



Agenda Item 2: Air Navigation Issues
2.3 Follow-up to other Air Navigation Issues

**STATUS OF THE VSAT MEVA II NETWORK
AND ITS INTERCONNECTION PROCESS WITH REDDIG**

(Presented by the Secretariat)

SUMMARY

This paper presents an analysis of the follow-up to the development and interconnection status of the VSAT MEVA II Network to the REDDIG Network.

References:

- Report of the Fourth MEVA II / REDDIG Coordination Meeting, (Lima Peru, 7-9 March 2007)
- GREPECAS/14 Report
- Report of the CAR/WG/1 Meeting, Port of Spain, Trinidad and Tobago, 21-23 June 2007
- State Letters Ref. N 1/3.6.3 – EMX0282, EMX0487 and EMX0593

1. Introduction

1.1 The First Meeting of the Caribbean Working Group (CAR/WG/1) held in Port of Spain, Trinidad and Tobago, from 21 to 23 June 2007, took note of the status of the VSAT MEVA II Network (digital communications network in the CAR Region), as well as the status of its interconnection with the VSAT South American Network (REDDIG). **Appendix A** to this paper presents an updated summary of the MEVA II network status.

1.2 This paper presents an analysis of the results of the consultation process made with MEVA II and REDDIG Member States, Territories and one International Organization, which was conducted by the ICAO NACC and SAM Regional Offices, as follow-up to the Conclusions from the Fourth MEVA II / REDDIG Coordination Meeting (MR/4).

1.3 The MEVA II / REDDIG Memorandum of Understanding (MoU), prepared by the MR/4 Meeting, was circulated by the ICAO NACC Regional Office to the MEVA II network Member States, Territories and one International Organization through letter N 1/3.6.3 – EMX0282, dated 23 March 2007.

1.4 Likewise, the Action Plan for the *MEVA II / REDDIG Interconnection*, prepared by the MR/4 Meeting, was reviewed by the GREPECAS/14 Meeting; the results of this revision are presented in Appendix Z to the report of the mentioned Meeting. As a result of these actions, GREPECAS drafted Conclusion 14/52 – *Review for the Adoption of the Memorandum of Understanding and Implementation of the Action Plan for the MEVA II / REDDIG Interconnection*.

1.5 Moreover, the MEVA II / REDDIG Interconnection Task Force prepared a technical-economical request for proposal (RFP) for the MEVA II / REDDIG interconnection, which was forwarded to the Members of the MEVA II / REDDIG networks for review and approval (letter sent to MEVA II Members – Ref. N 1/3.6.3 – EMX0487, dated 17 May 2007). The revised RFP would be forwarded to the MEVA II Service Provider and the REDDIG Administrator.

1.6 Taking into account the few responses received to the aforementioned communications, the ICAO NACC Office sent the MEVA II Members letter Ref. N 1/3.6.3 – EMX0593, dated 19 June 2007, stating that if no response was received before 29 June 2007, it would be considered that Administrations agreed to the proposals with no comments. The SAM Regional Office issued a similar letter to REDDIG members.

2. **Analysis of the consultation process and response to the MoU and RFP for the MEVA II / REDDIG Interconnection**

2.1 **Appendix B** to this paper presents a summary of the responses received to the MoU and MEVA RFP consultations for the MEVA II / REDDIG interconnection.

2.2 As a result of the analysis of the responses received to the MoU and MEVA RFP consultations for the MEVA II / REDDIG interconnection, it is proposed that the Meeting review and adopt the following premises:

- a) None of the responses received oppose continuation of the MEVA II / REDDIG Interconnection Process; therefore, the implementation of the Interconnection Action Plan should continue.
- b) It is a given that the RFP has been approved by MEVA II and REDDIG Members; therefore, it will be sent to the MEVA II Service Provider and the REDDIG Administrator.
- c) Since several members of both networks have not signed the MoU, though many have expressed their agreement with the MoU and some have provided proposals for amendment to the MoU, the Secretariat will prepare a revised MoU proposal that groups and harmonizes all the proposals for amendment that have been received. This will be presented for the consideration of the Fifth MEVA II / REDDIG Coordination Meeting (MR/5), which is scheduled to be held in the ICAO NACC Office in Mexico City from 26 to 28 September 2007.

- d) The MR/5 Meeting should review the responses related to the RFP and adopt the corresponding decisions as appropriate.
- e) The MR/5 Meeting should review the proposals for amendment to the MoU and adopt the actions deemed appropriate regarding the MoU.

3. Suggested action

3.1 The Meeting is proposed to:

- a) take note of the information contained in this working paper;
- b) review the status of the MEVA II Network;
- c) review and agree to apply the follow-up actions to the MEVA II / REDDIG interconnection process proposed under paragraph 2.2 of this paper; and
- d) agree to any other actions as deemed appropriate.

