



ICAO

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North American, Central American and Caribbean Office

WORKING PAPER

MEVA/TMG/29 — WP/11
19/11/14

Twenty-ninth MEVA Technical Management Group Meeting (MEVA/TMG/29)
Mexico City, Mexico, 9 to 12 December 2014

Agenda Item 4: MEVA III Implementation Activities
4.3 MEVA III Interconnection Matters

MEVA - E/CAR AFS NETWORK INTERCONNECTION

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
This Working paper presents the progress and results of the E/CAR – MEVA II interconnectivity in light of the MEVA III Network implementation	
Action:	The suggested actions are given in Section 3.
Strategic Objectives:	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Environmental Protection
References:	<ul style="list-style-type: none">• Twenty-second MEVA Technical Management Group Meeting (MEVA TMG/22), Melbourne, Florida, United States, 23-26 May 2011• Twenty-fifth MEVA Technical Management Group Meeting (MEVA TMG/25), ICAO NACC Regional Office, Mexico City, Mexico, 8 to 11 January 2013• MEVA II- E/CAR AFS Network interconnection teleconferences• Fifth Eastern Caribbean Network Technical Group (E/CAR/NTG/5) and Third Eastern Caribbean Radar Data Sharing Ad-hoc Group (E/CAR/RD/3) Meetings Fifth Eastern Caribbean Network Technical Group (E/CAR/NTG/5) and Third Eastern Caribbean Radar Data Sharing Ad-hoc Group (E/CAR/RD/3) Meetings

1. Introduction

1.1 During the MEVA TMG/22 Meeting the importance to start exchanging information for the interoperation of the MEVA II and the E/CAR AFS Network was proposed and Conclusion TMG/22/09 – *Regional Interconnection/ Integration with the E/CAR Network* was formulated.

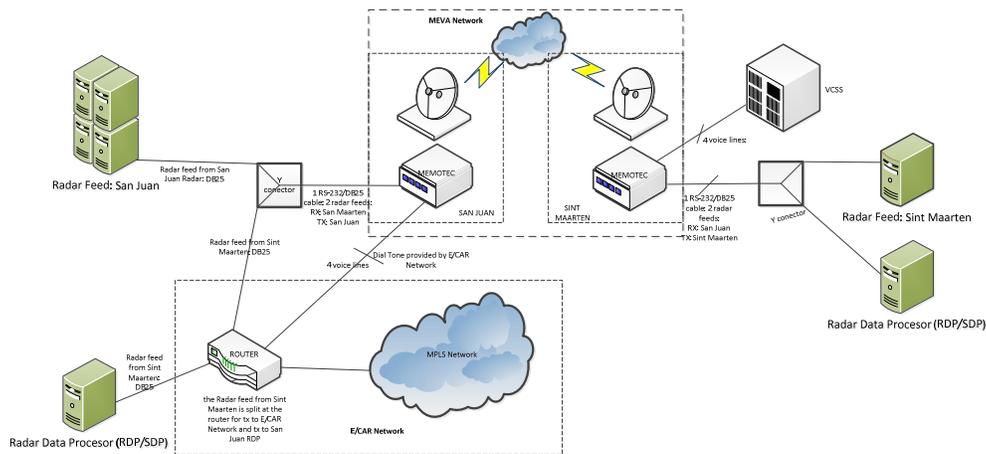
1.2 It was agreed that San Juan, Puerto Rico would be the point of interconnection for both networks, since San Juan has both a MEVA node and an E/CAR AFS Network node. The interconnectivity would allow Sint Maarten to share their radar with Trinidad and Tobago as part of the radar feeds that will support the Radar Data Server project to be implemented for the E/CAR States/Territories in addition to the exchange of radar between Sint Maarten and San Juan. Conclusion TMG/25/09 - *MEVA II-E/CAR AFS Network Interconnection* was formulated.

