



International Civil Aviation Organization

North American, Central American and Caribbean Office (NACC)

**Twenty-fifth Meeting of Directors of Civil Aviation of the Eastern Caribbean (E/CAR/DCA/25)**

St. John's, Antigua and Barbuda, 3–5 December 2013

E/CAR/DCA/25 — WP/09

12/11/13

**Agenda Item 5:**

**Air Navigation Matters**

**5.4 Review of the E/CAR Communications Network**

**PROGRESS REPORT OF THE E/CAR/NTG: E/CAR AFS NETWORK IMPROVEMENTS AND RADAR DATA SHARING IMPLEMENTATION**

(Presented by E/CAR/NTG Rapporteur)

**SUMMARY**

This working paper presents the results of the Fourth Eastern Caribbean Network Technical Group (E/CAR/NTG/4) and the Second Eastern Caribbean Radar Data Sharing Ad hoc Group (E/CAR/RD/2) Meetings and provides an update on the performance of the Eastern Caribbean (E/CAR) Aeronautical Fixed Services (AFS) Network.

**References:**

- First Eastern Caribbean Civil Aviation Technical Group Meeting (E/CAR/CATG/1), Martinique, France, 19-21 June 2013
- Fourth Eastern Caribbean Network Technical Group Meeting (E/CAR/NTG/4) and the Second Eastern Caribbean Radar Data Sharing Ad hoc Group (E/CAR/RD/2) Meetings, Martinique, France, 17-18 June 2013
- Twenty-fourth Meeting of Directors of Civil Aviation of the Eastern Caribbean (E/CAR/DCA/24), Martinique, France, 2–5 October 2012
- E/CAR Radar Data Sharing (RDS) Teleconference October 2013

**Strategic Objectives**

*This working paper is related to Strategic Objectives:*  
*A. Safety – Enhance Global Civil Aviation Safety*  
*B. Security – Enhance Global Civil Aviation Security*  
*C. Environmental Protection and Sustainable Development of Air Transport*

## 1. Introduction

1.1 The E/CAR/NTG/4 and the E/CAR/RD/2 Meetings were held in Martinique, France, from 17 to 18 June 2013. The meeting was attended by 29 participants from 7 E/CAR States/Territories (Antigua and Barbuda, Barbados, Dominica, France, Saint Lucia, Trinidad and Tobago and United States), ECCAA in representation of the OECS States, ICAO and the E/CAR AFS Network Service Provider (TSTT).

1.2 These meetings, held jointly, discussed 4 agenda items and subsequently formulated 12 draft Conclusions and 4 Decisions, covering the 2 main subjects assigned by the E/CAR DCA regarding E/CAR AFS Network performance and the E/CAR radar data sharing implementation activities.

## 2. Discussion

2.1 Under Agenda Item 1, the Meeting reviewed the valid conclusions from the previous E/CAR/NTG meetings: C2/1, C2/3, C2/5, C2/9, C/3/1 and decision D3/2. The Meeting concluded that all of these conclusions were completed and C2/1 was superseded. From the analysis of the Thirty-third Eastern Caribbean Working Group Meeting (E/CAR/WG/33) and E/CAR/DCA/24 Meetings, the following conclusions are considered related to the E/CAR AFS Network:

- E/CAR/WG/33 Meeting: C/33/3 and C/33/8
- E/CAR/DCA/24 Meeting: C24/2 and C24/3

### *E/CAR AFS Network performance*

2.2 A review of the E/CAR Network performance was conducted, highlighting the following agreements and updates:

- a) The installation and commissioning of an Uninterrupted Power System (UPS) in Dominica, commissioned to eliminate power fluctuations
- b) Damage to AFS equipment resulting from environmental negligence:
  - Anguilla - a UPS and a Cisco router
  - Saint Kitts – a Cisco router

2.3 The Piarco-Martinique, Martinique-Guadeloupe and Guadeloupe-Antigua International Private Leased Circuits (IPLCs) were implemented. The implementation of the last leg: Guadeloupe-Antigua (March 2013) completed the initial design of the E/CAR AFS Network as agreed by the E/CAR/NTG.

