



ASSEMBLY — 40TH SESSION

TECHNICAL COMMISSION

Agenda Item 30: Other issues to be considered by the Technical Commission

**IMPORTANCE OF THE ATS MESSAGE HANDLING SYSTEM (AMHS) SYSTEM FOR  
GROUND-GROUND AND AIR-GROUND DATA COMMUNICATIONS:  
THE VENEZUELAN EXPERIENCE**

(Presented by the Bolivarian Republic of Venezuela)

**EXECUTIVE SUMMARY**

This working paper presents the progress made in implementing and interconnecting the CAR-SAM Region AMHS Centres for the use and exchange of the various ground-ground and air-ground data communications for air traffic control and aeronautical information services in aviation. Since it is the aeronautical telecommunication network/communications, navigation, and surveillance (ATN/CNS) platform for the use of this service, there is a pressing need to enhance its interconnection with the rest of the Contracting States and particularly with the main aeronautical fixed telecommunication network (AFTN)/AMHS centres.

Given the great importance of the system for the SAM Region, RCC/13 of the Bogota Declaration made its implementation a priority for air navigation services.

**Action:** The Assembly is invited to:

- take note of the information presented;
- assess the importance of the AMHS system for the use of all ground-ground and air-ground data communications systems (ATS interfacility data communications (AIDC), VHF digital link (VDL), controller-pilot data link communications (CPDLC), NOTAM, filed flight plan (FPL)); and
- set timelines and the continued implementation of interconnections among the message transfer agents (MTAs) of States' AMHS systems in accordance with the routing directories to ensure the safety of international civil aviation.

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| <i>Strategic Objectives:</i>   | This working paper relates to Strategic Objectives Safety and Air Navigation Capacity and Efficiency |
| <i>Financial implications:</i> | N/A                                                                                                  |

<sup>1</sup> Spanish version provided by Venezuela (Bolivarian Republic of).

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| <b>References:</b> | Twenty-Third Workshop/Meeting of the SAM Implementation Group (SAM/IG/23) – Regional Project RLA/06/901 (Lima, Peru, 20 to 24 May 2019)<br>Twentieth Workshop/Meeting of the SAM Implementation Group (SAM/IG/20) (Lima, Peru, 16 to 20 October 2017)<br>Final Report of the Eleventh Project Coordination Meeting RLA/06/901 (Lima, Peru, 5 October 2017)<br><i>Location Indicators</i> (Doc 7910) / SAM Region AFTN Routing Directory, List No. 6<br>Thirteenth Meeting of Civil Aviation Authorities (RAAC/13) (Bogota, Colombia, 4 to 6 December 2013)<br><i>CAR/SAM Regional Air Navigation Plan</i> (Doc 8733), Volume II, Table CNS II-1<br>Project RLA 06/901 (RLA/98/003), GREPECAS Recommendations<br><i>Manual of Technical Provisions for the Aeronautical Telecommunication Network</i> (ATN) (Doc 9705AN/956) |
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## 1. INTRODUCTION

1.1 In December 2016, the Bolivarian Republic of Venezuela acquired a new AMHS/AFTN system from the COMSOFT-Germany company for its AMHS messaging and installed it in September 2017 in order to replace the old AMHS/AFTN system and interconnect the country with the adjacent MTAs (Colombia, Brazil, Peru, Curaçao, Aruba, Ecuador, Trinidad and Tobago, Guyana, Suriname, United States, Spain) with the purpose of receiving and transmitting aeronautical messages (flight plans, NOTAMS, and meteorology).

1.2 The AMHS/AFTN system has 11 international connections, and since the implementation of the new AMHS system, great progress has been achieved with the AMHS (P1) connections with the following States:

- a) successful connection with Peru since November 2017;
- b) connection established with Colombia since November 2017;
- c) successful connection with Brazil in February 2018;
- d) successful connection with Ecuador in September 2018; and
- e) P1 connection with Paramaribo successful since March 2019.

## 2. ANALYSIS

2.1 Throughout this year, the Venezuelan State has sought to continue the important work towards the achievement of interconnection among the States and, at the same time, to unify the interconnections with other systems requiring AMHS integration, whether at national or international level.

2.2 P1 protocol connections are essential for the exchange of ground-ground and air-ground data communications for AIDC implementation, and the exchange of flight plans and user consultations of the various aeronautical information databases are key to ensuring safety. They have been made a

priority for air navigation implementation as set out in the Bogota Declaration and indicated in Table CNS II-1 of Volume II of the *CAR/SAM Regional Air Navigation Plan* (Doc 8733 eANP).

2.3 Thus the Venezuelan State has the responsibility to act as a main centre of the AFTN network in the SAM Region as indicated in the Global Air Navigation Plan, in accordance with ICAO Routing Directory No. 6 of Doc 7910.

2.4 The targets achieved in the first half of the year include the following:

- a) successful messaging exchange tests were conducted with Guyana. Operative transmission and reception of P1/AMHS messaging is slated to begin in September 2019;
- b) currently coordinating with Trinidad and Tobago to begin P1/AMHS tests;
- c) AIDC information exchange;
- d) OPMET database information exchange;
- e) reactivation of the digital circuit and P1 connection with Madrid, Spain; and
- f) coordination with the United States Federal Aviation Administration (FAA) has begun to start P1/AMHS interconnection tests once Peru finalizes its own tests with the Agency.

2.5 In line with the aforementioned, 45per cent of our connections (5 of 11 circuits) are AMHS P1. We estimate that by the end of this year, 85per cent of our connections (9 of 11 circuits) will be AMHS.

2.6 We are considering conducting tests of aeronautical information exchange (MET, AIDC, etc.) between the Bolivarian Republic of Venezuela and other States.

### 3. CONCLUSION

3.1 We would like to highlight the importance of the support provided by the Regional Office and the continued coordination with the States involved for the prompt activation of AMHS interconnections with Venezuela in order to achieve the objectives set and the safety targets.

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