1.3 The final list of telecommunication requirements for the MEVA II – E/CAR Network interconnection agreed from the teleconferences is the following:

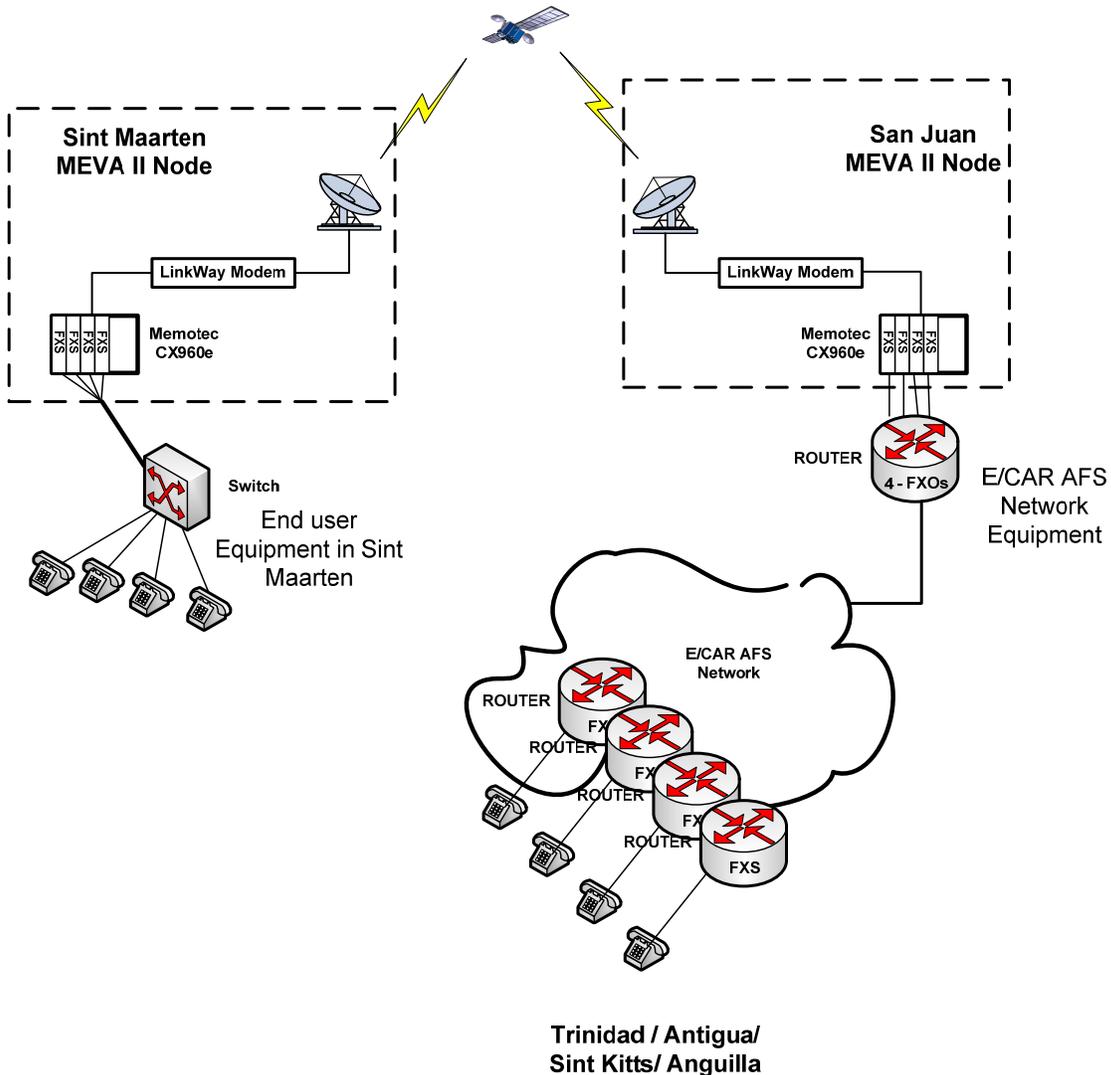
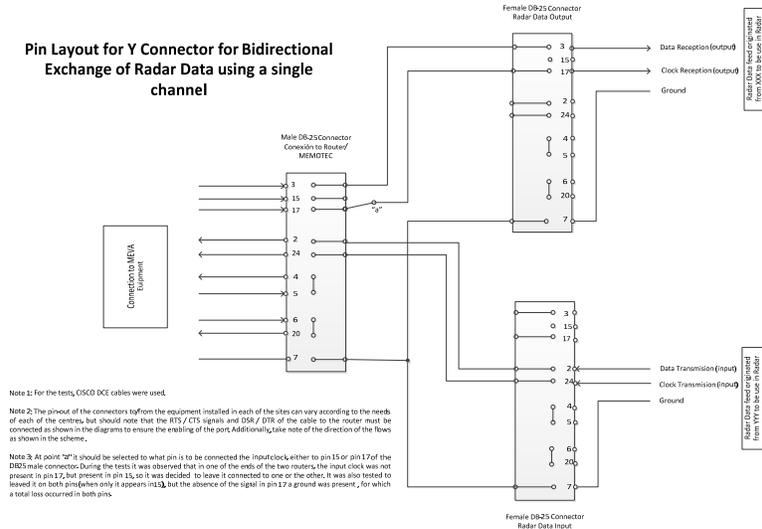
	ATS Units	Technical details
SINT MAARTEN/ JULIANA APP	Anguilla (Clayton J. Lloyd International)	2 PBX service from ECAR-analog voice line
	Antigua (V. C. Bird APP)	1 PBX service from ECAR-analog voice line
	Saint Kitts (Robert L. Bradshaw TWR)	1 PBX service from ECAR-analog voice line
	PIARCO ACC	1 Serial line, RS232

