



**Twentieth Meeting of the CAR/SAM Regional Planning and Implementation Group  
 (GREPECAS/20)**

Salvador, Brazil, 16 – 18 November 2022

**Agenda Item 2: Global and Regional Developments**  
 2.3 Programmes and Projects Progress Report

**CNS PROGRAMMES AND PROJECTS - CAR/SAM**

(Presented by the Secretariat)

<b>EXECUTIVE SUMMARY</b>	
This working paper summarizes the status of the activities of GREPECAS Projects C and D in the NAM/CAR/SAM regions during 2022.	
<b>Action:</b>	Suggested actions are presented in numeral 3 of this working paper.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"> <li>Air navigation capacity and efficiency</li> </ul>
<i>References:</i>	<ul style="list-style-type: none"> <li>CAR/SAM Planning and Implementation Regional Group (GREPECAS) Programmes and Projects Committee (PPRC) Fourth Virtual Meeting (ePPRC/04), held online from 21 to 22 April 2022:</li> <li><a href="https://www.icao.int/NACC/Documents/Meetings/2022/PPRC04/eCRPP04-Minute.pdf">https://www.icao.int/NACC/Documents/Meetings/2022/PPRC04/eCRPP04-Minute.pdf</a></li> <li>Nineteenth Meeting of the Caribbean and South America Regional Planning and Implementation Group (GREPECAS/19), from 27 to 29 October 2021: <a href="https://www.icao.int/NACC/Documents/Meetings/2021/GRP19/GREPECAS19-FinalReport.pdf">https://www.icao.int/NACC/Documents/Meetings/2021/GRP19/GREPECAS19-FinalReport.pdf</a></li> </ul>

**1. Introduction**

1.1 Within the framework of GREPECAS Projects C – Automation and Situational Awareness and D – Ground-Ground and Ground-Air Communications Infrastructure, the main initiatives/activities developed in the CAR/SAM Regions, related to the implementations of Air Navigation Services (ANS) in the Communications, Navigation and Surveillance (CNS) area are presented in this working paper.

## 2. Analysis

### 2.1 NAM/CAR activities

2.1.1 The North American, Central American and Caribbean Working Group (NACC/WG) was defined as the only Regional Implementation Group of the NAM/CAR Region. It brings together all the Implementation Task Forces and also reports directly to GREPECAS.

2.1.2 During 2022, all the meetings of the NACC/WG Task Forces that develop activities and contribute directly to the execution of GREPECAS projects C and D were held. The meetings and their reports can be found under the following link: <https://www.icao.int/NACC/Pages/Meetings.aspx?year=2022&cM=10&cY=2022>.

2.1.3 Regarding regional implementation, a setback was identified in the regional programmes for the development and installation/commissioning of new systems due to the Covid19 pandemic, and in this sense, the following is reported:

- a) **Air traffic services (ATS) Aeronautical message handling system (AMHS):** With the exception of the pending interregional AMHS connections between Piarco (TTPP) – Georgetown (SYCJ) and Curaçao (TNCC) and Caracas (SVCA) and Haiti (the latter which will renew the commissioning of its system for the year 2023), the region is operating with its AMHS connections in its entirety.
- b) Automated NAM Protocols/Interface Control Document (ICD) and Air Traffic Services Inter-Facility Data Communications (AIDC): through the **NACC/WG/AIDC** Task Force meeting it was defined that the region would focus work and support efforts directed to States that are in the process of implementing the protocols – in this case Jamaica for its connection with Cuba and COCESNA, as well as States updates in its phase II with the NAM/ICD protocol.
- c) **Automatic Dependent Surveillance System - Broadcast (ADS-B):** Through the Regional Surveillance Task Force (NACC/WG/SURV), an analysis of the coverage of surveillance data at the regional level was carried out and the points that need to be addressed were identified, in addition to the need for States that have already implemented ADS-B to make it operational through the development of the corresponding national regulation.
- d) **Communications Network Improvements to the ATS Voice Link (MEVA):** Phase IV of this network is under development, which will be called "Caribbean Communications Network" and is expected to be in operation by December 2024.
- e) **NACC/WG/Aviation System Block Upgrades (ASBU) Task Force:** is in the process of renewing the air navigation plans of 16 States that already have them ready with the new version of the Global Air Navigation Plan document (GANP) and also support the development of the air navigation plans of the States that do not yet have them.
- f) **New Aeronautical Frequency Management Task Force (NACC/WG/FM):** was created during the seventh and latest meeting of the NACC/WG, (NACC/WG/07) with the aim of leading a better regional management of aeronautical frequencies and ensure their protection for future aviation uses.

