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INFORMATION PAPER

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Second NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/2)
Puntarenas, Costa Rica, 1 to 4 June 2015

- Agenda Item 4** **Follow-up on the NAM/CAR Regional Performance Based Air Navigation Implementation Plan (NAM/CAR RPBANIP)**
4.2 **National Plans Reports on Aviation System Block Upgrade (ASBU) (AIM, ATM and CNS)**

IMPROVEMENT IN AIR NAVIGATION COMMUNICATION BETWEEN THE FIRS OF PIARCO AND DAKAR

(Presented by Trinidad and Tobago)

EXECUTIVE SUMMARY	
This paper presents the operational requirements and solution for communication between the FIRs of Piarco and Dakar.	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Environmental Protection
<i>References:</i>	<ul style="list-style-type: none">• Final Report Nineteenth meeting on the improvement of Air Traffic services over the South Atlantic (SAT/19), (Buenos Aires, Argentina, 6 to 8 August 2014)

1. Introduction

1.1 Trinidad and Tobago has an operational requirement to coordinate the movement of aircraft with the Air Navigation Service Providers (ANSPs) of the adjacent FIR of Dakar, Presently such coordination is achieved via the Public Switched Telephone Network (PSTN). PSTN are unsecure and unreliable and are not recommended as the primary medium of voice communication for air navigation services.

2. Discussion

2.1 At regional meetings related to satellite telecommunication networks, ICAO urged ANSPs to advance their efforts in the implementation of high quality and reliable telecommunication services. In this regard ASECNA (L'Agence pour la Sécurité de la Navigation aérienne en Afrique et à Madagascar - Agency for Aerial Navigation Safety in Africa and Madagascar) made a proposal to Trinidad and Tobago and French Guiana for the deployment of AFISNET (African and Indian Ocean Satellite Network) VSAT stations to link the FIRs of Piarco and Cayenne to Dakar. To accelerate and simplify the coordination of such project, ASECNA proposed to defray the cost of providing and installing the VSAT stations, maintenance and related costs particularly the space segment.

2.2 Trinidad and Tobago and French Guiana accepted the generous offer by ASECNA. The Piarco Node will enable Air Traffic Services/Direct Speech (ATS/DS) circuits between Piarco/Dakar and Piarco/Cayenne. AFISNET also supports facilities for AIDC which may be considered in the future.

2.3 The Factory Acceptance Tests (FAT) activity for the Piarco VSAT station of the AFISNET was successfully conducted at the premises of COFELY INEO in Paris, France, from March 02 to 06, 2015.

2.4 Technical training was provided for four (4) participants: two (2) from Trinidad and Tobago and two (2) from French Guiana in Paris, France from 30th March to 10th April, 2015. The course was initially tailored for ASECNA design engineers, with the purpose to deepen their knowledge of VSAT systems and to train them in new technologies in the field of radio and satellite communications. The training was conducted by specialist engineers in the field of radio and satellite communications. The training objectives were well met with in-depth coverage of the architecture and equipment, alarms and diagnostic assistance and maintenance procedures.

2.5 The equipment was shipped from France on May 18, 2015 to arrive in Trinidad on May 30, 2015. Installation will commence in June 2015 with commissioning tentatively in July 2015.