



**Agenda**

**Item 3:**

**Report of activities and deliverables of the Interop TF and Subgroups**

**ACTIVITIES EXECUTED BY THE CNS/SUR SUBGROUP**

(Presented by the Secretariat)

<b>SUMMARY</b>	
This working paper presents the activities carried out by the CNS/SUR Subgroup of the Interoperability Task Force (Interop TF), since the last Meeting of the SAM Region Implementation Group (SAM/IG) to date.	
<b>References</b>	
- Final Report of SAM/IG/26 Meeting (Virtual, 20 to 23 September 2021); and - Summary of Discussions of the INTEROP TF/3 Meeting (Virtual, 14 to 17 March 2022).	
<b>ICAO Strategic Objectives:</b>	<i>A – Safety</i> <i>B – Air Navigation Capacity y Efficiency</i>  <i>ASBU: AMET-B0/4 (IWXXM), ASUR-B0/1 (ADS-B), ASUR-B1/1 (SB ADS-B), COMI-B0/7 (AMHS) y 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 air navigation services modernization initiatives and ensure 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 problems of interconnection between the systems;
- b) promote a coordinated and homogeneous transition to 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 the interconnection works of the systems implemented in the South American Region.

1.2 The CNS/SUR Subgroup deals with the issues of exchange of aeronautical surveillance data, and is also responsible for studying and proposing the activities necessary for a regional

implementation of satellite ADS-B in the SAM Region, using REDDIG as a platform for the distribution of information, reducing the cost with the contracting of telecommunications services.

## 2. ANALYSIS

### 2.1 CNS/SUR SUBGROUP

#### Meeting/Workshop ADSB/ANP/1

2.1.1 In the period from March 02 to 04, 2022, the First NAM/CAR/SAM Meeting/Workshop on Planning the Implementation of Automatic Dependent Surveillance – Broadcasting (ADS-B/ANP/1) was held virtually, with the participation of representatives of 22 States of the NAM/CAR/SAM Regions and COCESNA, two international organizations, two companies and ICAO Officers, totaling 107 people.

2.1.2 The documents and presentations of the MEETING/Workshop ADS-B/ANP/1 are available at the following link:

<https://www.icao.int/SAM/Pages/MeetingsDocumentation.aspx?m=2022-RLA06901-ADSBYADSBANP1>

#### Terrestrial ADS-B implementation in the SAM Region

2.1.3 The following SAM states have implemented ADS-B stations: Brazil, Chile, Colombia, Guyana, Panama, Paraguay and Peru. Currently, only in Brazil is the use of ADS-B OUT as the primary means of surveillance information, in the TMA Macaé, to support the operation of helicopters in the Campos oil basin.

2.1.4 Colombia intends to use ADS-B OUT operationally from April 2022 on. Areas in which the information presented to the controller comes exclusively from ADS B, either because there is no radar coverage in it or because there is a failure of the radar system, the controller may use the information from ADS B to maintain surveillance on the fly of air traffic, in order to obtain:

- Better position information regarding aircraft under control;
- Supplementary information regarding other transit;
- Information on any significant deviation of aircraft, with respect to the relevant air traffic control authorizations, including authorized routes and flight levels where applicable;
- No separation by surveillance shall apply; and
- No vector guidance will be provided.

2.1.5 Argentina has a technological upgrade project of 22 secondary radars manufactured by INVAP, currently operational. The modernization includes incorporating Mode S and ADS-B in the surveillance stations of Comodoro Rivadavia and Cordoba FIRs and 5 ADS-B stations to expand aeronautical surveillance coverage. The planning contemplates that the implementations of the sensors will begin in 2023 and will be developed progressively until 2025.

2.1.6 The planned improvement of the existing radars incorporating the S mode and ADS-B technology and the addition of new ADS-B systems and stations, will allow to progressively incorporate experience in the use of ADS-B.

### **Space-based ADS-B Implementation in the SAM Region**

2.1.7 Since the Meeting GT INTEROP/2 (Virtual, 09 to 13 August 2021) and SAM/IG/26 (Virtual, 20 to 23 September 2021) there was no substantial progress in the implementation of Space-based ADS-B, through a Regional Technical Cooperation Project, using REDDIG II (MPLS) as a platform for the distribution of surveillance information.

2.1.8 The three States that expressed interest in the proposal (Chile, Panama and Trinidad & Tobago), continue to evaluate the possibility, considering the strong impact caused by the pandemic on the planning and prioritization of projects under development in the States.

2.1.9 The entry of Panama as a member of the Regional Technical Cooperation Project RLA/03/901, will administratively facilitate a potential contracting of the service, within the framework of Project RLA/03/901, enabling the use of the Digital Network of the SAM Region (REDDIG II) as a distribution platform for the contracted surveillance information.

2.1.10 In this sense, it was reported that the additional node of REDDIG II (MPLS) was implemented by Aireon in Virginia, contracting directly from the telecommunications provider of the network, allowing the connection to any REDDIG II node of the States that future contract the SB ADS-B service.

### **3. SUGGESTED ACTION**

3.1 The Meeting is invited to:

- a) Take note of the activities carried out in the Subgroup CNS/SUR; and
- b) Analyze other considerations that the Meeting deems pertinent.

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