



*International Civil Aviation Organization*

North American, Central American and Caribbean Office (NACC)

**Seventh Central American Air Navigation Experts Working Group Meeting  
(CA/ANE/WG/7)**

**Ninth Central Caribbean Working Group Meeting (C/CAR/WG/9)**

ICAO NACC Regional Office, Mexico City, Mexico, 5 to 9 March 2012

**Agenda Item 3**

**Air Navigation Matters**

**3.2 Follow-up on the implementation of the NAM/CAR Regional Performance Based Air Navigation Plan (RPBANIP) in Central America and the Central Caribbean:**

- **Progress reports of the AIM, AGA, ATM, CNS, MET and SAR Committees and the Chairpersons of each Working Group**

**(Presented by the MEVA/TMG Coordinator)**

1. Under this Agenda Item the meeting reviewed the Conclusions, Action Items, and Deliverables from previous TMG Meetings.

**CONCLUSION TMG/22/01 SES Equipment Support Commitment**

In order to confirm SES commitment in supporting the MEMOTEC, Linkway and other critical equipment of the MEVA II Network, SES shall submit to the MEVA members and ICAO no later than 3 June 2011, a Letter from SES Executive expressing this commitment. The Letter must include as well:

- a) that purchased spare parts can replace the existing equipment by sending it back to SES for repair, for which a charge cost for repair will not be made if the equipment is still under guarantee, only shipping charges will apply;
- b) The manufacturers' communications on the equipment support and production deadlines

1.1 SES is drafting a letter indicating their commitment in providing equipment support. This letter will be posted in the mevaii Website by 13 March 2012.

**CONCLUSION TMG/22/02 MEMOTEC and LINKWAY replacements**

Due to the no longer production of MEMOTEC 960e and Linkway 2100 Modems, and as a follow-up to potential solutions with replacements of these models in the MEVA II Network, SES shall:

- a) post on the MEVA II Website no later than June 3 2011, information on:
  - Linkway and Memotec 960e equipment replacements as it becomes available.
  - Linkway S2 model
  - Availability of spare parts in the Central spare parts pool
- b) Inform MEVA Members about the replacement of the Linkway 2100 for Linkway S2 Model at the hub no later than 3 June 2011.

1.2 The spare list is shown under procedures in the mevaii Webpage. This page was last updated in June 2011. SES indicated there is a new updated list dated 24 February and will be posted on the mevaii website by Friday 9 March 2012. Potential replacement information Linkway and Memotec 960 update will be posted 1 April 2012

**CONCLUSION 22/03 - ADOPTION OF MEVA II TECHNICAL CONTINGENCY PROCEDURES ver 3.0**

Considering the need to define contingency means to support the MEVA II Members in case of MEVA system failures, the MEVA Members are urged to:

- a) Adopt the final version of the MEVA II Technical Contingency Procedure Document Version 4, attached to this report;
- b) Conduct the necessary actions to formalize the implementation of these procedures and
- c) Inform the MEVA II Members and ICAO NACC Office, no later than November 2011, of the actions taken to formalize these procedures.

1.3 **CLOSED** - The MEVA II Technical Contingency Procedures ver 4.0 was formalized and is being adopted by all Meva II Member States

**CONCLUSION TMG/22/04 – Central Spare parts Pool inventory revision**

Considering the importance of keeping sufficient spare parts to support the network operations and new nodes/circuits, that:

- a) MEVA Members are urged to review the inventory of the Central spare parts pool and sent comments to the MEVA TMG Coordinator no later than 31 July 2011;
- b) And SES will provide a time line to complete the actions noted in paragraph 1.10 in the Project Plan to be submitted by 3 June 2011.

1.4 The TMG Members reviewed a copy of SES/C-Systems 2011 and 2012 inventory list. The Members express concern at the zero quantity for spare parts shown on the report. Also, some parts have been sent to Zimbabwe, Khazakstan, Thailand, etc. Members reminded SES that a fee is being paid for guarantee spare parts for MEVA only. These spare parts should not be used for other networks.

1.5 SES indicated they will verify this information with C-Systems and took an action to update the information posted on the website by. Update copy indicating the minimum # of spares and date when it will be purchased will be posted on 13 March 2012 Also, this information will include the minimum spare parts required to comply with the existing contract.

