



ICAO

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WORKING PAPER

E/CAR/CATG/2 — WP/14
15/07/15

Second Eastern Caribbean Civil Aviation Technical Group (E/CAR/CATG/2) Meeting
Miami, United States, 15 to 17 July 2015

Agenda Item 4: Air Navigation Matters

4.2 Follow-up on the implementation of the NAM/CAR Regional Performance Based Air Navigation Plan (RPBANIP) and the Port-of-Spain Declaration Air Navigation Targets in the Eastern Caribbean:

E/CAR/NTG AND E/CAR/RD AD HOC GROUP REPORTS

(Presented by E/CAR/NTG-E/CAR/RD Rapporteur)

EXECUTIVE SUMMARY	
This Working Paper presents the report of the E/CAR/NTG/6 and the E/CAR/RD/4 Meetings with updated information.	
Action:	a) Review the information contained in this working paper; b) Identify any new tasks or progress on the tasks of the E/CAR/NTG and E/CAR/RD groups; and c) Agree to any other actions as deemed appropriate.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Environmental Protection
<i>References:</i>	<ul style="list-style-type: none">• 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 The Sixth Meeting of the Eastern Caribbean Network Technical Group (E/CAR/NTG/6) and the Fourth Eastern Caribbean Radar Data Sharing Group Meeting (E/CAR/RD/4) were carried out in Miami, United States, from 13 to 14 July 2015. The Meeting was attended by nine (9) States/Territories and three (3) International Organizations, totalling thirty five (35) delegates.

2. Discussion

2.1 Under Agenda Item 1 the following Decision was formulated:

Decision

E/CAR/NTG/6/XX E/CAR AFS NETWORK CONTINGENCY PROCEDURES INCLUSION TO OPERATIONAL PROCEDURES

In order to make official and homogeneously apply the E/CAR AFS Network contingency procedures, E/CAR AFS Members should implement/ include the following procedures by the E/CAR/DCA/26 Meeting in their operational procedures:

- In case E/CAR Network is not available for voice communications: use of PSTN phones;
- In case E/CAR Network is not available for data: use of SPATIA Web for NOTAM and Flight plans.

2.2 These procedure have already been integrated into local documentation or into Letter of Agreements (for instance between Martinique and Trinidad or Martinique and Saint Lucia). Each State is invited to verify the validity of PSTN numbers identified as backup phone means and to upgrade the existing LoA accordingly.

2.3 Under Agenda Item 2 the meeting reviewed and updated the valid conclusions related to the E/CAR AFS Network formulated by the:

- First Eastern Caribbean Civil Aviation Technical Group Meeting (E/CAR/CATG/1) and the Twenty-fifth Meeting of Directors of Civil Aviation of the Eastern Caribbean (E/CAR/DCA/25) meetings;
- CNS Committee actions involving E/CAR/NTG and RD; and
- Air Navigation Implementation Working Group (ANI/WG) and North America, Central American Working Group (NACC/WG) Meetings.

2.4 Under Agenda item 3 the following aspects were highlighted for the analysis of the E/CAR/AFS network performance and general aspects:

- a) Anguilla - Service through the E/CAR/AFS network is expected to be available by end of July 2015.
- b) St. Kitts - Saint Kitts is presently pursuing government approval for the funds to replace one (1) of the routers that failed as a result of environmental damage.
- c) TSTT's failure reporting system registered a total of seventy two (72) tickets reported (October 2014 to June 2015). As of June 2015, seventy (70) have been closed. Of the seventy two (72) failures, seventeen (17) were identified as link failures. TSTT presented data showing consistently good performance and availability of the network.
- d) The next E/CAR/AFS Network maintenance activity is scheduled for September – October 2015.
- e) Barbados informed that the E/CAR AFS Network performance was acceptable.

- f) ECCAA reported that in general, all states have reported significant improvement in the performance of the network. Feedback on faults from TTCAA and or TSTT has been excellent which has provided a high level of confidence in the network.
- g) France reported that the E/CAR/AFS network is globally compliant with operational requirements, but recommended some improvements both in technical and procedural aspects.

