



Agenda Item 3: Report of activities and deliverables of the INTEROP TF and Subgroups

ACTIVITIES CARRIED OUT IN THE INTEROP TF SUBGROUPS

(Presented by the Secretariat)

SUMMARY	
This working paper presents the activities carried out by the Subgroups of the Interoperability Task Force (INTEROP TF) since the last Workshop/Meeting of the SAM Region Implementation Group (SAM/IG/27), to date.	
References	
- SAM/IG/27 Final Report (Virtual, 31 May to 3 June 2022); and - Summary of Discussions of GT INTEROP/3 Meeting (Virtual, 14 to 17 March 2022)	
ICAO Strategic Objectives:	<i>A – Safety</i> <i>B – Air Navigation Capacity and Efficiency</i> <i>ASBU: AMET-B0/4 (IWXXM), ASUR-B0/1 (ADS-B), ASUR-B1/1 (SB ADS-B), COMI-B0/7 (AMHS) and FICE-B0/1 (AIDC)</i>

1. INTRODUCTION

1.1 The SAM Region Implementation Group (SAM/IG) has formed the Interoperability Task Force (INTEROP TF) to support and promote initiatives to modernize air navigation services and guarantee interoperability between automated systems used by AIM, ATM, ATFM, CNS and MET users, with a view to:

- a) facilitate the exchange of information between the systems implemented by the States, reducing the time and interconnection problems between the systems;
- b) promote a coordinated and homogeneous transition towards the new services and elements indicated in the GANP; and
- c) Encourage the multidisciplinary participation of air navigation services professionals in support of the SAM Region Implementation Group (SAM/IG) for the planning and execution of interconnection work for the systems implemented in the South American Region.

1.2 Currently, six INTEROP TF Subgroups are activated: ATM/AIDC Subgroup, ATM/FPL Subgroup, CNS/AMHS Subgroup, CNS/ANP Subgroup, CNS/SUR Subgroup and MET/IWXXM Subgroup. The activities carried out since the SAM/IG/27 Workshop/Meeting (Virtual, 31 May to 3 June 2022) are summarized below. The Final Report of the SAM/IG/27 Workshop/Meeting can be accessed through the link below:

<https://www.icao.int/SAM/Pages/MeetingsDocumentation.aspx?m=2022-RLA06901-SAMIG27>

2. DISCUSSION

2.1 ATM/AIDC Subgroup

2.1.1 The ATM/AIDC Subgroup is dedicated to promoting the implementation of ATS Interfacility Data Communication (AIDC), to advance with the automation of the aeronautical context.

2.1.2 From the SAM/IG/27 Workshop/Meeting the following information was provided:

- **Brazil:** the updates in the SAGITARIO systems of the Amazonian, Curitiba and Recife ACCs were carried out and ready to resume the pre-operational tests with the adjacent centers;
- **Colombia:** the AIDC between the Barranquilla ACC – CENAMER ACC is close to signing the Letter of Agreement. In relation to the operational tests of the AIDC between ACC Barranquilla – ACC Maiquetía, errors were found in the configuration of the Barranquilla COPs and some details in the ATECH system, pending the adjustments of the INDRA system to schedule a new operational test. Once the tests with Barranquilla have concluded, the pre-operational tests will be carried out between the Bogotá ACC – Maiquetía ACC. Regarding the AIDC between Barranquilla ACC – Kingston ACC, there is no information from Jamaica to start operational tests;
- **Paraguay:** has updated the SAGITARIO system of the Asunción ACC and is already in coordination with Brazil to start tests with the Curitiba ACC;
- **Peru:** the Coordinator of the ATM/AIDC Subgroup has held a meeting with the participation of representatives from Peru, SAM Office, EASA and INDRA on September 23, 2022, to discuss the necessary updates in the Lima ACC system. It was informed that, after the renewal of the support/maintenance contract, the necessary adjustments identified will be implemented; and
- **Venezuela:** ATECH has reported that coordinated with the Venezuelan ATM Management to update the Maiquetía ACC system in the second half of October 2022.

2.2 ATM/FPL SUBGROUP

2.2.1 The purpose of the ATM/FPL Subgroup is to study and propose solutions for the centralization of flight plan management, in order to mitigate errors and duplication/multiplicity of flight plans, with the participation of interested States and the Industry.