**CONCLUSION TMG/22/05 – Use of ATS Voice Circuits by Aruba**

In order to benefit from the operation and performance of the MEVA II Network, Aruba is urged:

- a) to review the use of their current voice circuit with Curacao to increase the use of this circuit through the MEVA Network, and
- b) inform their results during the MEVA/TMG/23 Meeting

1.6 **CLOSED** - Representative from Aruba indicated they are using ATS voice with Curacao and planning to move the line to MEVA Network once coordination with Curacao concludes at this meeting.

**CONCLUSION TMG/22/06 – MEVA Network Traffic Information and bandwidth use of MEVA/REDDIG Network nodes (Colombia and Venezuela)**

That SES-USG, in order to evaluate the bandwidth use and traffic generated by the MEVA /REDDIG nodes in relation to the MEVA Network:

- a) coordinates with the REDDIG Administrator access to the circuit statistic data for nodes in Venezuela and Colombia;
- b) Includes this information into the network/quarterly monthly reports and corresponding network performance graphics if possible; and
- c) Inform MEVA members no later than July, 2011 on the progress of tasks a) and b).

1.7 CLOSED - SES informed the meeting that the information requested on bandwidth use and traffic generated by the MEVA/REDDIG nodes can not be provided because the circuit statistic data can not be captured. Only call logs

**CONCLUSION TMG/22/07 – Update of Preventive and Corrective Maintenance Plan**

That in order to reflect the responsibilities in the maintenance of the equipments, updates for PoC's, and references:

- a) SES updates this document and sends a copy to the TMG Coordinator. The date as of when the document will be sent will be reflected on the Project Plan to be issued by SES on 3 June 2011.
- b) TMG Coordinator to coordinate with the MEVA Members the revision and comments to the proposed updated document by SES ( a); and
- c) Coordinate with SES to the updated the final version of this document to be posted in the MEVA II website.

1.8 CLOSED - This information was reviewed during the meeting and the information provided to SES to be uploaded on the mevaii Website.

**CONCLUSION TMG/22/08 – Quick Reference Guide and Online trouble tickets tracking for the NOC**

That in order to facilitate the use and application of the NOC and track efficiently the trouble ticket for resolving a failure, SES:

- a) Provide the NOC quick reference list and posts it on the MEVA II webpage by 26 May 2011.
- b) Evaluate and inform the MEVA Members on the implementation of the online trouble ticket tracking feature of the Harris NOC reporting system, presenting the corresponding activities for this on the Project Plan that will be posted on the MEVA II website on 3 June 2011.

1.9 OPEN - SES has posted the quick reference guide on the mevaii Website. However, they evaluated the online trouble ticket tracking feature of the Harris NOC reporting system and was unable to post the trouble ticket tracking on the mevaii Website. Trouble tickets are shown on the monthly report. TMG requested SES to find a way to provide service???

**CONCLUSION TMG/22/09 – Regional Interconnection/ Integration with the E/CAR Network**

Considering the importance of exchanging information for a regional interconnection/ Integration of the modernized MEVA Network (MEVA III) and the E/CAR Network, that the MEVA TMG Coordinator, United States and St. Maarten:

- a) exchange information with the E/CAR Network Technical Group for thregional interconnection/ Integration with their network; and
- b) inform the MEVA Members by the MEVA/TMG/23 Meeting, the progress achieved and how to include this information on the plans for the modernization of the MEVA Network

1.10 OPEN - This Conclusion will be carried out by the parties during the MEVA III RFI process

### **CONCLUSION 22/10 – Start the Transition Process to MEVA III**

Considering that currently several critical elements of the MEVA II node infrastructure are no longer manufactured and looking for costs savings with new technologies, bandwidth optimization and COTS equipment, that the MEVA Members start the process for transitioning to MEVA III (modernization of the MEVA II network):

- a) That a Letter of Intent for MEVA III be drafted by the MEVA TMG Coordinator, in coordination with all the MEVA members, and be sent to ICAO NACC Regional Office;
- b) ICAO, as coordinator of the MEVA II Network, to proceed accordantly with the Letter of Intention to all MEVA Member States/Organizations for their agreement to transition;
- c) That actions a) and b) may carried out by **31 August 2011**; and
- d) That the MEVA TMG coordinates and elaborates an action plan for the necessary activities to transition to MEVA III, informing on this plan by the next MEVA TMG Meeting (MEVA TMG/23).

1.11 CLOSED -This Conclusion is complete.

### **CONCLUSION 22/11 – MEVA II Website Improvements**

In order to make the MEVA II Website more efficient and friendlier, that the MEVA Service Provider SES:

- a) implements the identified improvements detailed in paragraph 5.5 of this report,
- b) post/update on the MEVA II Website the identified information listed in paragraph 5.6; and
- c) inform the MEVA Members of the implementation of a) and b) no later than **30 June 2011**.

