



ICAO

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WORKING PAPER

E/CAR/NTG/8 & E/CAR/RD/6 — WP/18
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**Eighth Eastern Caribbean Network Technical Group (E/CAR/NTG/8) and
Sixth Eastern Caribbean Radar Data Sharing Ad hoc Group (E/CAR/RD/6)**
Saint George's, Grenada, 3 - 5 September 2018

**Agenda Item 3: E/CAR Aeronautical Fixed Services (AFS) Network Performance and Operation
- Network Performance and General Aspects**

UPDATE ON E/CAR AFS NETWORK INTERCONNECTION TO THE MEVA NETWORK

(Presented by United States)

EXECUTIVE SUMMARY	
This paper presents information on the combined activities in the Central and Eastern Caribbean. Also provides updates on Aeronautical Message Handling System (AMHS) implementation. These activities are carried out in order to improve the telecommunications in the area.	
Action:	Suggested Actions listed on section 3.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Security & Facilitation
<i>References:</i>	<ul style="list-style-type: none">• MEVA/TMG/33, Willemstad, Curaçao, May 2018

1. Introduction

1.1 This Paper presents information on the combined regional activities in the Central and Eastern Caribbean regions. These activities are carried out through bilateral agreements in order to improve telecommunications in the area. Such agreements and activities include MEVAIII-E/CAR Network interconnection, AMHS Implementation, RADAR Data Exchange and cooperation under the Caribbean Initiatives Project.

2. Regional Activities

2.1 Caribbean Initiative Update

2.1.1 In recent years, stakeholders involved with managing and operating air traffic in the Caribbean have identified a need to address airspace capacity, operational performance and safety in the region. The United States (U.S.) Federal Aviation Administration (FAA) addressed these issues with five Air Traffic Control (ATC) communication improvement projects known within the FAA as the Caribbean Initiatives.

2.1.2 Unfortunately, due to the devastating Hurricane season last year, some of these projects were delayed.

2.1.3 The five projects are:

- San Juan CERAP to BVI – Incomplete
 - three shout services from San Juan (ZSU) Combined Center RADAR Approach Control (CERAP) to Beef Island BVI
- San Juan CERAP to Curaçao – Incomplete
 - One shout service from San Juan CERAP to Curaçao. Implementation completed, waiting for final testing to controller position.
- San Juan CERAP to Piarco – Incomplete
 - The FAA ordered an E&M card for the San Juan operational voice switch and identified the extension to be used to support the new shout service.
 - San Juan still needs to provide clearance for TSTT technicians at the San Juan CERAP to perform maintenance on the E/CAR Network router and connect the new service.
- San Juan to Maiquetia, Venezuela – Complete
- Houston ARTCC to Habana – Complete

2.2 **RADAR Data Exchange**

2.2.1 Sint Maarten / San Juan / Piarco - A proof of concept test was done early last year (2017) indicating that the 64kbps output of the RADAR could be sent using the 9.6 MEVA service for transport between MEVA sites in San Juan and St. Maarten. The information (data and/or voice) could be cross-connected at the E/CAR router in San Juan and sent to Piarco.

2.2.2 The interconnectivity would allow Sint Maarten to share their RADAR with Trinidad and Tobago as part of the RADAR feeds that will support the RADAR Data Service project implemented in the E/CAR States/Territories as well as analogue voice lines between Sint Maarten, Anguilla, Saint Kitts and Antigua.

2.2.3 Update – In process. Waiting for MEVA equipment implementation in Sint Maarten to be completed following the devastating impact of Hurricane Irma.

2.3 **AMHS Implementation**

2.3.1 TTCAA AMHS implementation completed in 2015.

2.3.2 AMHS Update - Transition progress has tremendously improved in the Caribbean area. The table below shows the current FAA AMHS transition status. Trinidad (E/CAR) transitioned using existing landlines.

OPERATIONAL (AMHS)		TESTING (AMHS)		REMAINING (X.25)	
Aruba*	(MEVA)	Mexico	(Landline)	Bahamas ²	(MEVA)
COCESNA	(MEVA)			Curacao ²	(MEVA)
Cuba	(MEVA)			Haiti ²	(MEVA)
Dominican Rep.	(MEVA)			Peru	(MEVA)
Jamaica*	(MEVA)			Venezuela	(MEVA)
Panama*	(MEVA)				
Sint Maarten ¹	(MEVA)				
Trinidad	(Landline)				

* Country transitioned to AMHS since 2017.

¹ Sint Maarten transitioned to AMHS but not operational since Hurricane Irma.

² Makes and receives X.25 calls (the operation will change in future)

2.4 ADS-B

2.4.1 The increase in air traffic operations requires the implementation of new services such as ADS-B. The current MEVA Network provider has indicated its consent, capacity and availability to provide the necessary communications for the implementation of third party services using the MEVA Network infrastructure. This provides tremendous savings by using the existing infrastructure.

2.4.2 Implementation Procedures approved by the MEVA TMG indicate that State may contract directly with the Third Party Company from which the services are required. The contract and the terms of the contract will be executed between the State and the Third Party Company. Curaçao will be the first MEVA Member State to implement such services.

3. Suggested Actions

3.1 The Meeting is invited to:

- a) review the updated information provided in this working paper;
- b) continue working and supporting those States still recovering from Hurricane damage; and
- c) take into consideration, as indicated in paragraph 2.4 best ways to utilize the existing network infrastructure.