2.4 The Service Level Agreement maintenance procedures were reviewed in terms of initial feedback on fault, identification and isolation of faults and escalation conditions. Network contingency was discussed in light of the importance of the E/CAR/AFS Network and the current and future applications to be supported by the Network.

2.5 The Meeting reviewed the two projects undertaken by Trinidad and Tobago on the supply, installation and training of an Air Traffic Services Message Handling System (AMHS), Aeronautical Information Services System (AISS), and provided comments on the performance of same since the installation.

2.6 United States informed on the AMHS Workshop/Meeting, hosted by United States, in coordination with ICAO, in Miami, United States, from 11 to 13 April 2012. The workshop was a forum to exchange experiences, guidance on implementation of AMHS, as well as implementation activities and schedule updates.

2.7 The Meeting was informed of the E/CAR/NTG Rapporteur participation in the MEVA III Request for Information (RFI) process in representation of the E/CAR AFS Network and the MEVA III Request for Proposal (RFP) process and status. The MEVA Technical Management Group (TMG) Rapporteur confirmed that the MEVA II – E/CAR AFS Network interconnection requirements had been included in the MEVA III Tender Package, version 1.0, for the MEVA III Tender process.

*E/CAR Radar Data Sharing implementation activities*

2.8 The Meeting was informed of the progress of the radar data sharing project, the infrastructure needed for radar data exchange and the offer made by France for their monoradar data to E/CAR States in addition to the radar data server in Trinidad and Tobago. The operational requirements were reviewed, and ECCAA provided operational requirements for situational awareness and recalled the information exchange for operational experiences in situational awareness being conducted between France, Saint Lucia and ECCAA. In this regard, several members of the Radar Data Sharing Ad hoc Group expressed their commitment to move on with the implementation of the CPUs donated by France, considering their geographical situation within the French radar coverage of Dakota radar data. These members committed to acquire the necessary monitor for the CPU, local environmental conditions and wiring infrastructure for interconnectivity to the E/CAR AFS equipment. **Appendix A** shows the activities planned for the radar sharing project.

2.9 The Meeting also recognized that for 2014, due to the planned activities for the E/CAR AFS Network and radar data sharing, a 3-day face-to-face meeting would be needed in addition to regular teleconferences to ensure the continuity and progress of the radar data activities through the E/CAR AFS Network; therefore, the Meeting agreed that the E/CAR/NTG/5 Meeting shall be held jointly with the third radar data sharing Ad hoc Group Meeting. Among the subjects to be discussed at these meetings are:

- a) E/CAR AFS Network improvements review
- b) Radar data integration from Dakota, Barbados and Trinidad radar
- c) Radar display implementation from CPUs donated by France
- d) Radar display RFI outcomes
- e) Next activities in radar data exchange

2.10 In this regard, the Meeting agreed to request the support of the E/CAR DCAs for an E/CAR State/Territory to host the next E/CAR/NTG/5 and III Radar Data Sharing Ad hoc Group meetings. These meetings (E/CAR/NTG/4 and E/CAR/RD/2) will advise on the best feasible solution (radar display acquisition by individual States or as a whole regional project) for implementing radar data displays in the E/CAR area.