## 2.2 SAM Activities

### *Third Workshop/Meeting of the Supervisors/Operators of COM AMHS Centers of the SAM Region (COM AMHS/3)*

2.2.1 In the period from 21 to 24 February 2022, the Third Workshop/Meeting of the Supervisors/Operators of COM AMHS Centres of the SAM Region (COM AMHS/3) was held, which dealt with the following issues related to the implementation of AMHS: contingency plans, routing tables, updating of information in the AMHS Management Centre (AMC) and support to the CNS/Air Navigation Plan (ANP) Subgroup with the task of updating the tables of Part III (CNS) of the CAR/SAM ANP Volume II. The following link contains the documents and presentations of the aforementioned event: [COM AMHS/3 Documentation](#).

### *Third Workshop/Meeting of the Interoperability Task Force Subgroups (GT Interop/3)*

2.2.2 From 14 to 17 March 2022, the Third Workshop/Meeting of the Interoperability Task Force Subgroups (GT Interop/3) was held, with the aim of consolidating the work carried out and deliverables of each Subgroup, for presentation at the Twenty-seventh Workshop/Meeting of the SAM Implementation Group (SAM/IG/27), held virtually, from 31 May to 03 June 2022. The following link contains the documents and presentations of the aforementioned event: [GT Interop/3 Documentation](#).

### *Twenty Eighth Meeting of the REDDIG Coordination Committee (RCC/28)*

2.2.3 The Twenty Eighth Meeting of the REDDIG Coordination Committee was held from 02 to 04 May 2022, within the Regional Technical Cooperation Project RLA/03/901, with the objectives of evaluating the activities developed, planning and approving the activities of the following period, reviewing the financial situation of the project, approving the budget for the following period and evaluate the project against the expectations of the participating States. The documents and presentations of this event can be accessed here: [RCC/28 Documentation](#).

### *Twenty-seventh Workshop/Meeting of the SAM Implementation Group (SAM/IG/27) and Twenty-eighth Workshop/Meeting of the SAM Implementation Group (SAM/IG/28)*

2.2.4 The SAM/IG Workshops/Meetings aim to follow up and monitor technical activities related to the implementation of the Regional Air Navigation Plan, as well as other Air traffic management (ATM)/CNS implementation initiatives.

2.2.5 The SAM/IG/27 Workshop/Meeting was held virtually, from 31 May to 03 June 2022. The following link includes the documents and presentations of the event: [SAM/IG/27 Documentation](#).

2.2.6 The SAM/IG/28 Workshop/Meeting was carried out in a hybrid manner (face-to-face in Lima, Peru and online), from 03 to 07 October 2022. The documents and presentations of the event can be accessed through this link: [SAM/IG/28 Documentation](#).

*Ninth Technical/Operational Meeting for the operation of the REDDIG II Digital Network (RTO/9)*

2.2.7 Event held virtually, from 13 to 14 October 2022, with the eminently technical objective, to review the procedures for the operation and maintenance of REDDIG II, the coordination required for adjustments, repairs, sending and receiving damaged and repaired parts, the revision of the maintenance and operation manual of REDDIG II. The following link contains the documents and presentations of the event: [RTO/9 Documentation](#).