APPENDIX A

SUMMARY ON THE IMPLEMENTATION STATUS OF THE MEVA II VSAT NETWORK IN THE CENTRAL CARIBBEAN AND THE PROCESS FOR ITS INTERCONNECTION WITH THE SOUTH AMERICAN VSAT NETWORK (REDDIG)

1. The MEVA VSAT network was developed and has been implemented since 1996, mainly in the Central Caribbean, providing voice and data communications for Aeronautical Fixed Services (AFS) between 15 VSAT-equipped nodes in the Central Caribbean and neighbouring zones. MEVA operates in the 4-6 GHz C-band on the PAS-1R satellite and uses SCPC/DAMA technology for bandwidth-on-demand communications and circuit management. This network has made implementation and improvement of the AFTN and ATS speech circuits required for this area in the Air Navigation Plan possible.
2. The States, Territories and International Organizations Members MEVA I, considering the SARPs contained in Annex 10, Vol. III, Chapter 3, as well as the ICAO guidance related to the need not only to satisfy AFS communications requirements, but also aimed at supporting communications, navigation, surveillance and air traffic management services to facilitate the introduction of aeronautical telecommunications network (ATN), recognized the need to update the MEVA Network to facilitate the adoption of protocols and services with common interface equipment based on the reference model for the open system interconnection (OSI) of the International Standardization Organization (ISO), and the MEVA Network interconnection/interoperability achievement with other regional and sub-regional digital networks, such as the South American Digital Network (REDDIG). This initiative is called the “MEVA II Network”.
3. The MEVA Technical Management Group, integrated by experts from States, Territories and an International Organization, studied in detail the MEVA update aspects toward the MEVA II Network implementation. Such work represented the basis for the Request for Information (RFI) and subsequently the Request for Proposals (RFP) for the MEVA II and the evaluation and selection of the best proposal. This stage of the process culminated with the MEVA/10 Meeting held in Mexico City, 13 – 15 December 2004, in which the Civil Aviation Directors approved the Service Provider for the MEVA II Network, as well as the updated Document of Agreement (DOA) for the MEVA II Network, which has been approved through the signatures of Directors of Civil Aviation.
4. The MEVA II Network has been conceived with a satellite technology access VSAT/TDMA/Frame Relay type, through a “Full Mesh” network topology, the use of PAS 1R satellite with beam directed over United States / Latin America, operation frequencies in the C Band, and vertical linear polarization. All of this contributes to objectives to satisfy the AFS communications required at present, to ease the ATN sub-networks implementation and to achieve interoperability between the MEVA II and REDDIG networks and other CAR Region subregional networks, contributing to the implementation of the new CNS/ATM systems, including the new ATM integrated global system.
5. During the first months of 2005, the MEVA II TMG finalized Annex I of the MEVA II Document of Agreement, which is a technical document describing the network. Likewise, the transition plan of MEVA to MEVA II was developed. Based on these documents and in accordance with the corresponding national laws, the MEVA II members arranged their contracts with the MEVA II Service Provider. Cuba and Panama established their MEVA contracts through the ICAO Technical Co-operation Bureau.

6. The implementation of the following MEVA II nodes were completed in November 2006:

- Aruba, Aruba
- Bahamas, Freeport
- Bahamas, Nassau
- Cayman Islands, Grand Cayman
- Cuba, Havana
- Netherlands Antilles, Curacao
- COCESNA, Honduras, Tegucigalpa
- Dominican Republic, Santo Domingo
- Haiti, Port-au-Prince
- Jamaica, Kingston
- USA, Miami, FL
- Panama, Panama
- USA, Puerto Rico, San Juan

7. Regarding the interconnection of MEVA II with VSAT REDDIG, the Fourth MEVA II / REDDIG Coordination Meeting (MR/4) held in Lima, Peru, from 7 to 9 March 2007, reviewed all technical-operational aspects for the implementation of the interconnection solution in the Bogota and Caracas REDDIG nodes; in the Tegucigalpa COCESNA MEVA II node; as well as the impact that the interconnection would have on the Aruba, Curaçao, Kingston, Miami, San Juan and Panama MEVA II nodes; and in the Guayaquil, Lima and Manaus REDDIG nodes. Additionally, it produced the communication service requirements for interconnection and the required premises, equipment and devices for the interconnection.

8. In addition, a MEVA II / REDDIG Memorandum of Understanding (MoU), an Action Plan and a technical-economical Request For Proposal (RFP) for the MEVA II / REDDIG interconnection were produced. These documents have been sent to the members of both networks for review and approval.

APPENDIX B

Table 1 – Responses of the MEVA II Members on the MoU and RFP	
Signed the MoU:	Comments
United States	-- Agrees with the RFP.
COCESNA	Needs clarification regarding the MoU Appendices. Agrees with the RFP.
Did not sign the MoU, but sent comments:	
Bahamas	Has no objection to the interconnection process.
Cuba	The MoU should be limited to the interconnection, the content of the pertinent Appendices should be completed and proposed modification to the text. Has no objection to the RFP.
No response has been received:	
No responses have been received from the remaining MEVA II Members.	

Table 2 – Responses of the REDDIG Members on the MoU and RFP	
Signed the MoU:	Comments
Chile, France, Guyana and Paraguay	Have accepted the MoU and the RFP with no comments.
	No comments.
Did not sign the MoU, but sent comments:	
Argentina	Agrees with the MoU and the RFP.
Brazil and Peru	Have accepted the MoU and the RFP.
Colombia	Notified that they will respond before 6 July.
Venezuela	Agrees with the MoU and the RFP.
No response has been received:	
No responses have been received from the remaining REDDIG Members.	