2.2.2 The Coordinator of the ATM/FPL Subgroup has carried out two teleconferences to work with the participants of the Ad-hoc Group formed at the SAM/IG/27 Workshop/Meeting on a common

methodology to quantify errors in flight plans and associated messages, in order to obtain indicators to measure the level of mitigation achieved, with the application of the measures indicated in the ATM/FPL Roadmap.

2.2.3 A methodology proposal will be presented, through a working paper prepared by the Ad-hoc Group, for analysis and approval by the participants of the SAM/IG/28 Workshop/Meeting.

2.3 CNS/AMHS SUBGROUP

2.3.1 The CNS/AMHS Subgroup is directed to establish the AMHS interconnections between the COM Centers of the Region and with the COM Centers of the other ICAO regions.

2.3.2 Since the SAM/IG/27 Workshop/Meeting, the following extra-plan AMHS (P1) interconnections have been established:

- Bogotá COM Center – CENAMER COM Center (SKED – MHTG);
- Caracas COM Center – COM CENAMER Center (SVCA – MHTG); and
- Lima COM Center – CENAMER COM Center (SPIM – MHTG).

2.3.3 On 27 September, 2022, coordination began for the establishment of the AMHS interconnection (P1) between Argentina and COCESNA:

- Ezeiza COM Center – COM CENAMER Center (SAEZ – MHTG).

2.3.4 With the completion of the installation of the REDDIG II (MPLS) node in Madrid, it is estimated that, by mid-October 2022, the following AMHS (P1) interconnections would be established, via REDDIG II:

- Brasilia COM Center – Madrid COM Center (SBBR – LEEE);
- Caracas COM Center – Madrid COM Center (SBBR – LEEE); and
- Ezeiza COM Center – Madrid COM Center (SAEZ – LEEE).

2.3.5 Likewise, with the completion of the installation of the REDDIG II (MPLS) node in Madrid, it is estimated that, by the end of October 2022, the following AMHS interconnection (P1) would be established, via REDDIG II:

- Ezeiza COM Center – Johannesburg COM Center (SAEZ – FAOR).

2.3.6 **Appendix A** to this working paper presents the intraregional and interregional AMHS interconnections (planned and extra plan) of the SAM Region.

2.4 CNS/ANP SUBGROUP

2.4.1 The CNS/ANP Subgroup was activated at the SAM/IG/26 Meeting (Virtual, 20 to 23 September, 2021) in order to support the review of the information contained in Vol II of the CAR/SAM Air Navigation Plan, as well as providing support in the preparation of Vol III of the CAR/SAM ANP, on CNS issues.

2.4.2 On 15 July, 2022, a meeting of the CNS/ANP Subgroup was held, where the Coordinator provided an Excel template with all the tables of Part III (CNS) of Volume II of the CAR/SAM ANP, requesting the participants to update the respective information to their States.

2.4.3 Immediately, individual meetings were held with each State to consolidate the information in each table.

2.4.4 During the SAM/IG/28 Workshop/Meeting, the progress made with the States that participated in the activities will be presented. States that did not provide the required updates are encouraged to participate in the activities developed by the CNS/ANP Subgroup.

2.5 CNS/SUR SUBGROUP

2.5.1 The CNS/SUR Subgroup deals with aeronautical surveillance data exchange issues, likewise, it is in charge of studying and proposing the necessary activities for a regional implementation of satellite ADS-B in the SAM Region, using the REDDIG as platform for the distribution of information, reducing the cost with the contracting of telecommunications services.

2.5.2 Currently, the CNS/SUR Subgroup is without a Rapporteur/Coordinator; being necessary that the participants of the Workshop/Meeting elect a person to carry out this function in the Subgroup.

2.5.3 During this Workshop/Meeting, a working paper that was submitted by Colombia with the support of Argentina, Bolivia, Brazil, Chile, Ecuador, El Salvador, Guyana, Panama, Paraguay, Peru, Uruguay and Venezuela during Assembly 41 (A41-WP/337 TE/133) – *Progress, Challenges and Advantages of ADS-B Implementation in the SAM Region*, will be presented.

2.6 MET/IWXXM SUBGROUP

2.6.1 The MET/IWXXM Subgroup was formed with the purpose of testing and exchanging OPMET messages in the new IWXXM format, via the Aeronautical Messaging Service (AMHS).

