



ICAO

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

WORKING PAPER

MEVA/TMG/31 — WP/05  
19/05/16

**Thirty first MEVA Technical Management Group Meeting (MEVA/TMG/31)**  
Kingston, Jamaica, 24 to 26 May 2016

**Agenda Item 6: Other Matters**

**LEGACY X.25 AFTN SUPPORT**

(Presented by United States)

<b>EXECUTIVE SUMMARY</b>	
This working paper presents a plan for the FAA to support legacy AFTN connections after decommissioning of its X.25 network.	
<b>Action:</b>	Suggested actions are listed in section 3
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li><li>• Security &amp; Facilitation</li><li>• Economic Development of Air Transport</li><li>• Environmental Protection</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• MEVA Technical Management Group Meeting (MEVA/TMG/29), Mexico City 9-12 December 2014</li><li>• MEVA II and III Teleconferences for Monthly reports</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 the concentration of international X.25 connections at its Atlanta and Salt Lake Network Enterprise Management Center (NEMC) locations.

1.2 All MEVA III connections are now terminated at Atlanta and are supported by the FAA X.25 network node there.

1.3 Since 2010, the FAA has reduced its X.25 users from approximately 500 to just over 20. The majority of the remaining users are international X.25 AFTN and twelve users are supported on the MEVA III network.

1.4 The FAA has managed to reduce the number of X.25 network nodes and will shortly have just two operational nodes remaining at Atlanta and Salt Lake City. The current network is beyond the End Of Life and has no active vendor maintenance. Continued sustainment is increasingly difficult.

1.5 Similarly the FAA's NAS Messaging Replacement (NMR) AFTN message switch has X.25 interface cards that need to be retired so that essential server upgrades can be performed.

1.6 This paper discusses the FAA's plans for the final elimination of the existing nodes and ongoing support for the legacy X.25 connections.

## **2. Discussion**

2.1 ICAO has encouraged existing X.25 AFTN users to migrate to Air Traffic Services Message Handling System (AMHS) and the NACC region is implementing an IP-based approach. The FAA has actively supported this approach and is testing with several of the region's ANSPs today with an intention for their migration to AMHS.

2.2 Meanwhile several MEVA III users are expected to continue to need X.25 AFTN support in advance of their migration to AMHS. The FAA plans to deploy COTS TCP/IP to X.25 conversion allowing a local TCP/IP connection originated from the NMR switch to be converted into the existing X.25 AFTN connection.

2.3 Since NMR provides geographic redundant service between Atlanta and Salt Lake City, either center may initiate the TCP/IP session. The result is that continuous X.25 SVCs must be initiated by the FAA and received by legacy X.25 users. This may be a reversal of today's operation or a change if two-way initiation is used. Recent implementations (Aruba, Bogota, Caracas) of X.25 PADs by the MEVA III vendor have already been configured to receive X.25 SVCs only.

2.4 Testing of the TCP/IP to X.25 conversion capability is currently underway and scheduled for deployment in 2016. A schedule for migration of existing X.25 users to this new support mechanism will be forthcoming.

## **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. The result will be the users may have to change their X.25 configuration to receive X.25 SVC connections only.

## **4. Suggested Actions**

3.1 The Meeting is invited to

- a) Take note of the information in this paper; and
- b) Take appropriate action as needed