1.12 The following items identified during the TMG/22 were reviewed and updated

- a) Trouble ticket tracking – **OPEN ??? review the contract and statement of work on this action**
- b) Organization of folder to reflect individual meeting of the MEVA TMG – **SES will modified the files to show one folder per TMG meeting by 1 April 2012**
- c) Dial line directory – **This action is still pending – updated by 1 April 2012**
- d) NOC common reference: PoC, etc. –**Completed**
- e) NOC Procedures, 1<sup>st</sup> level maintenance activities – **NOC procedures was completed, 1<sup>st</sup> level maintenance activities is still pending. This was defined last meeting.**
- f) Results of yearly maintenance visits –**CLOSED**
- g) MEVA TMG ToR, work programme, etc. - **Pending**

- 1.13 Also the following actions were reviewed and updated
1. Colombia and Venezuela should be added to the link status - **Pending**
  2. MEMOTEC and Linkway updated information - **Pending**
  3. Network Performance report - **Completed**
  4. Contingency Plan- **Completed**
  5. MEVA II Directory (including MEVA II REDDIG interconnection information) - **Completed**
  6. Updated MEVA TMG Point of Contact List - **Completed**
  7. MEVA NOC Point of Contacts - **Completed**
  8. Remove “Netherland Antilles” term as shown below:

### **CONCLUSION 22/12 – Task Force to Support GREPECAS D1 Project**

Project, that the Task Force formed by representatives from COCESNA (lead), Jamaica, Dominican Republic and United States as the core team and Haiti, Cayman Island, and Curacao as observers:

- a) Review and coordinate with the MEVA Service Provider the information requested by the GREPECA D1 Project;
- b) COCESNA to coordinate with the GREPECAS D1 Project the support requested; and
- c) The task force to inform by the next MEVA TMG Meeting (MEVA/TMG/23) the progress and completion of these activities.

1.14 This Conclusion was completed and a report is being presented to the Members under WP-04.

### **CONCLUSION 22/13 – Bandwidth Requirements for New Services**

In order to determine the potential use of the available contracted bandwidth and carried out the corresponding network expansion activities, that:

- a) the MEVA members provide the existing and future bandwidth requirements to TMG Coordinator by **end of September 2011** for the time frame 2011-2014 specifying the year for its implementation considering the initial requirements listed in paragraph 6.2 and the future initial requirements related with the MEVA II / REDDIG interconnection; and
- b) the TMG coordinator groups these requirements and present this result to the next MEVA/TMG Meeting (MEVA/TMG/23) and for its consideration for the MEVA III process.

1.15 Requirements were reviewed during the meeting and are presented under Agenda Item 2.

### **Agenda Item 2:           Operation and Performance of the MEVA II Network**

2. During this Agenda Item, AGS/SES provided an overview of the MEVA II Network Performance: 2011 network performance, major failures and specific working issues, NOC Operations, Coordination procedures.

Annual Operations and Performance – Bandwidth usage in the Network is increasing to the point that the spare bandwidth at peak usage is 4%. The Member showed concern for the existing bandwidth availability. SES took note and indicated they will look into this issue and report back to the MEVA Members.

**CONCLUSION 23/XX – AVAILABLE BANDWIDTH**

That:

**The members provide SES with a list of project requirements that will need additional bandwidth by 9 March 2012.**

**SES informs the members of their plan to increase bandwidth, as needed based on existing and future requirements.**

Maintenance Schedule – SES presented a copy of the maintenance schedule for 2012. The TMG should review such maintenance schedule and coordinate with SES.

The meeting agreed on the following Conclusion:

**CONCLUSION 23/XX – TMG MEMBERS TO COORDINATE MAINTENANCE SCHEDULE WITH SES**

That;

a) TMG Member States coordinate with SES the proposed maintenance presented during the meeting.

b) Once verified by States, SES post the official list on the meva ii Website by 2 April 2012

2.1 The attending Members provided the following update on the Network Performance and future requirements:

Aruba – Would like to increasing bandwidth for future use. Quicker response from SES. No new requirements for next two years

Curacao – Small problems with Memotec indicating that the lines falls out. They have two lines and one fails on point to point calls. Have installed AMHS domestically but is not operational (Ubitech). New requirement is the implementation of one shout down line with Aruba and one with Venezuela

Haiti – Failure two month ago, SES sent technician to fix the problem. Modernizing international airport in Haiti and will requesting the installation of another node because MEVA Network performed very well during earth quake. This new node is projected to be implemented in two years. Availability was 97% and Haiti would like for SES to increase availability. No new requirements for next two years.