2.6.2 Since the SAM/IG/27 Workshop/Meeting, coordination meetings were held with the following States/Organizations:

- **Cuba:** for exchange between the NOC in Havana and the RODB/IROG in Brasilia;
- **NATS UK:** for exchange between RODB/IROG in London and RODB/IROG in Brasilia;
- **FAA/NWS:** for exchange between RODB/IROG in Washington and RODB/IROG in Brasilia; and
- **Paraguay:** for exchange between the MET SGASBMET user of Paraguay and the RODB/IROG of Brasilia.

2.6.3 **Appendix B** to this working paper illustrates the connections for conducting the tests with Cuba, the United States and the United Kingdom.

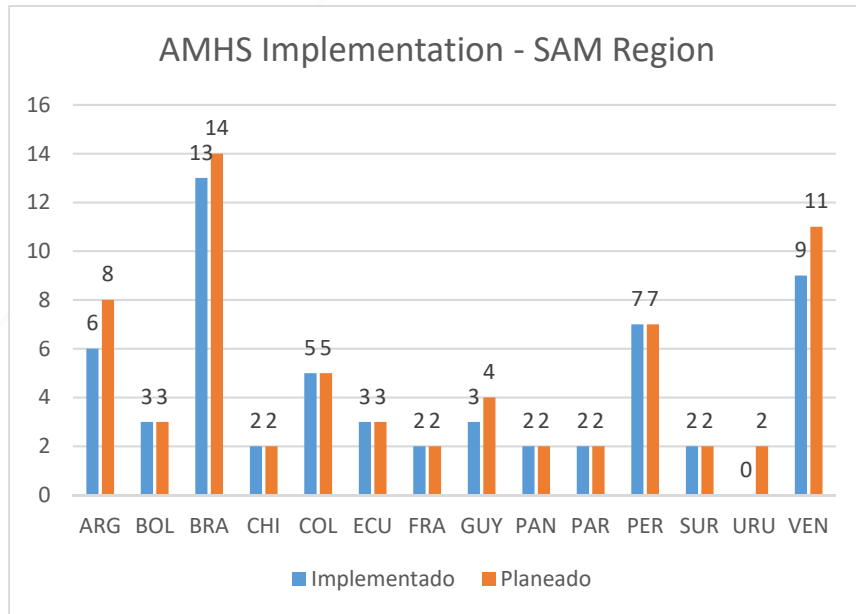
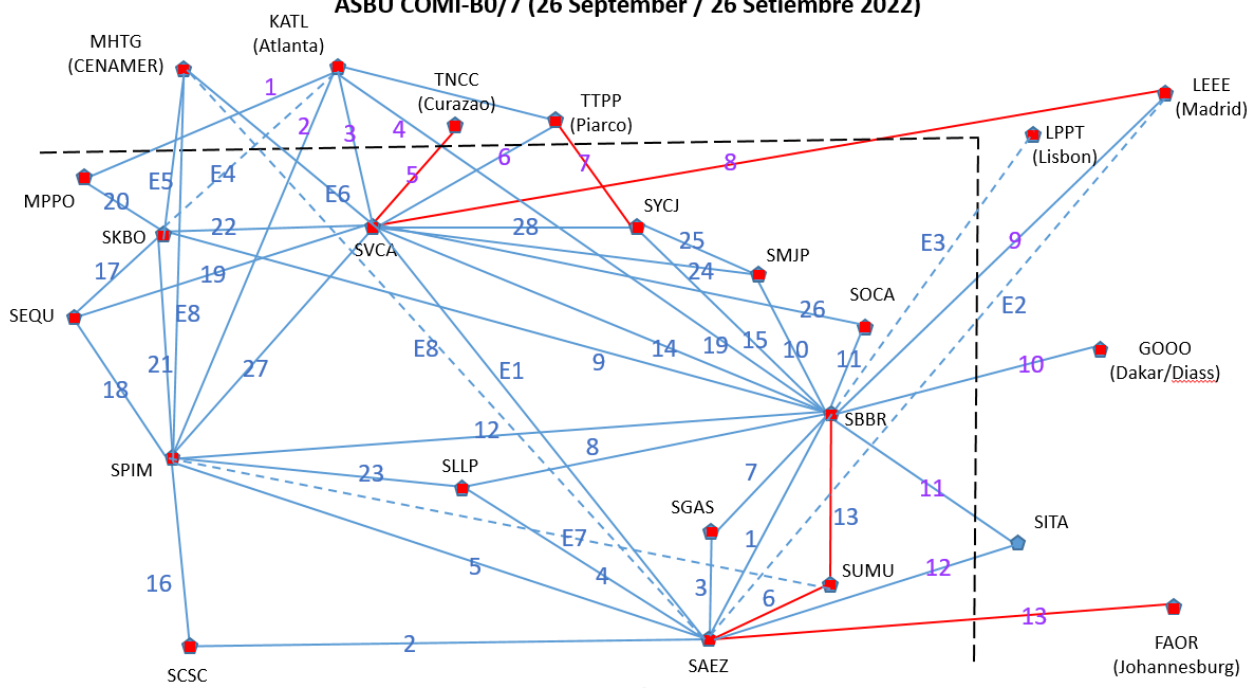
3. SUGGESTED ACTION