2.5 The following draft Conclusion was formulated:

Draft Conclusion
E/CAR/NTG/06/XX

**IMPROVEMENT TO E/CAR AFS NETWORK IN TECHNICAL
AND PROCEDURAL ASPECTS**

That, in order to improve the existing E/CAR AFS operation and procedural aspects, TSTT to conduct the improvements details in paragraph 3.1.6 by 15 October 2015.

2.6 France offered the software and manuals for any State/Territory that would like to implement the local monitoring solution. In this regard the following draft conclusion was proposed:

Draft Conclusion
E/CAR/NTG/6/XX

LOCAL MONITORING IMPLEMENTATION

That, considering the kind offer by France on a Local monitoring tool of the ECAR AFS nodes:

- a) France to complete Guadeloupe E/CAR monitoring and editing Tool manual;and
- b) States that wish to implement the local SNMP supervision tool should send their request to the NTG Rapporteur, by December 2015.

2.7 Under WP/09, Trinidad and Tobago shared the improvements made by TSTT to the network to mitigate against another single point of failure; namely, the Mausica exchange, by the creation of a redundant path from the TTCAA premises to the St. Augustine exchange.

2.8 Under WP/10, the MEVA TMG Coordinator presented an update on the activities towards the realization of the agreed action for voice improvement between Sint Maarten and Anguilla, Antigua and St. Kitts. In this regard the following conclusion was adopted:

Draft Conclusion
E/CAR/NTG/6/XX

**MEVA III-ECAR AFS NETWORK INTERCONNECTION- VOICE
CIRCUITS**

That, to complete the voice circuits implementation in the MEVA III- ECAR AFS Network interconnection:

- a) Trinidad and Tobago to install the replacement routers in Anguilla by July 2015;
- b) United States to complete the wiring between the MEVA III and E/CAR AFS Node by 14 August after the routers in Anguilla are replaced; and

- c) For the testing, United States, Comsoft, TSTT, Trinidad and Tobago, Sint Maarten, Anguilla, St. Kitts and Antigua to coordinate the corresponding actions.

2.9 Under Agenda Item 4 on Radar Data Sharing Activities the meeting noted that the installation of the French donated IRMA computers was completed with the exception of Anguilla pending the replacement of the routers. France noted some issues encountered with St. Lucia and in this regard the following decision was adopted:

Draft Conclusion

E/CAR/NTG/6/xx

FRENCH RADAR/DACOTA DATA ADJUSTMENTS

That, in order to show the correlated flight plan and radar data information in the Radar Data displays with Dakota Data feed from the E/CAR AFS Network, that France SNA/AG to coordinate with TTCAA and Saint Lucia to:

- a) transfer the radar back to the IPLCs while the issue of the Flight ID is being resolved; and
- b) conduct latency checks of the data and data adjustments by 21 August 2015.

2.10 France commented on the need to complete the corresponding LOA for the Radar CPU implementation with Montserrat and Anguilla, LOA to be signed with ASSI. In this regard the following conclusion was agreed:

Draft Conclusion

E/CAR/NTG/6/xx

SIGNING OF LOA REGARDING THE FRENCH RADAR

That in order to complete the signing of the Radar data Display LOA as agreed for the provision of the Radar Data Display CPUs (IRMA), Montserrat and Anguilla are urged to sign the respective LOA by 18 September 2015.

2.11 Under WP/14 and WP/15, Barbados informed the Meeting of their Multilateral ADS – B project and Trinidad and Tobago provided an update on their intention for ADS-B/MLAT respectively.

2.12 Under Agenda Item 5 and regarding the Surveillance Data Sharing Implementation Action Plan and the corresponding Request for Proposal compilation, ECCAA proposes to hold meetings with the OECS States to gain funding approval. ECCAA and States to determine and advise if this can be done as one project or as individual projects. ICAO and Trinidad and Tobago offers to lend support as needed to explain to States' administration. In order to give States more experience with surveillance (IRMA CPU) and to allow Antigua to confirm the timelines of their radar procurement, a proposal was made to push back the dates previously agreed, by three (3) months. A Response from ECCAA expected by October 30, 2015. The draft RFP presented in WP/18 should be used as reference and will be updated after the States finalize their user requirements.