Dom Rep – One problem with the UPS system. Replaced the battery. New requirements for AMHS testing, 4 shout down lines and 4 dial up lines. Line to San Juan is on hold. New center in Punta Cana should be installed by August, then shout down line with San Juan will be implemented.

Cuba – Network is working well. Problems with ups – there are two ups's connected together. V.24 card spare was used and never replaced. Will need 64K for AMHS implementation. Two radar data sharing lines with COCESNA and Jamaica. Another data circuit with Merida for AFTN. One shout down with Mérida. Quotes from for these new requirements were received.

COCESNA – MEVA node working well. New requirements – data channel for sharing data with Cuba and another for Jamaica. AMHS channel with US.

Jamaica – new requirements for date circuit with Cuba and COCESNA. Formally requested ½ circuit with Cuba and coordinating with COCESNA. Data circuit forvAMHS and shout down line with Curacao.

Panama – network working well. Future requirement are radar data sharing with Jamaica and AMHS with Atlanta in two years. Will moved to new building and will need a new antenna by April 2013.

St Maarten – waiting for SES to implement voice line with San Juan

USA – Network is working well. Experienced large delays on the Atlanta node implementation. Future requirements are AMHS implementation with other C/CAR States.

Mexico – no information on new node. Future requirements on Mérida node from teleconference between ICAO-COCESNA-FAA-Mexico. Two voice channels between Cenamer and Merida,1 data AFTN

Cenamer-Merida, 1 voice Guatemala-Merida-Tapachula, 1 voice Belize-Merida, 1 voice Habana-Mérida, 1 data AFTN San Julian and radar Cancun. Node will be operational towards the end of April.

2.2 A follow up teleconference will be scheduled for the middle of April with Cuba, México, COCESNA, FAA, and ICAO

2.3 SES took this opportunity to remind the Members of the regularly scheduled teleconference every third Wednesday of the month to review the MEVA II Network operation. SES also noted the lack of participation from Member on this monthly teleconference.

2.4 Based on the above mentioned information, the meeting agreed on the following conclusion:

**CONCLUSION 23/XX – MONTHLY SES/TMG MEMBERS NETWORK OPERATIONS REVIEW TELECONFERENCE**

**That MEVA II TMG Members actively participate on the network review monthly teleconference hosted by SES:**

NOC operations - 92 trouble tickets were open in 2011 vs. 33 in 2010. The increase is due to the new NOC reporting system that also opens a trouble ticket for maintenance events. Most of the trouble ticket reports were on Memotec failures.

MEVA II REDDIG Interconnection issues – SES completed testing of lines from Lima-US and Caracas-US. Caracas. Brasil line was tested only to Bogota.

FAA informed the meeting that Brasil is awaiting extension of the line from Bogota to Brasilia over REDDIG.

MII/REDDIG Pending implementation issues and other network interoperability activities. The meeting review and updated the following table

No.	Requirement CAR/SAM	Required AFS Circuits	Status	FOLLOW_UP / SEGUIMIENTO
1	2	3	4	5
1	Curaçao / Caracas (Venezuela)	1 ATS voice– A	OPERATIVE	
		1 AFTN data, 2400 bps, X25, IA-5	<b>Operative</b>	Missing end user equipment connection by Curacao
2	Aruba / Josefa Camejo (Venezuela)	1 ATS voice – A	<b>PENDING</b>	ARUBA: PBX upgrade in progress. Due date? ICAO will coordinate with REDDIG for internal connection from Caracas to Josefa Camejo tower
3	Atlanta (USA) / Caracas (Venezuela)	1 ATS voice – A	OPERATIVE	
		1 AFTN data, 9600 bps, X25, IA-5	<b>PENDING:</b>	The end-to-end test was completed in 3 November 2011. Cutover procedures been drafted and no cut-off date set yet.

