.5 ADACEL has won the French Guiana call of tender and now we are about to conduct the FAT with the manufacturer.

1.6 DNSA is preparing the next call for tender for West Indies and expects to publish it in 2016. The first site to be equipped will be Cayenne, French Guiana, with an ADACEL system. The two (2) following sites are Martinique and Guadeloupe, French West Indies. A first selection has selected three (3) providers: NAvCan, ADACEL and INDRA.

2 Objectives of the French Guiana project

2.1 The main goals of the Cayenne center project is to:

- Replace our existing ATM system now composed by 3 under systems:
  - IRMA Radar ATCO HMI data visualisation
  - SIGMA stripping and flight plans
  - CACAO ADS-C and CPDLC

- Allow controllers to adapt to the real traffic by degroup ou group CWP (controller working position);

- Use automatic coordination to improve security and reduce voice contact with adjacent;

- Have a unique IHM screen which represents all the traffic (ADSB, ADSC, Radar and Flight Plan).

2.2 Only one integrated system will equip all controls positions in the tower and will integrate:

- Flight Data Processing System;
- Surveillance Data Processing System,(RADAR and ADSB);
- ADS-C/CPDLC;
- Electronic stripping;
- Automatic coordination (AIDC);
- A Flight data operator;
- Technical position (supervision).

A traffic simulator, a recording and replay system and a test and training platforms will be included

3 **Planning of the project**

3.1 The planning of the project is the following:

CAYENNE

	Decembre 2014	Selection of a provider (ADACEL)
	Jan / Sep 2015	Configuration of the system according to the operational requirements
	Oct 2015 / Feb 2016	**Validation FAT : Factory Acceptance Test, Installation on site SAT : Site Acceptance Test**
	Mar / Jun 2016 :	**Training Phase 1 ACC with paper strip**
	Sept / Dec 2016 :	**Training Phase 2 ACC Electronic stripping**
	Jan / Mar 2017 :	**Training Phase 3 APP and TWR Electronic stripping**

=> **Full Operation of the System: End of 2017**

ANTILLES

 MARTINIQUE	**Sep / Dec 2015**	**Elaboration of the operational requirements**
	Sep / Dec 2016	**Analysis of the 3 offers, demonstrations by companies, visits to ANSP using these systems on both sites. Selection of the providers (Indra, Adacel and Navcanada)**
	Jan–Sep 2017	**Configuration of the system** **Validation FAT : Factory Acceptance Test**
 GUADELOUPE	**Oct-Dec 2017**	**System installation on the 2 sites** **SAT : Site Acceptance Test**
	Jan-Oct 2018	**System tuning, training**

=> Full operation of the system: End of 2018