*Advanced Course on AMHS*

2.2.8 Course held online, from 07 to 11 November 2022, with the objective of providing advanced technical and operational information on the AMHS system, in order to guarantee the operation of the current aeronautical messaging infrastructure and its interconnection, as well as the implementation of short and medium term requirements, aimed at technical and operational personnel who maintain and operate AMHS systems and who are involved in the implementation of the intraregional and interregional interconnections. The following link contains the documents and presentations of the event: [AMHS Course Documentation](#).

*Training on Firewalls Equipment*

2.2.9 Training to be held in Lima,-Peru, from 22 to 25 November 2022, aimed at the training of the technical personnel of the REDDIG II nodes, in the available functionalities and configuration of the network security equipment acquired within the framework of the Regional Technical Cooperation Project RLA/03/901 (REDDIG II Administration).

**2.3 NAM/CAR/SAM Joint Activities**

2.3.1 The following activities were carried out jointly with the NAM/CAR/SAM States and with the support from the NACC and SAM Offices.

*ICAO Frequency Spectrum Management Panel (FSMP) and 2023 World Radiocommunication Conference (WRC-23) Workshop*

2.3.2 From 21 to 22 February 2022, a workshop was held with the NAM/CAR/SAM States and by the members of the Frequency Spectrum Management Panel (FSMP), with the aim of providing background and information to States, in preparation for their delegations that will participate in the WRC-23, on issues relevant to the aeronautical context.

2.3.3 Similarly, during the workshop, other relevant topics were discussed such as the impact of the development of 5G technology on aircraft operations (potential interference in the radio altimeter) and the new secondary surveillance radar (SSR) and NAV modules of the Frequency Finder. The presentations and documents of the workshop can be accessed through the following link: [FSMP and WRC-23 Documentation](#).

*First NAM/CAR/SAM Meeting/Workshop on Planning the Implementation of Automatic Dependent Surveillance - Broadcasting (ADS-B) (ADS-B ANP/1)*

2.3.4 The First NAM/CAR/SAM Meeting/Workshop on Planning the Implementation of Automatic Dependent Surveillance - Broadcasting (ADS-B) (ADS-B ANP/1) was held from 02 to 04 March 2022, with the objective of assisting States in the implementation of ADS-B – Broadcast (ADS-B OUT) in accordance with the planning methodology applied in the new Volume III of the

CAR/SAM ANP, based on the ASBU (Aviation System Block Upgrade) Threads and Modules/Elements recommended in the sixth edition of the Global Air Navigation Plan (GANP).

2.3.5 During the event, the document “NAM/CAR/SAM Automatic Dependent Surveillance – Broadcasting (ADSB) Concept of Operations (CONOPS)” version of March 2022 was reviewed. The document "Instructions for the use of the Template of Volume III of the Regional Air Navigation Plan – ANP CAR/SAM" was presented to the participants, which was approved at the GREPECAS/19 Meeting. Participants also discussed other topics on aeronautical surveillance planning and presented the implementation progress in the States. The following link contains the documents and presentations of the event: [ADS-B/ANP/1 Documentation](#).

*Second Coordination Meeting of the MEVA III – REDDIG II Interconnection (MIII-RII/INTERCON/02)*

2.3.6 Meeting held from 05 to 06 May 2022, with the aim of reviewing and updating the interconnection agreement among the regional networks and discuss coordination issues. Participants also discussed the proposal for a new interconnection arrangement presented with GREPECAS/19 Meeting IP/14, entitled “New Scheme to Improve Communications for States at the Interface of the CAR and SAM Regions”. The documents and presentations can be accessed here: [MIII-RII/INTERCON/02 Documentation](#).

**3. Suggested Action**

3.1 States are invited to:

- a) take note of the information presented in this working paper;
- b) consider regional approaches to the implementation of new systems; and
- c) Analyse any other related matter that the Meeting deems necessary.