2.11 The E/CAR/NTG/4 and the E/CAR/RD/2 Meetings report and conclusions were approved on 20 September 2013, by the E/CAR DCAs. In October 2013, a follow-up teleconference to these meetings was held, highlighting the actions to be carried out by some E/CAR Members, viz:

- a) Anguilla and Saint Kitts and Nevis, as a matter of urgency, should contact Trinidad and Tobago to agree on the necessary actions to restore the node redundancy for the replacement of the faulted equipment;

- b) France and United States should develop network contingency procedures for the E/CAR AFS Network;
- c) Antigua and Barbuda should report the final status and planning for restoration of its radar system, including the necessary actions to start radar data sharing with Sint Maarten;
- d) France and Trinidad and Tobago should complete the radar technical specifications update and, with the assistance of ICAO, conduct a RFI for radar technical specifications to determine the best technical solution for radar data display for situational awareness considering the current radar requests;
- e) Trinidad and Tobago should arrange for implementation of the radar data feed to each corresponding node for operation of each radar display in order to facilitate implementation of the radar data displays based on the CPUs provided by France; and
- f) Trinidad and Tobago should update the Radar Data Sharing Action Plan to include all actions and activities discussed and agreed at the E/CAR/NTG/4 Meeting in order to update the implementation activities of the Radar Data Sharing Action Plan.

2.12 **Appendix B** contains follow-up to the valid conclusions and decisions.

2.13 On 16 October 2013, following the radar data sharing agreements, France, with the support of ICAO, (ref. State Letter EMX0827) submitted the Procedure for Donation of CPUs for radar displays particularly directed at those E/CAR States that have committed to implement the CPUs donated by France. The following CPUs are on request:

- a) Anguilla: 1 CPU
- b) Antigua and Barbuda: 2 CPUs for Antigua
- c) Barbados: 1 CPU
- d) Dominica: 1 CPU for Melville Hall
- e) Montserrat: 1 CPU
- f) Saint Kitts and Nevis: 1 CPU for Saint Kitts
- g) Grenada, and Saint Vincent and the Grenadines will also commit, pending the successful outcome of the monoradar radar data tests

### **3. Suggested action**

3.1 The Meeting is invited to:

- a) review the outcomes and progress achieved by the E/CAR/NTG and the E/CAR Radar Data Ad-hoc Group contained in this working paper in Appendix B;
  - b) seek confirmation on implementation of the Radar Display CPUs donated by France as detailed in paragraph 2.13;
  - c) support the request for hosting the 3-day E/CAR/NTG/5 and Third Radar Data Sharing Ad hoc Group Meetings, as detailed in paragraph 2.9; and
  - d) identify any new task or progress on the existing tasks of the E/CAR/NTG and E/CAR/RD groups.
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APPENDIX A