2. Discussion

2.1 Eight different teleconferences had been conducted to complete the implementation of the ECAR AFS Network- MEVA II interconnection. The following configurations were agreed:



Pin Layout for Y Connector for Bidirectional Exchange of Radar Data using a single channel



2.2 The current implementation status in MEVA II for the radar circuit implementation required a new dedicated data serial circuit between San Juan and Sint Maarten:

- The MEVA II equipment for the circuit was installed in Sint Maarten.
- The FAA did not order the MEVA II equipment because the Radar Sharing MoA between the FAA and Sint Maarten is not yet signed.
- It was agreed that the FAA will send the radar data from San Juan in the Common Digitizer-2 (CD2) format and Sint Maarten will provide their radar feed in ASTERIX format.

2.3 Due to time and cost constraints, during the 8th meeting of the E/CAR AFS Network and the MEVA interconnection, held during the E/CAR/NTG/05 Meeting, it was agreed that the implementation was to be postponed for the MEVA III Network. The following agreements were made:

- a) 4 voice circuits will be implemented thru MEVA III and not MEVA II, so Trinidad and Tobago confirm the availability of the existing OPX circuits until this implementation. Sint Maarten reconfirmed that the total cost of the implementation of these 4 voice circuits through MEVA III will be covered by Saint Maarten.
- b) the radar feed of Pico del Este will be the required radar feed to be exchanged with Saint Maarten.
- c) United States confirmed their commitment to exchange radar data, but also recognized that currently they cannot process external radar data feed into San Juan. In this regard, United States indicated that they can provide the Pico del Este radar feed to Sint Maarten only. Sint Maarten will then pay for the total data circuit for the radar data feed from Pico del Este radar. In this regard, the following actions we agreed:
 - **ACT 02/08:** Sint Maarten will analyze the conversion of the Pico del Este Radar feed (Common Digitizer-2 -CD2 format) for integrating it in their ATC System. Results to be presented by next teleconference (January 2015).
 - **ACT 03/08:** FAA will work the necessary arrangements for signing the agreement between United States and Sint Maarten and the necessary technical work for the provision of the radar data to Sint Maarten (San Juan MEVA node), informing by next teleconference (January 2015).
- d) Trinidad and Tobago commented the operational need for sharing this same Pico del Este radar feed for benefit of the PIARCO FIR- San Juan FIR coordination and Antigua APP- San Juan ACC. Trinidad and Tobago will be responsible for the format conversion to integrate it into their Multiradar data processor.
 - **ACT 04/08:** Trinidad and Tobago will send United States a letter with the request for the Pico del Este Radar feed explaining the operation benefits foreseen for the PIARCO FIR and Antigua APP: 30 November 2014.

- **ACT 05/08** Trinidad and Tobago will analyze the conversion of the Pico del Este Radar feed (Common Digitizer-2 -CD2 format) for integrating it in their ATC System. Results to be presented by next teleconference (January 2015).

2.4 The MEVA II – E/CAR AFS Network interconnection minutes are available in the MEVA III secure portal website.

2.5 The MEVA II – E/CAR AFS Network interconnection requirements are part of the MEVA III network implementation.

3. Suggested action

3.1 The meeting is invited to:

- a) take note of the information contained in this working paper;
- b) consider the transition actions for the SAT/NAT in Puerto Rico and Saint Maarten MEVA III Nodes; and
- c) agree to any other actions, as deemed appropriate.