2.13 Under Agenda Item 6 the work programme and terms of reference for the E/CAR/NTG was updated (**Appendix**). In accordance with the E/CAR/CATG rotation of meetings scheme, the next E/CAR/CATG/3 meeting is to be hosted by Saint Kitts and Nevis in 2016. As agreed in the meeting mechanism of the E/CAR/NTG and the E/CAR/CATG, for 2016 both the E/CAR/CATG and E/CAR/NTG meetings will be held consecutively, holding the next meeting of the E/CAR/NTG prior to the E/CAR/CATG/3 meeting. Considering the Surveillance RFP tasks and the selection process, a three-day (3) meeting for the E/CAR/NTG and E/CAR/RD discussion and activities is projected.

2.14 Under WP/20, the Secretariat informed that during the ANI/WG/02 Meeting, States were recalled on their support for the ICAO position for WRC-2015, emphasizing ICAO and the NAM/CAR Regions support to this position and the following conclusion:

***DRAFT CONCLUSION
ANI/WG/2/2***

COORDINATION FOR UPDATED VERSION OF THE ICAO WRC-2015 POSITION

That in order to ensure an effective coordination for the support of the ICAO Position for WRC-2015 considering the update of this position, the ICAO NAM/CAR States:

- a) timely coordinate that this update of the ICAO Position is shared with their national Spectrum regulators; and*
- b) attend as possible, with their National Spectrum Regulators to attend the last 2015 Regional CITELE (Ottawa, Canada, August 2015) and vote for the Interamerican proposals related with the ICAO position*

The complete report of the E/CAR/NTG/6 and the E/CAR/RD/4 meetings are available on the ICAO NACC office website at: <http://www.icao.int/NACC/Pages/meetings>.

3. Suggested Action

3.1 The Meeting is invited to:

- a) Study, analyse and propose solutions to move forward with the Surveillance Data Sharing Implementation Action Plan and the corresponding:
 - i. Development of the user requirements;
 - ii. The method of procurement; and
 - iii. The development of the Request for Proposal document

APPENDIX
EASTERN CARIBBEAN NETWORK TECHNICAL GROUP
(E/CAR/NTG) TERMS OF REFERENCE

1. Background

1.1 The Eastern Caribbean Network Technical Group (E/CAR/NTG) was established as a standing group in accordance with E/CAR/WG/31 Meeting, Conclusion 31/7, approved by the E/CAR/DCA/22 Meeting (Port of Spain, Trinidad and Tobago, 8-11 December 2009) The terms of reference of the E/CAR/NTG were approved by the E/CAR/DCA/22 Meeting, - Decision 22/6. The following main objectives are assigned:

- a) analysis and monitoring of the status of the current E/CAR AFS Network;
- b) recommend measures to improve reliability of the E/CAR AFS Network for the immediate/near term; and
- c) study, analyze and follow-up on the planning, documentation and implementation of the replacement of the existing E/CAR AFS Network.

1.2 By 2013, the E/CAR/NTG has fulfilled these objectives, with an efficient IP Network and well established stable services; however the continuous monitoring, analysis and follow-up to Network improvements and resolution of failures were considered necessary by the E/CAR AFS Network participants.

2. Terms of Reference

For the activities related to the analysis and monitoring of the status of the current E/CAR AFS Network, the E/CAR/NTG is required to make recommendations on measures to improve the reliability of the E/CAR AFS Network for the immediate/ near term. These activities include:

- a) review the current status of the Network (maintenance and reporting procedures, technical personnel involved, spare parts, tools for monitoring the Network status, identify common network points of failure, etc.) and submit recommendations;
- b) ensure compliance of the Network services with ICAO SARPs, Regional Air Navigation Plans and user expectations (Aviation System Block Upgrades (ASBU) Block 0 Modules);
- c) assist the TTCAA and the E/CAR States with technical coordination and solutions of problems that occurred with the implementation and operation of the AFS including the E/CAR AFS Network and to consider and make recommendations on measures to improve implementation and operation; and
- d) Study and propose to the E/CAR/DCA intra and inter-regional coordination for the E/CAR AFS Network connectivity with other regional and domestic digital communications networks of the CAR and SAM Regions.
- e) inform and advise the E/CAR AFS Network users, if a major failure or network concern that affects the entire network occurs or may occur or an event that doesn't allow achieving the Network Service level agreement, recommending solutions for its recovery and actions by the E/CAR AFS Network Service Provider.

