



**Agenda Item 6: Other Business**

**MEVA II-ECAR AFS NETWORK INTERCONNECTION ACTIVITIES**

(Presented by the E/CAR/NTG Rapporteur)

<b>SUMMARY</b>	
This Working paper presents the progress and results of the work of the E/CAR/NTG and the MEVA regarding the E/CAR – MEVA II interconnectivity and the progress of the E/CAR Radar sharing project.	
<b>REFERENCES</b>	
<ul style="list-style-type: none"><li>• Twenty-fourth Meeting of Directors of Civil Aviation of the Eastern Caribbean (E/CAR/DCA/24), Martinique, France, 2–5 October 2012</li><li>• Report of MEVA TMG/24 Meeting, Mexico City, Mexico, 21-23 August 2012.</li><li>• Report of E/CAR/NTG/3 Meeting, Christ Church, Barbados (5-6 June 2012)</li><li>• MEVA II – E/CAR Network Interconnection Teleconferences (2)</li></ul>	
<b>STRATEGIC OBJECTIVES</b>	<i>THIS WORKING PAPER IS RELATED TO STRATEGIC OBJECTIVES A AND C.</i>

**1. Introduction**

1.1 Decision E/CAR/NTG/2/10 - Planning for the implementation of a Common Request for Information (RFI) document for the CAR Region telecommunication networks was formulated further to shared information between the E/CAR NTG and the MEVA TMG on the separate planned renewal of the E/CAR AFS and the MEVA Networks. In consideration of the operational benefits of network interconnection Conclusion TMG/22/09 – Regional Interconnection/ Integration with the E/CAR Network and Decision E/CAR/NTG/3/02 – Regional Interconnection of the MEVA III and the E/CAR Networks were formulated.

1.2 During the MEVA TMG/24 Meeting a Working paper was presented informing that the MEVA/TMG/23 Meeting reviewed the progress reported to the meeting for Conclusion TMG/22/09 and urged the MEVA TMG Coordinator, United States and St. Maarten to proceed with the assigned tasks. To date two teleconferences have been held between Trinidad and Tobago (E/CAR NTG representative) and the MEVA TMG representatives, St. Maarten and United States, with the assistance of ICAO NACC Regional Office. Teleconference minutes are available at the MEVA III Activities webpage: <http://www.mexico.icao.int/Meva/MEVAIIINetwork.html>.

## 2. Discussion

2.1 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 St. 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 St. Maarten and San Juan.

2.2 To achieve the radar data exchange with the interconnection, a new dedicated data serial circuit for the radar exchange between San Juan and St. Maarten would be required on the MEVA network.

2.3 The ATS voice circuit between San Juan AIFSS and St. Maarten is currently available via off premises extension (OPX) through the E/CAR AFS Network (going through Antigua Node) to San Juan, and as such only one extension is available. Since the AIFSS was operationally moved to Miami, St. Maarten should established a new ATS voice circuit or use the existing MEVA ATS voice circuits to contact the AIFSS. The other AIFSS to E/CAR connections will remain part of the ECAR network.

2.4 Up to date a follow up teleconference has not been able to be agreed and these interconnection requirements are important to be defined in light of the MEVA III activities, so United States and St. Maarten should inform on progress with the implementation of the voice and data circuit between San Juan ACC and Juliana APP (St. Maarten).

2.5 The up-to date list of telecommunication requirements for the MEVA II – E/CAR Network agreed from the teleconferences and included in the MEVA III RFI version 1.0 are the following:

	ATS Units	Interconnection MEVA II- E/CAR AFS Network (San Juan )		Technical details
		Voice	RADA R	
<b>SINT MAARTE N/ JULIANA APP</b>	Anguilla (Clayton J. Lloyd International)	√		Radar requirement comes from the radar data sharing meeting of 18 July 2012 Serial line, RS232-V.35 Protocol TBD 3 PBX service from ECAR-analog voice line 3 available Serial lines, RS232-V.35 Protocol TBD
	Antigua (V. C. Bird APP)	√	√	
	Saint Kitts (Robert L. Bradshaw TWR)	√		
	PIARCO ACC		√	

2.6 To sample the benefit and progress of implementing radar data sharing at a regional level, the following informs about this activities in the E/CAR area:

- a) Further to Conclusion Piarco/FIR/PG/1/2 - E/CAR Radar Data Server Trinidad and Tobago will provide and host the radar data server for the sharing/exchange/remoting of radar data in the Eastern Caribbean. In this regard the radar system tracks from the radar of Martinique and Guadeloupe are presently available at the Piarco Area Control Centre (ACC) in addition to the system tracks of the Trinidad and Tobago radar. Trinidad and Tobago has added multi sensor fusion equipment to the Piarco Air Traffic Management (ATM) system in order to support the radar sharing project. The data will be processed and then distributed on the new E/CAR AFS (Aeronautical Fixed Services) network via a Cadmos ST media switch unit to be presented as a seamless composite surveillance image to the E/CAR states.
- b) France currently exports radar from Martinique to Saint Lucia and is displayed on IRMA2000 traffic displays which are supplied by France. With the assistance of ICAO, Trinidad and Tobago has started discussion with Venezuela to share radar information. Barbados is also part of the radar sharing project and this radar input is expected to be presented at Piarco within the first quarter of 2013. Configuration of the E/CAR AFS network and the associated ATM system to export the composite image from Piarco to Martinique is expected to be completed by the end of February 2013. This will enable Martinique to carry out testing on hardware further to the E/CAR radar sharing project and their assistance to E/CAR States. France has offered to supply ten (10) computers (complete with the appropriate software) similar to that provided to Saint Lucia, to E/CAR States that would like to have a demonstration trial (situational awareness only) of the radar sent by Trinidad and Tobago. Trinidad and Tobago has offered Situational Awareness training for the E/CAR free of charge to be provided at the training school in Trinidad.
- c) Most of the E/CAR States have expressed interest in receiving the radar data as shown in Table below.

**Table**

<b>State / Territory</b>	<b>Use of radar Data</b>	<b>Remarks</b>
Anguilla	Situational awareness	
Antigua & Barbuda	Situational awareness	
Barbados	Radar Control	ATC System on site
Dominica	Situational awareness	
French Antilles	Radar Control	ATC System on site
Grenada	Situational awareness	
Montserrat	Situational awareness	
Saint Lucia	Situational awareness	
Saint Vincent and the Grenadines	Situational awareness	
Trinidad and Tobago	Radar Control	ATC System on site

d) Revised highlights from the draft schedule for the radar sharing project are:

- States in conjunction with Trinidad and Tobago to conduct actual radar coverage checks, October 2012 – March 2013;
- The Radar Ad-hoc group in consultation with ICAO to develop technical specifications needed to implement the radar display for situational awareness, September 2012 – February 2013;
- Trials with France to determine whether the composite image can be displayed on the existing displays, February 2013;
- Procurement of equipment and award of contract for Situational Awareness as a regional project, January-March 2013 with expected commissioning in third quarter 2013.

**3. Suggested action**

3.1 The meeting is invited to:

- a) Take note of the information contained in this working paper;
- b) Urge the interconnection participants (United States, Sint Maarten and E/CAR representative) to continue the definition and implementation of this interconnection and
- b) Agree to any other actions as deemed appropriate.