



ICAO

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

INFORMATION PAPER

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**Thirty Sixth MEVA Technical Management Group Meeting
(MEVA/TMG/36)**

On-line, from 1 to 3 June 2021

**Agenda Item 2: Operation and Performance of the MEVA III Network
2.3 Aeronautical Message Handling System (AMHS) connections**

SOUTH AMERICAN DIGITAL NETWORK (REDDIG) INTERCONNECTION

(Presented by United States)

EXECUTIVE SUMMARY

This paper presents information on the interconnection between the Federal Aviation Administration (FAA) and the South America Red Digital (REDDIG) MPLS network. The additional nodes in Atlanta and Salt Lake City add improved telecommunications performance and redundancy to the region.

<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency
<i>References:</i>	<ul style="list-style-type: none">• State Letter NT-N1-3.6 — E.OSG - NACC85664: Thirty Sixth MEVA Technical Management Group Meeting (MEVA/TMG/36).

1. Introduction

1.1 This paper presents information on the interconnection between the Federal Aviation Administration (FAA) and the South America Red Digital (REDDIG) network. The new network connections are representative of a bilateral agreement between the FAA and the ICAO South America Regional Office. These new services represent a significant improvement in network performance and reliability.

1.2 The objective of the new service is to establish communications with specific States within South America using a technically improved infrastructure to provide superior performance and reliability.

2. Discussion

2.1 The FAA installed REDDIG nodes in Atlanta and Salt Lake City provided by Lumen Technologies. The nodes are configured to operate within the REDDIG MPLS network with dynamic routing enabled to improve redundancy.

2.1.2 Connectivity to the REDDIG cloud from FAA facilities is supported with 10 Megabytes of bandwidth.

2.1.3 The FAA nodes are known as external nodes and do not constitute membership in the REDDIG Regional Project.

2.2 MEVA connectivity

2.2.1 MEVA connections to South America establish connectivity to the following States:

- Caracas, Venezuela
- Brasilia, Brazil
- Lima, Peru



2.2.2 The MEVA interconnection in Bogota created a single point of failure to reach Brasilia and Lima. However, the Venezuela connection was not subject to interconnection issues but remained vulnerable to satellite outages.

2.3 REDDIG MPLS

2.3.1 Diverse connectivity from ATL and SLC to the REDDIG MPLS network.



- South America AMHS:
 - Brasilia, Brazil (Dec 2020)
 - Lima, Peru (Dec 2020)
 - Trinidad (2Q2021)
 - Caracas, Venezuela (2Q2021)
- Benefits
 - Increased bandwidth, 10 Mbps connections
 - Redundant FAA connections (ATL and SLC)
 - Dynamic Border Gateway Protocol (BGP) routing enabled

3. Conclusion

3.1 The Members are invited to take note of the information contained in this information paper.