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WORKING PAPER

E/CAR/NTG/9 & E/CAR/RD/7 — WP/05  
04/07/20

**Ninth Eastern Caribbean Network Technical Group (E/CAR/NTG/9) and  
Seventh Eastern Caribbean Radar Data Sharing Ad hoc Group (E/CAR/RD/7) Meetings**  
On-line, 14 and 15 July 2020

**Agenda Item 3: E/CAR Aeronautical Fixed Services (AFS) Network Performance and Operation**  
**3.1 Network Performance and general aspects**

**GENERAL FEEDBACK OF THE FRENCH WEST INDIES**

(Presented by France)

<b>EXECUTIVE SUMMARY</b>	
This paper presents the situation in FWI and identifies possible improvement.	
<b>Action:</b>	Suggested actions are presented in Section 5.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• 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</li></ul>

**1. Introduction**

1.1 The E/CAR/AFS network is globally compliant with operational requirements, but some improvements may be needed, both in technical and procedural aspects.

1.2 Securing FWI E/CAR/AFS network connection is achieved through dual access: Guadeloupe (Antigua, Martinique) and Martinique (Trinidad and Tobago, Guadeloupe).

1.3 In addition of the ECAR network, a link between Martinique and Trinidad and Tobago supports radar data and 2 phone lines.

## 2. Status of the FWI Nodes

2.1 FWI appreciates the access to the E/CAR network by different kind of links: copper cable and optical fibre. They provided a better redundancy. This new architecture significantly reduces the loss of connections to the E/CAR network

2.2 Guadeloupe and Martinique have two routers (one main, one spare) each fully equipped. Only the main is connected to the network and can be monitored by TSTT. We don't know their configurations.

2.3 FWI appreciates TTCAA/TSTT visits on site for the periodic maintenance on the E/CAR router (check system and align configuration). The maintenance planning is sent on time.

2.4 Martinique: during the last year, the majority of defaults were problems with outgoing calls (1 or more lines out of the 4 available were out of service). The repair time was very variable: from 1 day to more than 1 month (from 22 June to 26 July 2019). These events tarnish the proper functioning of the network.

2.5 Guadeloupe: Most of the troubles reported to TTCAA came from remote sites. The Guadeloupe node is considered reliable.

2.6 For informing TTCAA, FWI mail to [ttcns@caa.gouv.fr](mailto:ttcns@caa.gouv.fr) the detail of the trouble. But some of these events are not listed in the ECAR Fault reporting: for example mails from TFFF 15/04/2020 and 15/05/2020 (phone trouble with St Lucia). In this case, tracking the resolution of the fault is more complicated.

2.7 On 6 September 2018, TTCAA and SNA AG signed the new LOA that covers the use and distribution of data supplied by SNA AG to TTCAA for the benefit of member States of the E/CAR AFS Network. A LOA covering the use and distribution of data supplied by TTCAA to the benefit of member States of th E/CAR AFS Network is missing. FWI still supports the setup of a common maintenance agreement for E/CAR network and associated tools (SPATIA and CADAS/CRONOS).

## 3. Evolution

3.1 Martinique has changed its AFTN Switch. CAGOU has been replaced by MANGO, a COMSOFT system (AIDA, CADAS-ATS). Guadeloupe will change it at the end of 2020.

3.2 This news system is compliant with AMHS. FWI plan to switch to AMHS:

- Martinique at the end of 2020
- Guadeloupe at the beginning if 2021

3.3 FWI asked TTCAA (email of 14/02/2020) the creation of 2 AMHS lines for each site (Martinique, Guadeloupe). In advance of the delivery, we need information from ECAR implantation if we are to maintain our AMHS deployment planning.

**4. Conclusions**

4.1 The ECAR network is globally operating correctly in FWI, and improvements are proposed:

- To complete maintenance procedure for ECAR network and associated tools (could be integrated to an ECAR LOA).
- To organize the management of configurations (access to online version, traceability).
- To monitor the network components.

4.2 AMHS information from ECAR implantation is required for the deployment of an AMHS system in Martinique and Guadeloupe.

**5. Suggested actions**

5.1 The meeting is invited to:

- a) take action to define maintenance procedure for ECAR network and associated tools; and
- b) decide whether a configuration management to perform traceability of changes in router configurations is needed or not.