E/CAR/DCA/25 - WP/9

ID	Task Name	Duration	Start	Finish	Predecessors	Responsible	Gantt Chart											
							Half 1 Qtr	2nd Half 2 Qtr	1st Half 3 Qtr	2nd Half 4 Qtr	1st Half 1 Qtr	2nd Half 2 Qtr	1st Half 3 Qtr	2nd Half 4 Qtr	1st Half 1 Qtr	2nd Half 2 Qtr	1st Half 3 Qtr	2nd Half 4 Qtr
1							CNS Com/ICAO											
2	✓ First meeting to discuss the project (E/CAR/WG/33)	1 day	Thu 6/7/12	Thu 6/7/12		CNS Com/ICAO	CNS Com/ICAO											
3	✓ Identify States that will be part of the project: Expression of interest	68 days	Fri 6/8/12	Mon 9/10/12			E/CAR Members											
4	✓ Identify the intended usage of the composite radar image	27 days	Wed 7/18/12	Wed 8/22/12		E/CAR Members	E/CAR Members											
5	✓ Identify number of displays and site of displays	1 day	Wed 7/18/12	Wed 7/18/12		E/CAR Members	E/CAR Members											
6	✓ 1st Radar teleconference	1 day	Wed 7/18/12	Wed 7/18/12		RDS Members/ICAO	RDS Members/ICAO											
7	✓ 2nd Radar teleconference	1 day	Wed 9/12/12	Wed 9/12/12		RDS Members/ICAO	RDS Members/ICAO											
8	✓ Develop test procedure, identify resources to conduct actual coverage checks	60 days	Sat 7/28/12	Thu 10/18/12		Trinidad and Tobago	Trinidad and Tobago											
9	✓ Coordinate tests with Grenada and St Vincent	30 days	Wed 8/1/12	Tue 9/11/12			Trinidad and Tobago											
10	✓ Provide theoretical radar coverage (Barbados, French Antilles, Trinidad, Antigua, United States)	3 days	Tue 8/21/12	Thu 8/23/12		Barbados, French Antilles, Trinidad and Antigua, United States	Barbados, French Antilles, Trinidad and Antigua, United States											
11	✓ Combine the theoretical radar coverage into one composite image	20 days	Mon 9/3/12	Fri 9/28/12		Trinidad and Tobago	Trinidad and Tobago											
12	✓ Actual coverage checks with Grenada and St Vincent	3 days	Thu 9/20/12	Mon 9/24/12			Trinidad and Tobago											
13	✓ Coordinate tests with States	5 days	Fri 10/19/12	Thu 10/25/12		Trinidad and Antigua	Trinidad and Antigua											
14	✓ Analyze network against the need for additional hardware/configuration, if any	120 days	Fri 6/15/12	Wed 11/28/12		Trinidad and Antigua/ ECARNTG	Trinidad and Antigua/ ECARNTG											
15	✓ Make recommendations to E/CAR/DCA/24 on Radar Data Sharing Project- implementation and procurement	3 days	Tue 10/2/12	Thu 10/4/12		CNS Com Rapporteur	CNS Com Rapporteur											
16	Have Barbados Radar in Trinidad	180 days	Thu 3/28/13	Wed 12/4/13			Trinidad and Tobago											

Project: ECAR RADAR DATA PROJE  
Date: Wed 11/13/13

Task		External Tasks		Manual Task		Finish-only
Split		External Milestone		Duration-only		Deadline
Milestone		Inactive Task		Manual Summary Rollup		Progress
Summary		Inactive Milestone		Manual Summary		
Project Summary		Inactive Summary		Start-only		

ID	Task Name	Duration	Start	Finish	Predecessors	Responsible	Half	2nd Half	1st Half	2nd Half							
							Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr
17	Develop technical specifications needed to implement the radar display for situational awareness.	320 days	Thu 1/10/13	Tue 4/1/14		Ad-Hoc Group/ICAO											
18	Send Piarco's MRT to Martinique- recorded data only	183 days	Wed 4/10/13	Fri 12/20/13													
19	Conduct actual coverage checks with Antigua, Dominica, Montserrat, St. Kitts, St. Lucia	15 days	Mon 6/17/13	Fri 7/5/13													
20	Integrate Barbados radar into Piarco's MRT	24 days	Mon 1/20/14	Thu 2/20/14													
21	Trials to determine whether the composite image can be displayed on the displays available by French Antilles (recordable data)	27 days	Thu 4/11/13	Fri 5/17/13													
22	3rd Radar Teleconference: Present findings to radar sharing group	1 day	Fri 3/15/13	Fri 3/15/13													
23	4th Radar Sharing Teleconference	1 day	Tue 5/21/13	Tue 5/21/13													
24	<b>Acquisition of new Radar Data Displays</b>																
25	Draft specifications for review by ICAO, ECCAA, France and Trinidad and Tobago	1 day	Fri 1/10/14	Fri 1/10/14													
26	E/CAR/RD/2 Meeting	1 day	Tue 6/18/13	Tue 6/18/13													
27	5th Radar Sharing Teleconference	1 day	Thu 6/27/13	Thu 6/27/13													
28	Finalize Procedure and conditions for IRMA2000 delivery to E/CAR States	22 days	Wed 10/2/13	Thu 10/31/13													
29	Visit to Martinique to resolve multicasting issues	2 days	Mon 11/11/13	Tue 11/12/13													

