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INFORMATION PAPER

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**Fourteenth Directors of Civil Aviation of the Central Caribbean Meeting (C/CAR/DCA/14)**  
Kingston, Jamaica, 11 to 13 May 2015

**Agenda Item 4:**

**Air Navigation Matters**

**4.2 Review of the Implementation of Air Navigation under the NAM/CAR Regional Performance Based Air Navigation Implementation Plan (RPBANIP) and the Aviation System Block Upgrades (ASBU) Methodology**

**4.2.3 MEVA Telecommunications Network**

**MEVA TELECOMMUNICATIONS NETWORK**

(Presented by the Secretariat)

<b>EXECUTIVE SUMMARY</b>	
<p>This paper presents the MEVA III network implementation activities. The MEVA network is the regional telecommunication network serving as the Communication, Navigation and Surveillance (CNS) infrastructure for air navigation and as the future Aeronautical telecommunication Network (ATN) for the CAR Region. The MEVA III network has been implemented successfully since 1 April 2015.</p>	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li><li>• Environmental Protection</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• Twenty-ninth MEVA Technical Management Group Meeting (MEVA/TMG/29), Mexico City, Mexico, 9 to 12 December 2014</li><li>• MEVA III Implementation Teleconferences</li></ul>

**1. Introduction**

1.1 The MEVA satellite network has been fully operational since 1999, consisting of a C-band Demand Assigned Multiple Access (DAMA)-Very Small Aperture Terminal (VSAT) satellite network providing integrated voice and data (mainly X.25 packet-switched Aeronautical Fixed Telecommunication Network (AFTN) messaging) services between ICAO Member States/Organizations airports and air traffic control facilities throughout a designated coverage zone of the Central Caribbean area. The MEVA network replaced the less reliable and costlier undersea leased telecommunications cables that had been used in the past.

1.2 The MEVA II network was implemented in 2005 under a ten year contract – five fix and five optional. The network has been performing according to expectations and requirements, and has seen an increase in services carried over the network since its inception. With the MEVA III Network modernization, the same contract scheme under a ten year contract – five fix and five optional was agreed.

1.3 The current MEVA members are representatives from Civil Aviation Authorities/Service Providers of Aruba, Bahamas, Cayman Islands, Cuba, Curacao, Dominican Republic, Haiti, Jamaica, Mexico, Panama, United States and COCESNA. The current and future MEVA III nodes are at the following locations:

- Miami, FL
- Miami, FL - Telepuerto
- Freeport, Bahamas
- Georgetown, Cayman Islands
- Panama City, Panama
- Havana, Cuba
- Port-au-Prince, Haiti
- Kingston, Jamaica
- Santo Domingo, Dominican Republic
- Merida, Mexico
- Atlanta, United States
- Nassau, Bahamas
- COCESNA (Tegucigalpa, Honduras)
- San Juan, Puerto Rico
- Phillipsburg, Sint. Maarten
- Willemstad, Curacao
- Oranjestad, Aruba
- Bogota, Colombia
- Caracas, Venezuela

## 2. Discussion

2.1 In 2011, the Central Caribbean States/Organizations members of the MEVA network identified the need for reviewing the MEVA network architecture and services to ensure that the network would support emerging requirements in a cost effective manner. A Request for Information (RFI) was released to the industry in 2012 to explore solutions offered then by the telecommunication industry that would meet the present and future requirements of the MEVA members. The MEVA Members analysed the responses to the RFI, and agreed on the architecture for the MEVA III network.

2.2 In 2013, the MEVA Technical Management Group (TMG) created a Task Force entrusted with drafting the MEVA III Request for Proposal (RFP) for the MEVA III Tender Process. This document was finalized and agreed by the TMG, and in June 2013, the MEVA III Tender was released to the industry through the ICAO Technical Cooperation Bureau (TCB) Office. The Task Force was also entrusted with reviewing and grading the proposals received in response to the tender, and to recommend to the TMG a Service Provider for the MEVA III Network. The MEVA III Network Service Provider was chosen by the TMG Members in October 2013 being COMSOFT Company. Each MEVA Members will sign individual contracts with the MEVA III Service Provider. Each MEVA member signed individual contracts with the MEVA III Network Service Provider. The Task Force was also assigned to assist with the MEVA III installation and commissioning, including the approval review and recommendations of all Project documentation and the activities coordination with the MEVA III Service Provider, as established in the MEVA/TMG/29 meeting.

2.3 Through the years the technological requirements placed on the MEVA Network have increased in terms of bandwidth, protocol, and number of nodes. Despite these increases, the MEVA members have successfully managed to reduce the cost to each member while increasing the overall availability of the network.

2.4 The implementation of the MEVA III Network was initiated in February 2015, and its installation and commissioning were finalized on 31 March 2015. All nodes have been implemented with the exception of Bogota, Colombia planned for mid-April and the Merida, Mexico node planned for May 2015. The new system is a Time Division Multiple Access (TDMA)/Medium Frequency (MF) satellite network providing Internet Protocol and legacy interface support. It will carry Air Traffic Control (ATC) voice and data services between Area Control Centers (ACCs) in the Central Caribbean area. The MEVA III network also delivers voice and data services to certain countries in South America through an interconnection between the MEVA and the REDDIG networks.

2.5 To support this implementation of the MEVA III Network, ICAO through the Project RLA/09/801 — *Implementation of Performance Based Air Navigation Systems for the CAR Region*, is also providing the assistance and guidance as MEVA II *Go-teams* missions to ensure an effective and harmonized implementation of each node of the network, including the sharing of expertise among MEVA Members. In the Central Caribbean: Bahamas, Cuba, Curacao, Dominican Republic and Haiti received the *Go-Team* mission's assistance.

2.5 The MEVA III network is projected to support all the ATN requirements for the CAR Region with its interconnection with the adjacent ICAO Regions in a cost-effective way.

### 3. **Conclusion**

3.1 The Meeting is invited to review the information presented in this paper.