3. Work Programme

See attached project file.

4. Working Methods

- a) E/CAR/NTG work programme should present their activities in terms of objectives, responsible and deliverables. Further details can be provided in the form of Work Breakdown Schedule (WBS);
- b) E/CAR/NTG will avoid duplication of work within the E/CAR/CATG and maintain close coordination among the existing entities (like the Air Navigation Implementation Technical Group: ANI/WG) to optimize the use of available resources and experience;
- c) E/CAR/NTG may designate, as necessary, ad-hoc groups to work on specific topics and activities; all tasks and activities should be clearly defined by time and deliverables;
- d) E/CAR/NTG should co-ordinate and advance its works as follows to maximize efficiency and reduce costs:
 - conduct work via electronic written correspondence
 - conduct work via phone and teleconference calls
 - hold meetings when necessary
- e) E/CAR/NTG meetings shall be conducted as possible, jointly with other E/CAR Meetings like the E/CAR/CATG meetings.
- f) E/CAR/NTG will report and coordinate the progress of assigned tasks to the E/CAR/CATG as well as to the E/CAR Directors.

5. Membership

See attached Membership List. ICAO will act as technical adviser to the E/CAR/NTG.

6. Rapporteur

Ms. Veronica Ramdath (Trinidad and Tobago)

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E/CAR/NTG WORK PROGRAMME

No.	Activities	Objectives	Responsible	Deliverables
1	To assist the E/CAR AFS Network Members in coordination for the solutions to problems presented in this operation, and in the implementation of services and parts.	Keep E/CAR AFS Network SLA levels	NTG	E/CAR AFS Network assistance
2	To study and implement technical/operational measures that may be agreed upon to improve the operation and implementation of E/CAR AFS Network services, and that do not impact significant cost, investments and objectives of the Network.	Satisfactory operation and service levels	NTG	Implementation of Network improvements
3	Keep E/CAR AFS Network Members aware of the status of the E/CAR AFS Network performance and conditions of operation.	E/CAR AFS NETWORK Network awareness	NTG	<ul style="list-style-type: none"> • Reliable E/CAR AFS Network website • Network Performance revision
4	Maintain valid and up-to-date E/CAR AFS Network Contingency Procedures, taking into consideration the contingency plans of each E/CAR AFS Network Member and of the Service Provider and in keeping with the CAR Region General Contingency Plan.	Readiness for contingencies	NTG	E/CAR AFS NETWORK Contingency Procedures
5	To assist the E/CAR AFS Network Members, in finishing the data and voice circuits implementation, according to the requirements shown in the ANP CAR/SAM (ASBU BO modules and Regional/National Priorities).	Fulfill Air Navigation requirements	Taskforces-Adhoc Groups	Data and voice circuit implementation
6	To study and propose solutions for AFS connectivity of the E/CAR AFS Network with other regional and domestic CAR/SAM networks.	Fulfill Air Navigation requirements	Taskforces-Adhoc Groups	Data and voice circuit implementation
7	To review and propose amendments to the RFP and the terms of the Services Agreement, based on the new ICAO requirements for the transitioning towards the ATN, as well as on the experience achieved, with the purpose of using them in a new Services Agreement for the E/CAR AFS Network.	Network improvements	Taskforces	Effective and efficient E/CAR AFS NETWORK Transition Process
8	Keep and validate with the E/CAR AFS Network Service Provider a procedural handbook on management, operation and maintenance of the E/CAR AFS Network telecommunication circuits.	Ensure proper E/CAR AFS Network maintenance and operation	NTG	Maintenance Procedural Handbook/Manual