International Civil Aviation Organization
North American, Central American and Caribbean Office

WORKING PAPER

NACC/WG/7 — WP/17
28/08/22

Seventh North American, Central American and Caribbean Working Group Meeting (NACC/WG/7)
ICAO NACC Regional Office, Mexico City, 29 August - 1 September 2022

Agenda Item 3: **Follow-up of the Activities of the NACC/WG Task Forces**
3.3 Improvements to the ATS Voice Link (MEVA) reports and the new communication network CANSNET, the Eastern Caribbean Civil Aviation Technical Group (E/CAR/CATG), and the Eastern Caribbean Aeronautical Fixed Service Network Technical Group (E/CAR AFS NTG)

OPERATION AND PERFORMANCE OF THE MEVA III NETWORK IN THE PERIOD 06/2021 – 07/2022

(Presented by the MEVA/TMG Rapporteur)

EXECUTIVE SUMMARY	
This working paper presents a summary of the work carried out by the MEVA Technical Management Group, in the period of 06/2021 – 07/2022	
Action:	Suggested actions are presented in Section 3.
Strategic Objectives:	• Safety • Air Navigation Capacity and Efficiency • Economic Development of Air Transport
References:	• Thirty-Seventh MEVA Technical Management Group Meeting (MEVA/TMG/37), August 2022. https://www.icao.int/NACC/Pages/meetings-2022-mevatmg37.aspx

1. Introduction

1.1 The Thirty-Seventh Meeting of the MEVA Technical Management Group (MEVA/TMG/37) was held in Mexico City from August 8 to 10, 2022 in person and online. Its main purposes were to monitor the operation and performance of the MEVA III network, assess the improvements that can be implemented during the remaining years of its operation, as well as for the States, in a coordinated effort, to define and review the technical requirements and operations of the new Caribbean Air Navigation Services Network (CANSNET).

1.2 The MEVA telecommunications network is in its penultimate year of operation due to contractual issues, since by March 2025 this network will be disabled.

1.3 As part of the work of the Ad-hoc Group, it was recommended that States take measures to ensure that the radio spectrum used for current and future air navigation services is available. In this sense, ICAO has shared its concerns about possible interference with radio altimeters operating in the 4 200-4 400 MHz frequency band, due to the deployment of 5G mobile service systems planned to operate in adjacent/close frequency bands in the frequency band 4 200-4 400 MHz

1.4 MEVA III has been operating efficiently in accordance with the expectations and requirements for which it arose in terms of the communications area, however, the work that has been carried out to date in terms of regional recommendations for the management of aeronautical frequencies has been insufficient.

1.5 The development of the CANSNET communications network will replace the MEVA network and will provide efficient support to air navigation services in the region. This will become a digital network that will allow not only the expansion of communications and services between the States of the NAM/CAR Region, but also with other regions with which our States have operations, such as the regions of South America, Europe and Africa, this is the main role of the MEVA Technical Management Group, which will change to manage CANSNET.

2 Discussion

2.1 During the meeting, the operation and performance of the MEVA III Network was analysed, in the period 06/2021 - 07/2022, within the framework of the presentation made by its service provider, Frequentis.

2.2 The causes of the interruptions faced by the MEVA network were analysed, mainly in the month of June 2022, where there was a higher incidence. In this sense, the supplier identified:

1. Outages announced at the Miami Teleport
2. Mérida faced several blackouts due to lightning strikes and electrical problems
3. Two general outages were observed related to the interference of the space segment
4. Faulty UPS observed in Haiti and FAA Atlanta

2.3 As a result of the analysis regarding failures that still exist in voice links between Jamaica - Colombia (Barranquilla), and radar data between Cuba - Mexico (Mérida), the meeting decided to coordinate tests with the States involved and the provider, aimed to the study, identification and solution of the interruptions in question. In this sense, it was also decided to carry out an OJT on the use of the procedure for opening reports in case of failures, in which the members of MEVA and the MEVA network provider, Frequentis, participate.

2.4 In this period MEVA III has had growth given by new geo-redundant stations, one already installed in Cuba and another with delivery in progress in Jamaica.

2.5 In the period in question, the Member States extended the current MEVA III contract, until March 2025, in compliance with CONCLUSION MEVA/TMG/36/03 “APPROVAL OF THE EXTENSION OF THE CONTRACT WITH THE CURRENT MEVA III SERVICE PROVIDER UNTIL MARCH 2025”.

