



**Twenty-first Meeting of the CAR/SAM Regional Planning and Implementation Group
(GREPECAS/21)**

Santo Domingo, Dominican Republic, 15 to 17 November 2023

**Agenda Item 3: Global and Regional Developments
3.3 CAR/SAM Air Navigation Services (ANS) Implementation Level**

CAR/SAM CNS PROGRAMMES AND PROJECTS

(Presented by Secretariat)

EXECUTIVE SUMMARY

This working paper summarizes the activities carried out by Communications, Navigation and Surveillance (CNS) of the NAM/CAR regions to follow-up on the activities of Projects C and D of GREPECAS, the implementation activities in air navigation and in response to the conclusions and decisions of the last GREPECAS/20 Meeting.

Action:	Suggested actions are presented in Section 4.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"> Air Navigation Capacity and Efficiency
<i>References:</i>	<ul style="list-style-type: none"> Minute of the GREPECAS Programmes and Projects Committee (PPRC) Fifth Virtual Meeting (ePPRC/05), April 2023 https://www.icao.int/NACC/Documents/Meetings/2023/PPRC5/Minute-CRPPR05-SPA.pdf Twentieth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/20), November 2022 https://www.icao.int/NACC/Documents/Meetings/2022/GREPECAS20/GREPECAS

1. Introduction

1.1 Within the framework of Projects C – Automation and Situational Awareness and D – Ground-Ground and Ground-Air Communications Infrastructure of GREPECAS, 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.

1.2 CNS hereunder presents the activities carried out jointly to support the implementation actions of the CAR and SAM States.

2. CNS activities

2.1 Aeronautical frequencies management

2.1.1 The NACC and SAM Regional Offices, in response to Conclusion GREPECAS/20/05 “Creation of an Ad-hoc group for the development of a regional project for frequency management”, developed the following activities:

- a) Meeting of the Ad-hoc Group on Regional Management of Aeronautical Frequencies - ICAO NACC Regional Office, 30 January to 3 February 2023. As a result of this meeting, the project “CAR/SAM REGIONAL MANAGEMENT OF THE AVIATION RADIOELECTRIC SPECTRUM” which was approved during the GREPECAS Programmes and Projects Committee (PPRC) Fifth Virtual Meeting (ePPRC/05), online, in April 2023.
- b) As a result of this project and in follow-up to the proposed activities, the Workshop on Regional Frequency Management for the World Radiocommunication Conference 2023 (WRC-23) was held and the Frequency Finder application was developed in Lima, Peru, from 29 May to 2 June 2023, with the aim of updating information on the WRC-23 and providing access and management to the new version of the Frequency Finder application, which was adopted by the CAR and SAM regions for the management of regional allocation of aeronautical frequencies.
- c) Both regions need to solidly strengthen the management of the frequencies necessary to provide aeronautical services, so the participation of all States and Territories is important in all Project activities.
- d) Because not all States participated during the workshop, a two-day online workshop was held in September 2023 to cover States that did not attend the workshop in person.
- e) The activities planned for this project in both regions will continue.

2.1.2 Aeronautical frequency management is an important activity for both regions. Taking into account that the electromagnetic spectrum is a limited resource in competition not only for aviation users but also for companies providing various services, especially telecommunications around the world, it is necessary that the States of both regions strengthen the mechanisms for appropriate management of the frequencies assigned to aeronautical services and work more closely with the national regulatory entities of their States to ensure the joint protection of aeronautical frequencies and support ICAO's position at the WRC, which occur every four years, because it is a continuous work during the years preceding the conference.

2.1.3 Considering the importance of this activity, it is necessary to have the best tools to carry out appropriate management of aeronautical frequencies, not only technical management, but planning the use of frequencies for the future. In this regard, CNS of both regions recommend that the CAR and SAM States obtain a much more versatile software tool that supports the States in carrying out this activity in the best way. This said, the following Conclusion/Decision of GREPECAS/21 is proposed:

DRAFT CONCLUSION/DECISION GREPECAS/21/XX		STRENGTHENING OF FREQUENCY MANAGEMENT FOR THE USE OF AIR NAVIGATION SERVICES.	
What:		Expected impact:	
<ul style="list-style-type: none"> a) support the activities indicated within the Aeronautical Frequency Management project; b) expand the Project with the activity of specifying an application (software) for technical/operational management and planning of the assignment of aeronautical frequencies for the entire CAR/SAM Regions; and c) through the Project coordinators, carry out the work of studying the alternatives, evaluating the costs, and proposing the minimum software implementation requirements, for presentation at the GREPECAS/22 meeting. 		<input type="checkbox"/> Political / Global <input checked="" type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Operacional/Technical	
Why:			
So that the States of both CAR and SAM Regions have standardized and regionally harmonized management mechanisms, to ensure the efficiency and effectiveness of the management of the aeronautical frequency spectrum and promote safety of air navigation services.			
Whwn: November 2024		Status: <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed	
Who: <input checked="" type="checkbox"/> CAR and SAM States (a y c) <input checked="" type="checkbox"/> OACI NACC and SAM (b) <input checked="" type="checkbox"/> Others: COCESNA (a y c)			

2.2 Online workshop for the NAM/CAR/SAM Regions on risk mitigation in aviation due to the use of 5G frequencies

2.2.1 Following up Conclusion GREPECAS/20/12 “NAM/CAR/SAM Workshop for the implementation of mitigation measures to avoid interference in the operation of radio altimeters due to the commissioning of 5G technology.” of the Twentieth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/20) and the Twelfth Regional Aviation Safety Group — Pan America Meeting (RASG-PA/12), this workshop was held with the objective of sharing the lessons learned, the implementation of measures and all related information that will help States mitigate the impact of this 5G implementation.