Project: ECAR RADAR DATA PROJE  
Date: Wed 11/13/13

Task		External Tasks		Manual Task		Finish-only	
Split		External Milestone		Duration-only		Deadline	
Milestone		Inactive Task		Manual Summary Rollup		Progress	
Summary		Inactive Milestone		Manual Summary			
Project Summary		Inactive Summary		Start-only			

ID	Task Name	Duration	Start	Finish	Predecessors	Responsible	Half	2nd Half	1st Half	2nd Half							
							Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr
30	Set up Network to export Martinique's radar to Dominica	2 days	Mon 11/11/13	Tue 11/12/13													
31	Transfer Martinique's radar to E/CAR AFS	2 days	Fri 11/22/13	Mon 11/25/13													
32	Finalization of Committee members/Selection of Chairperson	1 day	Wed 2/12/14	Wed 2/12/14													
33	Finalization of complete tender documents	25 days	Thu 1/16/14	Wed 2/19/14													
34	Obtain quotations from selected vendors for estimation	11 days	Thu 4/24/14	Thu 5/8/14		E/CAR Members											
35	Start procurement process as a regional project (tender/evaluation/selection)	48 days	Tue 5/27/14	Thu 7/31/14		E/CAR Members											
36	<b>Delivery and Installation of equipment</b>	<b>81 days</b>															
37	Delivery	7 days	Wed 8/20/14	Thu 8/28/14		Provider											
38	Installation- with local technicians	23 days	Mon 9/1/14	Wed 10/1/14		E/CAR Members											
39	Training	23 days	Mon 9/1/14	Wed 10/1/14		Trinidad											
40	Commissioning and operational readiness	23 days	Mon 9/1/14	Wed 10/1/14		E/CAR Members											
41																	
42																	
43																	

Project: ECAR RADAR DATA PROJE Date: Wed 11/13/13	Task		External Tasks		Manual Task		Finish-only	
	Split		External Milestone		Duration-only		Deadline	
	Milestone		Inactive Task		Manual Summary Rollup		Progress	
	Summary		Inactive Milestone		Manual Summary			
	Project Summary		Inactive Summary		Start-only			

**APPENDIX B**  
**UPDATE OF CONCLUSIONS/DECISIONS FROM E/CAR/NTG/4 AND E/CAR/RD/2**

CONCLUSION/DECISION	TITLE	TEXT OF CONCLUSION	STATUS
Draft Conclusion E/CAR/NTG/4/01	<b>Immediate Restoration of E/CAR AFS Network Node Redundancy in St. Kitts and Anguilla</b>	That Saint Kitts and Anguilla, as a matter of urgency, no later than 30 June 2013, to communicate with Trinidad and Tobago to agree on the necessary actions to restore the node redundancy for the replacement of the failed equipment.	Proposals were obtained from TSTT and sent to: St. Kitts and Nevis – router Anguilla – router and Damaged UPS due to environmental conditions. Both States have acknowledged receiving the proposals. ICAO was asked to send a letter to the States regarding this matter.
Draft Conclusion E/CAR/NTG/4/02	<b>E/CAR AFS Network Standard Operations Procedures (SOP): MPLS Maintenance Procedure and Service Level of Agreement</b>	a) E/CAR/NTG Rapporteur to draft and submit to E/CAR/NTG Members a E/CAR AFS Network Standard Operations Procedures (SOP) including all maintenance and necessary network operation procedures as well as the MPLS SLA by <b>30 September 2013</b> ; b) E/CAR/NTG members to provide comments on E/CAR AFS Network SOP by <b>31 October 2013</b> ; and c) E/CAR AFS Network members to apply E/CAR AFS Network Standard Operations Procedures (SOP) final version by <b>31 December 2013</b> .	The SOP from United States was received and reviewed by TSTT and TCAA. Comments were received from France on a SOP for E/CAR AFS. Draft document to be completed and sent out by 31 <sup>st</sup> October.
Draft Conclusion E/CAR/NTG/4/03	<b>E/CAR AFS Network Availability improvement</b>	In order to improve the E/CAR AFS network availability that: a) The E/CAR AFS Network Service Provider, TSTT, analyse and identify any issues that can improve availability figures per node and informs the E/CAR/NTG Rapporteur by September 30th 2013 and b) E/CAR AFS Members to be informed of the actions to be taken to improve the local node availability by the next teleconference (20 August 2013).	a) TSTT reported to NTG Rapporteur that the following causes were identified that affected availability: Power failures and router failures b) Commercial power is under the responsibility of the State. TSTT has improved coordination with the local support to enhance response time in the event of router failures to switch to the standby router.
Draft Conclusion E/CAR/NTG/4/04	<b>E/CAR AFS Network Availability statistics</b>	In order to improve the Network availability information reported and analysed by the E/CAR AFS Network members that the E/CAR AFS Network Service Provider, TSTT: a) To calculate the network availability per node discriminating the preventive maintenance downtime; b) To provide a bandwidth utilization graphic with individual node presentation; c) Include on these graphic updates a comparative approach with the previous Network report to identify improvements; and d) Submit the new information to the E/CAR AFS Members before the next teleconference (20 August 2013).	a) Network availability can be viewed on the web portal. It excludes preventative time. b) Bandwidth utilization is provided on the web portal. c) Comparative updates will need to be done manually. This information can be provided at the monthly teleconferences.