2.6 Since October of last year, and throughout the year, numerous activities have been carried out by ICAO through the NACC Regional Office to emphasize the attention of Member States regarding the importance of supporting ICAO's position in the twenty-third World Conference of Radio communications (WRC-23) of the International Telecommunications Union (ITU), through the respective coordination and participation with its National Authorities of the Frequency Spectrum, thus ensuring that the results of WRC-23 reflect the continuous need of civil aviation in relation to the radio frequency spectrum, in support of current and future flight safety applications.

2.7 During this period, the coordinator of the Ad Hoc Group for the Management of the Aeronautical Frequency Spectrum, together with its Points of Contact (PoCs) of the MEVA Member States, worked to update the Lists COM 1, 2 and 3 of the ICAO Frequency Finder database according to the regional frequencies.

2.8 On 2 March of this year, Frequentis operated a new MEVA frequency change due to interference on the IS-14 satellite. The transition was successful and Frequentis assured the MEVA members that they would not be forced in the medium term to move their operating frequency again. States were encouraged to register this new satellite frequency with their local spectrum regulator.

2.9 During the meeting, the need for the region to work hard to protect and ensure that present and future aeronautical services have the necessary frequencies to be provided safely was analyzed. In this sense, the importance of having specialized work that should be developed by experts in the area of radio spectrum management was identified. Thus, the MEVA/TMG Group proposes to this NACC/WG meeting the creation of a task force specialized in this area, to lead the activities and management of the radio spectrum.

2.10 In 2018, during the MEVA/TMG/33 meeting, the Central Caribbean Member States/Organizations of the MEVA III Network identified the need to review the MEVA architecture and services to ensure that the Network would support emerging requirements in a cost-effective manner.

2.11 CANSNET has been conceived to support all the new requirements of the Aeronautical Telecommunications Network (ATN) in the CAR Region, with its interconnection with the adjacent ICAO regions in a profitable manner, achieving the quality, redundancy and reliability required by the evolution of air navigation services.

2.12 The process followed by the MEVA TMG and the CANSNET ad-hoc group for the acquisition and implementation of the new network will be exposed in the NACC/WG/7 – IP/02, for its more detailed description.

2.13 For reference by the North American, Central American and Caribbean Working Group (NACC/WG), the document Conclusions and Recommendations of the Thirty-seventh Meeting of the MEVA Technical Management Group is included in the annex 1 to this note.

2.14 One of the decisions that the MEVA/TMG/37 Group took during the meeting was:

<table>
<tr><td colspan="3">Draft CONCLUSION
MEVA/TMG/37/01 CREATION OF A REGIONAL TASK GROUP SPECIALIZED IN THE MANAGEMENT OF AERONAUTICAL FREQUENCIES</td></tr>
<tr><td colspan="2">What:
That, considering that frequencies are a limited resource used by companies around the world to provide services in different areas, the frequencies that had previously been assigned to aeronautical services have been gradually assigned to other services and the region needs to work hard to protect and ensure that aeronautical services have the necessary frequencies to safely provide present and future aeronautical services. Specialized work is required and should be managed by specialists in this area. In this sense, the MEVA/TMG Group will coordinate with the NACC/WG the creation of a task group specialized in this area, which will lead the activities and management of the spectrum to ensure that the frequencies necessary to provide current and future aeronautical services are available and thereby ensure zero interference with other services.</td><td>Expected impact:
☐ Political / Global
☒ Inter-regional
☐ Economic
☐ Environmental
☒ Operational/Technical</td></tr>
<tr><td colspan="3">Why:
In order for the adequate and timely management of aeronautical frequencies to carry out the necessary analyzes so that the CAR States support the ICAO positions before the WRC conference in a regional manner, support the timely assignment of frequencies in the CAR region and assist in the protection of aeronautical frequencies by each State.</td></tr>
<tr><td colspan="2">When: NACC/WG/07 – 29 August 2022</td><td>Status: ☐ Valid / ☐ Superseded / ☐ Completed</td></tr>
<tr><td colspan="2">Who: ☐ States ☒ ICAO ☒ Other:</td><td>MEVA/TMG and ICAO</td></tr>
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2.15 The management of aeronautical frequencies is very important for the region, which is why it is important to carry out this management efficiently and effectively and give the States the necessary recommendations to ensure the protection of the frequencies that are needed to safely provide services. Aeronautical

3 Suggested actions

3.1 The Meeting is kindly invited to:

a) review the information presented in this working paper;
b) create an independent regional task force specialized in the management of aeronautical frequencies and part of the NACC/WG;
c) support the protection of frequencies on a regional basis to ensure their safe operation; and
d) another activity that applies.

