MEVA/TMG/34 — WP/07 05/06/19

# Thirty Fourth MEVA Technical Management Group Meeting (MEVA/TMG/34)

Miami, United States, 11 to 13 June 2019

Agenda Item 2: Operation and Performance of the MEVA III Network

2.3 Aeronautical Message Handling System (AMHS) connections

## **Decommissioning of FAA x.25 Network**

(Presented by the United States)

	EXECUTIVE SUMMARY
This working paper presents the progress in decommissioning the FAA X.25 network and discusses support for remaining legacy X.25 AFTN connections	
Action:	Suggested actions are listed in Section 4.
Strategic	Safety
Objectives:	Air Navigation Capacity and Efficiency
References:	<ul> <li>Eighth Central Caribbean Working Group Meeting (C/CAR/WG/8) Miami, United States May 2010.</li> <li>Thirty first MEVA Technical Management Group Meeting (MEVA/TMG/31), Kingston, Jamaica 24-26 May 2016</li> </ul>
	<ul> <li>Thirty second MEVA Technical Management Group Meeting (MEVA/TMG/32), Havana, Cuba 10-12 May 2017</li> </ul>
	<ul> <li>Thirty-third MEVA Technical Management Group Meeting (MEVA/TMG/33), Willemstad, Curaçao, 29-31 May 2018</li> </ul>

### 1. Introduction

- 1.1 At the Eighth Central Caribbean Working Group Meeting (C/CAR/WG/8) held in Miami, United States in May 2010, the FAA announced plans for decommissioning its X.25 network and concentrating all international connections through its Atlanta and Salt Lake Network Enterprise Management Center (NEMC) locations. Updates were provided at recent MEVA Technical Management Group meetings in Jamaica, Cuba and Curação.
- 1.2 The current FAA X.25 network is beyond the end of life and has no active vendor maintenance. Similarly, the X.25 interface for the FAA's AFTN message switch is obsolete.

- 1.3 Since 2010, the FAA has reduced the number of X.25 network nodes from twenty-four to two, at Atlanta GA, and Salt Lake City, UT. The number of X.25 users has been reduced from over six hundred to six remaining. Of these, four users will be transferred to X.25 legacy support in the very near future: Bahamas, Haiti, Peru and Venezuela.
- 1.4 This paper presents a brief description of ongoing temporary support for the legacy X.25 connections prior to transition to AMHS.

#### 2. Discussion

- 2.1 Four MEVA III users will need X.25 AFTN support after the decommissioning of the FAA's network. The FAA has implemented a temporary COTS TCP/IP to X.25 conversion solution (using CISCO equipment).
- 2.2 The FAA AFTN switch originates a TCP/IP session to a router that, in turn, generates an outgoing X.25 Switched Virtual Circuit (SVC) connection to the MEVA III user. A Packet Assembler Disassembler (PAD) function on the router converts the TCP message data into X.25 packets and vice versa. AFTN messages to and from the user use the same SVC connection.
- 2.3 The FAA's redundant AFTN switches at Atlanta and Salt Lake City are unable to receive TCP connections from the CISCO PAD devices. The result is that X.25 SVCs must be initiated by the FAA and received by MEVA III users. This may be a change in the current operation where SVCs are initiated in both directions. The FAA will maintain SVCs persistently.
- 2.4 Implementations of X.25 PADs by the MEVA III vendor in Peru and Venezuela only receive X.25 SVCs. Haiti also receives X.25 SVCs. Only Bahamas is likely to see a change in operation.

# 3. Conclusion

3.1 In order to complete decommissioning of its X.25 network, legacy X.25 AFTN users will be migrated to a TCP/IP to X.25 conversion capability in the near future.

# 4. Suggested Actions

- 4.1 The Meeting is invited to
  - a) Take note of the information in this paper; and
  - b) Take appropriate action as needed