



ICAO

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

INFORMATION PAPER

NACC/WG/4 — IP/15  
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**Fourth North American, Central American and Caribbean Working Group Meeting  
(NACC/WG/4)**  
Ottawa, Canada, 24 to 28 March 2014

**Agenda Item 3: Follow-up on the NAM/CAR Regional Performance-Based Air Navigation  
Implementation Plan (NAM/CAR RPBANIP) Progress**  
**3.3 ANI/WG and other regional group progress reports**

**IP NETWORK IMPLEMENTATION IN COCESNA**

(Presented by COCESNA)

<b>EXECUTIVE SUMMARY</b>	
This paper presents information on the progress of the implementation of the IP Network in COCESNA	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• IP Network Project Implementation in COCESNA</li></ul>

**1. Introduction**

1.1 Since 2009 the modernization and implementation process of a new IP Network in COCESNA has begun, with the objective to rely on a modern, safe and robust communication platform, that will not only satisfy the actual needs of COCESNA in Central America, but it will also prepare the corporation for the future, according to the new communication tendency and aeronautical services worldwide.

**2. Description**

2.1 It consists of a private communications network via terrestrial microwave stations, with 1 redundant features, which interconnect all sites regionally.

2.2 In a 1:1 configuration (1 +1) servers are configured as high availability pair that shares the same configuration. One server is in operation, while the other is on standby. The solution automates the disaster recovery. Change is fast depending on the system size.

2.3 This platform is supported by a VSAT network, which in addition to providing support (backup) of aeronautical services, functions as the main means of communication for remote sites where there is no access to the terrestrial network.

2.4 The whole platform is based on native IP equipment with segmented networks according to services, to ensure the quality and continuity of communications for critical systems.

3. **Advantages of an IP Network in COCESNA**

3.1 Currently besides traditional networking services, there are requirements that demand voice, video, VPN networks and distribution of rich media content IP. To meet these demands, control costs and optimize efficiency, it was necessary to converge the main networks infrastructure in a solution that would expand the traditional to a more modern environment.

3.2 The disposition of several media at an IP level, increases network reliability by providing dynamically switching services with minimal impact to end users.

4. **Suggested Action**

4.1 The Meeting is invited to consider the contents of this informative paper: