



INTERNATIONAL CIVIL AVIATION ORGANIZATION  
**WESTERN AND CENTRAL AFRICA OFFICE**  
 Sixth Meeting of the Central Atlantic FIR Satellite Network (CAFSAT)  
 Management Committee (CNMC/6)  
 (Lisbon, Portugal, 06-10 June 2016)

### Agenda Item 3: Interconnection and interoperability of CAFSAT with its neighboring Networks

(Presented by ASECNA)

#### Summary

This working paper reports status of item 3 for interconnection and interoperability.

#### 1. Introduction

The continuous increase of air traffic in the EUR/SAM corridor and the project of gradual implementation of the EUR/SAM Airspace Concept, with optimized ATS Routes and lateral and longitudinal separation reduction, require a reliable aeronautical telecommunication infrastructure in this area.

Since SAT/15, held in Uruguay, the necessity to improve the Aeronautical Fixed Service (AFS) between Atlantico FIR (**Recife**), Dakar Oceanic FIR (**Abidjan and Dakar**) as well as the other FIR of the SAT region has been addressed.

During SAT/18, the CNMC/3 meeting adopted the conclusion 3/6:

#### **Communication Requirement between Abidjan, Cayenne, Dakar, Piarco, Recife, Sal and Santa Maria**

*“That;*

- a) In order to ensure a sustainable Aeronautical Fixed Service between ATCs, Atlantico FIR (Brazil), Sal FIR (Cape Verde), Dakar FIR (Cote d’Ivoire, Senegal), Cayenne FIR (French Guyana), Santa Maria FIR (Portugal), and Piarco FIR (Trinidad & Tobago) envisage the establishment of direct links based on the existing satellite VSAT networks (AFISNET and CAFSAT) and conduct case by case technical analysis taking into consideration the cost effectiveness of the possible solutions.*
- b) SAT Secretariat to coordinate technical meetings (including teleconferences and e-meetings) for collaborative decision making and report to next CNMC meeting”.*

In addition, the CNMC/5 meeting adopted the conclusion 5/07 called ANSPs (ASECNA, DECEA, DGAC, TTCAA) to implement AFS circuits no later than 31 December 2015.

In order to implement this conclusion, **ASECNA** proposed an architecture to meet the ICAO communications requirements based on one hop satellite link and sent letters to DGAC (French Guyana), Trinidad and Tobago Civil Aviation Authority (TTCAA) and Brazil for their agreement.

The coordination with to DGAC (French Guyana) and Trinidad and Tobago Civil Aviation Authority (TTCAA) leads to an agreement for the implementation of AFINET nodes in **Cayenne** and **Piarco**.

The process is now in a final phase and the operational implementation is planned for end of July 2015.

## **2. Discussion**

### **Cayenne**

An AFISNET node was install and operational since March 2015.

- The service supported is ATS/DS between Dakar ACC and Cayenne ACC.
- The plan service is AIDC in the short term.

### **Piarco**

An AFISNET node was install and operational since June 2015.

- The service supported is ATS/DS between Dakar ACC and Piarco ACC.
- The plan service is AIDC in the short term.

**There is plan a link between Cayenne and Piarco on AFISNET Node the backup the REDDIG link.**

### **Recife**

An AFISNET node will be install in August 2016 and will be operational at September 2016.

- The service to support is ATS/DS between Abidjan ACC and Recife ACC.
- AIDC between Abidjan ACC and Recife ACC

**There is plan a link between Recife and Dakar on AFISNET Node the backup the CAFSAT link.**

## **3. Action by THE MEETING**

The meeting is invited to:

- a) Note the information provided in the Working Paper;
- b) Recommend appropriate action regarding CAFSAT re-engineering and modernization to take account the possibility to use the same satellite and network for best interoperability and integration.