3.1 The Meeting is invited to:

- a) Take note of the activities carried out by the INTEROP WG Subgroups; and
- b) analyze other considerations that the Meeting deems pertinent.

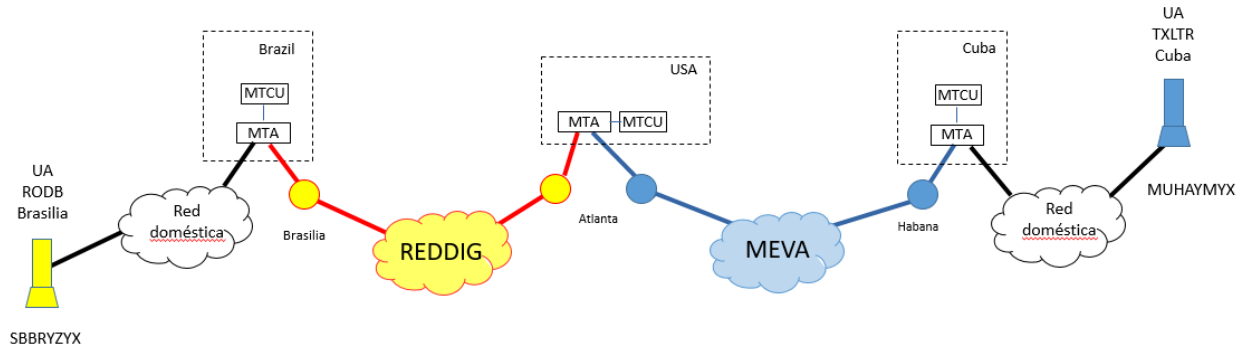
APPENDIX A

**AMHS Interconnections / Interconexiones AMHS
ASBU COMI-B0/7 (26 September / 26 Setiembre 2022)**

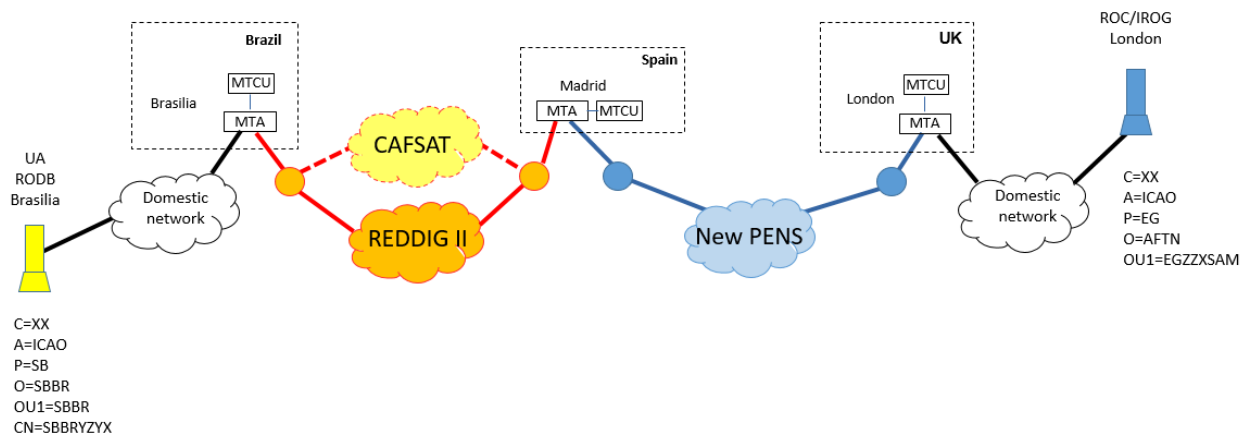


APPENDIX B

Pruebas IWXXM entre Brasil y Cuba



IWXXM Tests between Brazil and United Kingdom (NATS)



IWXXM Tests between Brazil and United States (FAA/NWS)