CONCLUSION/DECISION	TITLE	TEXT OF CONCLUSION	STATUS
<b>Decision</b> E/CAR/NTG/4/05	<b>E/CAR AFS Network Contingency Procedures</b>	That France and the United States develop network contingency procedures for the E/CAR AFS Network and present this document to the E/CAR/NTG/5 meeting.	
<b>Draft Conclusion</b> E/CAR/NTG/4/06	<b>Voice failures between Barbados and Martinique</b>	That the E/CAR AFS Network Service Provider, TSTT, reviews the dial plan and any activity needed to resolve the voice communications between Barbados and Martinique before 30 June 2013	This matter was successfully addressed on scheduled maintenance visit on 28-29 October 2013. Barbados and Martinique confirmed that voice circuits are operational.
<b>Decision</b> E/CAR/NTG/4/07	<b>Antigua and Barbuda Radar Restoration</b>	That Antigua and Barbuda reports no later than 30 September 2013, the final status and planning for the restoration of their radar system including the necessary actions to start radar data sharing with Sint Maarten.	Antigua reported that the replacement UPS is expected by 11/10/2013 and discussions are progressing with Selex regarding the replacement of faulty modules and the restoration of the radar.
<b>Draft Conclusion</b> E/CAR/NTG/4/08	<b>Improvement to failure report description and feedback</b>	Since Trinidad and Tobago is responsible for the operation and outcomes of the Top Desk application, that Trinidad and Tobago: a) Clearly identify the type of failure (application or network) in its responses on Top desk; b) Provide feedback to all failure reports; and c) Report these improvement to the next teleconference (20 August 2013)	States reported that the Topdesk responses have improved.
<b>Draft Conclusion</b> E/CAR/NTG/4/09	<b>ECCAA AFS Network procedure improvements</b>	Since ECCAA is the CNS Service Provider for the OECS States and that a minimum maintenance level review is made before issuing a failure report, that: a) ECCAA to review and update their maintenance reporting procedure with their ECCAA Members by the end of July 2013; and b) Trinidad and Tobago to provide Dominica an online training for the use of the Top Desk application.	a) Completed b) Dominica is to provide dates and number of persons to be trained. Training will be conducted on line by a TTCAA technician.
<b>Decision</b> E/CAR/NTG/4/10	<b>Review of Operational Guidance Material</b>	That ECCAA in collaboration with France and Saint Lucia review the operational guidance material and present a final draft to the Radar Sharing Rapporteur no later than 31st July 2013.	The draft Operational Guidance document was prepared and reviewed by ECCAA. The draft document is to be sent to Saint. Lucia after cross checking with Antigua and Barbuda. After this process it will be sent to the NTG.
<b>Decision</b> E/CAR/NTG/4/11	<b>Submission of Procedure to Request CPU Donated by France</b>	In order to facilitate the procedure for obtaining the CPUs donated by France, that France submits to the Rapporteur E/CAR/NTG and ICAO a template with the necessary requirements and conditions to formalize the request for these CPUs, including the required environmental conditions no later than 30th June 2013.	Document prepared by France and reviewed by ICAO and NTG Rapporteur. ICAO is to send the document to States for their comments and approval.