4	Barranquilla (Colombia)/Curaçao  Barranquilla (Colombia)/Jamaica  Barranquilla (Colombia) / Panama	ATS voice – A	OPERATIVE	
5	Bogota (Colombia)/Panama	1 AFTN data, 2400 bps, X25, IA-5	OPERATIVE	
6	Bogota (Colombia) / Panama  Cali (Colombia)/ Panama  Medellin (Colombia) / Panama  San Andrés (Colombia)/ Panama	ATS voice – A	OPERATIVE	
7	Lima (Peru) / Miami (United States)	1 AFTN data, 2400 bps, X25, IA-5	<b>PENDING:</b>	The end-to-end test was completed in 3 October 2011. Cutover procedures been drafted and no cut-off date set yet.
8	Miami (United States) / Brasilia (Brazil)	1 AFTN data, 2400 bps, X25, IA-5	<b>PENDING: testing with Brazil and REDDIG</b>	The PAD conversion test and the required connectivity were completed 3 October, 2011. End to end testing to Bogota completed. Waiting for circuit extension Bogota-Brasilia over REDDIG. FAA to provide draft testing procedures to TMG coordinator for a proposed date for cutover .
9	Cenamer (COCESNA)/ Bogota (Colombia)  Cenamer (COCESNA)/ Guayaquil (Ecuador)	ATS voice – A	OPERATIVE	



2.5 The meeting discussed the future integration of the MEVA and REDDIG Networks and noted the lack of information available on the actions being carried out by the REDDIG Network in their efforts to modernize the existing network.

2.6 The following Conclusion was agreed by the meeting:

**CONCLUSION 23/XX – CAR / SAM COORDINATION FOR FUTURE NETWORKS**

That ICAO NACC coordinates with ICAO SAM Office the interconnection of future networks

2.7 As part of the evaluation done during the 22<sup>nd</sup> MEVA TMG Meeting held in Melbourne, Florida, United States in May 2011, under Conclusion 22/12, the TMG agreed that in order to support the activities and information requested by the GREPECAS D1 project, the Task Force which is formed by representatives from COCESNA (lead), Jamaica, Dominican Republic and United States as the core team and Haiti, Cayman Island, and Curacao as observers:

1. Review and coordinate with the MEVA Service Provider the information requested by the GREPECA D1 Project;
2. COCESNA coordinates the results of the information requested with GREPECAS D1 Project; and
3. The task force provides information during the next MEVA TMG Meeting (MEVA/TMG/23) of the progress and/or completion of these activities.

2.8 SES responded to the Information Requested for the TMG on February 9. The information is presented as attach to this report. This information will be given to the GREPECAS D Project for its discussion and development of the assigned deliverables.

2.9 GREPECAS D Project will be meeting at Miami from 12 to 13 April immediately after the AMHS Implementation follow-up Meeting.

2.10 A teleconference is scheduled for next Wednesday 21 March at 12:00 between SES and D-Members to discuss the information presented under attachment X to this report.

**Agenda Item 3: Upgrades and expansion to MEVA II Network infrastructure**  
(provide information from states's requirements)

**Agenda Item 4: Transition to MEVA III**

4. The MEVA/TMG/22 Meeting proposed the MEVA III process. The Directors of Civil Aviation members of MEVA totally supported and approved the MEVA III process through the Letter of Intent (LOI) submitted to this respect.

4.1 Previous experiences with the MEVA and MEVA II tender process have highlighted the need for a small group of people to develop the documentation needed. As such the TMG Coordinator proposed the formation of a MEVA III Task Force tasked to draft, review and modify the MEVA III RFI and RFP, update the WBS. Once the documents are drafted, the Task Force will present them to the TMG for final review and approval. The proposed Task Force be responsible for

- a) Project Work Plan and Schedule
- b) Generate and issue a Request for Information (RFI)
- c) Generate and issue a Request for Proposal (RFP)
- d) Update to DOA and other Network administrative issues

4.2 The proposed Task Force was approved by the TMG nominating the following Members to participate

COCESNA - Roger Pérez

FAA - Dulce María Rosés and Olivier Delperdange

Jamaica - Derick Grant and David Miller

Panama - Daniel Avila

Haiti - Yves Andre Cesar - would like to be part of the Task Force as an observer

ICAO will create a website called Transition to MEVA III

4.3 A draft copy of the proposed WBS will be sent to the Task Force Members by Friday 16 March.

4.4 The Meeting agreed that the RFI be drafted in such a way that the response from potential service providers includes all available technologies and architectures.

**Agenda Item 5: Revision of MEVA TMG Terms of Reference, work programme and membership**

5.1 The Document of Agreement was updated to include Mexico as a new Member. ICAO will send the document to SENEAM for signature

**Agenda Item 6: Other Business**

6.1 MEVA TMG/24 will be in October 2012.

This meeting will not be combined with other meetings.