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APPENDIX

Draft Conclusions and Decisions

<table>
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Update of the lists of Frequencies COM 1, COM 2 and COM3 of ICAO:

1. COCESNA is pending delivery of the information from the Central American States.
2. United States: Pending delivery of Puerto Rico frequency listings.

DECISION MEVA/TMG/37/02	**ON-THE-JOB TRAINING (OJT) ON MANAGEMENT FAILURES IN THE MEVA NETWORK**	
What: Considering the express need of the members of the MEVA/REDDIG interconnection for a better management of network failure event tickets as stated in the MEVA procedures: a) The MEVA Network Coordination (NACC Regional Office) coordinate an online event to provide an OJT about the use of the procedure for issuing tickets in case of failures (XXXX); in which MEVA members and the MEVA Network Provider – Frequentis participate, b) That the MEVA Member States update the information of the contact points of the technical personnel of their States that should receive information about failures or activities that affect the network no later than 20 September 2022.		**Expected impact:** ☐ Political / Global ☐ Inter-regional ☐ Economic ☐ Environmental ☒ Operational/Technical
Why: Improve the management of troubleshooting in the MEVA network more immediately, this being a need for MEVA Members to ensure that the services are operating correctly.		
When: 20 September 2022		**Status:** ☒ Valid / ☐ Superseded / ☐ Completed
Who: ☒ States ☒ ICAO ☒ Other:		MEVA Member States, ICAO NACC and MEVA network provider

DECISION MEVA/TMG/37/03	**TROUBLESHOOTING IN MEVA NETWORK CIRCUITS**	
What: That, considering the need to find the origin and solve the faults between the Jamaica - Colombia (Barranquilla) and Cuba - Mexico (Mérida) circuits; Jamaica, Cuba, Mexico, the MEVA service provider, and the REDDIG network carried out coordinated tests at the aforementioned MEVA network points, integrating personnel from the States and the service provider for the different network points and based on the results of the tests carried out, the pertinent actions for the solution of the faults.		**Expected impact:** ☐ Political / Global ☐ Inter-regional ☐ Economic ☐ Environmental ☒ Operational/Technical
Why: Ensure that communications between States through the MEVA network meets network availability requirements to ensure that communications between States adequately support operational services.		
When: 30 September 2022		**Status:** ☒ Valid / ☐ Superseded / ☐ Completed
Who: ☒ States ☒ ICAO ☒ Other:		Cuba, Jamaica, REDDOG, Mexico, ICAO NACC and MEVA Network Provider

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<tr><td colspan="3">DECISION
MEVA/TMG/37/04 REVIEW AND APPROVAL OF THE UPDATED VERSION OF THE CANSNET RFP DOCUMENT</td></tr>
<tr><td colspan="2">What:
That, considering the update of the CANSNET RFP document by the CANSNET ad-hoc group and the importance of having comments from MEVA members:

a) The TMG Secretariat sends the updated version of the CANSNET RFP document to the MEVA TMG PoCs for their review and acceptance.
b) b) The members, once the document in question has been reviewed, will send the comments they deem necessary to the TMG coordination, expressing their agreement if they do not have any modification recommendation.</td><td>Expected impact:
☐ Political / Global
☐ Inter-regional
☐ Economic
☐ Environmental
☒ Operational/Technical</td></tr>
<tr><td colspan="3">Why:
It is important that all States review that their needs and requirements regarding the CANSNET network are included in the RFP document and also give their acceptance of said document.</td></tr>
<tr><td>When: 21 August 2022</td><td colspan="2">Status: ☒ Valid / ☐ Superseded / ☐ Completed</td></tr>
<tr><td>Who: ☒ States ☒ ICAO ☒ Other:</td><td colspan="2">MEVA State Members, ICAO NACC; CANSNET Ad hoc Group</td></tr>
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Procedure agreed with Frequentis to resolve non-payment problems:

1. Frequentis will notify the ICAO NACC Regional Office when a State has an invoice that is more than 45 days late in payment.
2. Frequentis will send a copy of the pending invoices for a better reference of the amounts owed and the services.
3. The ICAO NACC Regional Office will coordinate as it has done so far with the States.
4. Each State that for any reason has a pending payment of more than 45 days must send information about the dates on which the amounts owed will be covered.

— END —