CONCLUSION/DECISION	TITLE	TEXT OF CONCLUSION	STATUS
Draft Conclusion E/CAR/NTG/4/12	Implementation of Radar Data Displays with CPUs Provided by France	In order to facilitate the implementation of the Radar Data Displays based on the France provided CPUs, that: a) Trinidad and Tobago arrange the implementation of the radar data feed to each corresponding nodes for operation of each radar display no later than end of September 2013; b) Anguilla, Antigua and Barbuda, Dominica, Barbados, Montserrat and St. Kitts and Nevis proceed with the acquisition of the necessary monitor and local power conditioning requirement for the CPU by the end of September 2013; and c) All participants in action a) and b) to provide progress to the E/CAR/DCA/25 Meeting.	TSTT will work with France to complete the multicasting of the radar from the Piarco MRT to Martinique during the maintenance visit on 11-12 November 2013. When this is perfected, the other States will follow the same process.
Decision E/CAR/NTG/4/13	Radar Technical Specification Request for Information	In order to provide an accurate scenario for the implementation of the radar display for the medium-long term solution that France and Trinidad and Tobago: a) Complete the update of the radar technical specifications; b) assisted by ICAO, conduct a Request for information for the radar technical specifications for best technical solution for radar data display for situational awareness considering the current radar requests; and c) inform by the E/CAR/DCA/25 Meeting the progress and results of these actions.	Comments received from initial draft sent out to France, ECCAA and ICAO.
Decision E/CAR/NTG/4/14	Update to Radar Data Sharing Implementation Action Plan	In order to update the activities for the radar data sharing implementation action plan, that Trinidad and Tobago: a) update the Radar Data Sharing Action Plan including all the actions and activities discussed and agreed in the E/CAR/NTG/04 Meeting, in terms of long and short term solution actions, States/territories implementing the Radar Displays in Phase 1 and 2, etc.; b) present this update to the next Radar Data Sharing Ad hoc Group teleconference in 20 August 2013 for approval; and c) present the final update to the E/CAR/DCA/25 Meeting.	Awaiting the progress of the multicasting which will set the timeline for the other radar sharing activities.
Draft Conclusion E/CAR/NTG/4/15	Local Telecom Infrastructure	That the E/CAR States/territories implementing the Radar Displays in the short term solution, implement the necessary local telecommunications infrastructure to complete the connectivity of the circuits provided by the E/CAR AFS Network from the demarcation point of the E/CAR AFS network router.	Information noted by States. Requirements to be supplied by TTCAA.
Draft Conclusion E/CAR/NTG/4/16	Hosting of the next E/CAR/NTG/05 and III Radar Data Sharing Ad hoc Group Meetings	In order to conduct the next E/CAR/NTG/05 and III Radar Data Sharing Ad hoc Group Meetings together to discuss and agree on the matters related to the expected improvements in the network performance, reporting and interconnection, as well as the result on radar data sharing activities, that the E/CAR/NTG Rapporteur prepares the necessary dissertation for the DCAs in the coming E/CAR/DCA/25 for requesting the States support for a host country for these meetings	E/CAR/NTG Rapporteur to present NTG/4 report to E/CAR/DCA/25 meeting.