2.2.2 As a result of the workshop, it was recommended:

- a) Recommendation 1; designate aeronautical personnel to work continuously on the management of aeronautical frequencies, dedicated to the management of aeronautical frequencies and the services that operate through these frequencies.
- b) Recommendation 2: continue with interference mitigation activities at international airports, follow up on the results of these measures, and continue with continuous monitoring and improvement of them according to the analyses carried out.
- c) Recommendation 3: share the lessons learned with other States and learn for future actions, since the evolution of technology and the implementation of services advances at a faster speed than that of the implementation of aeronautical services, therefore, the lessons learned will be used to work on future technological implementations.

- d) Recommendation 4: take advantage of the technological development, implementation, and investment that telecommunications companies are making, since this technological development will also serve to promote and implement other services in the aeronautical environment.
- e) Recommendation 5: consider the importance of coexisting with other companies that provide other services through frequencies and that it is necessary to find a balance of operation and work, for which the involvement of aviation in the management of the services provided to through the radio spectrum is essential to find this balance of coexistence.

2.3 **ICAO/Eurocontrol Workshop on the Eurocontrol Base of Aircraft Data (BADA) for the NAM/CAR/SAM regions**

2.3.1 The implementation of PAN AIDC/ICD and NAM/ICD automated channels is a priority for the region, due to the benefits in terms of boosting the efficiency and safety of air traffic control coordination.

2.3.2 ICAO/Eurocontrol Workshop on the Eurocontrol Base of Aircraft Data (BADA), was held online on 3 August 2023, following the recommendations of the Air Traffic Services Inter-facility Data Communication Task Force of the North American, Central American and Caribbean Working Group (NACC/WG/AIDC/TF) in accordance with the need for each CAR State to work on updating the Air Traffic Control (ATC) aircraft database. The workshop had the support of Eurocontrol and the industry with the objective of assisting CAR States in the process of updating their ATC databases.

2.3.3 As a result of the event, each CAR/SAM State could request access to the BADA for the purposes of updating the databases of their control centres regarding aircraft performance data. Each State must manage its access through the corresponding Regional Office.

2.4 **NAM/CAR/SAM Workshop on the Development of regulations/standards for the implementation of Automatic Dependent Surveillance – Broadcasting (ADS-B)**

2.4.1 The workshop was held in July 2023 and aimed to support States that have already implemented Automatic Dependent Surveillance – Broadcasting (ADS-B) stations or are in the process of doing so. With the aim of supporting them in the development or review of their regulations/standards to this implementation. Also, this event gave continuity and support to Conclusion GREPECAS/20/03 which requests a “Study on operational priorities for the implementation of ADS-B and aspects of the use of ADSB in ATC units”, supporting in this way the operational use of this facility/service.

2.4.2 During the workshop it was indicated that ADS-B is an element of the common thread of technology, a member of the Alternative Surveillance (ASUR) module, the first element of Block 0 (B0/1), the importance of the work in the implementation of the different enablers that, according to the GANP, allow an effective and successful implementation of ADS-B:

- a) Earth system infrastructure;
- b) Onboard aircraft system capability (avionics);
- c) Training; and
- d) Legislation/Regulation.

2.4.3 The implementation of ADS-B is a complex process, which integrates many areas of aviation that must work together to achieve a successful implementation. At the same time, it is an enabler for the implementation of other Aviation System Block Upgrade (ASBU) elements that are important for air traffic control operations and airport operations.

2.4.4 Furthermore, ADS-B compared to other surveillance technologies is economical and more feasible. In the CAR region there are ten States with ADS-B implementation ready and without the development of a regulation for its use and in the SAM region there is one State operationally using ADSB as a primary means of surveillance (TMA-Macaé), nine States with ADS-B ground sensors already implemented and four States in the process or planning of implementation.

2.4.5 Regarding the capacity of onboard avionics, through the statistics obtained from the entire commercial fleet that flies in the CAR and SAM regions, a clear and high percentage of aircraft capable of version 2 (DO - 260B) has been identified. This facilitates a regional implementation of ADS-B since the fleet has the capacity and must take advantage of this capacity.

2.4.6 IATA has been informed of the need to coordinate with its partners the activities and actions that airlines would need to carry out to take advantage of both the technological advantage installed on the ground and the capacity of aircraft to expedite the regional implementation of ADS-B in en-route operations. IATA will present a Working Paper with this information.

2.4.7 IATA has been informed of the need to coordinate with its partners the activities and actions that airlines would need to carry out to take advantage of both the technological advantage installed on the ground and the capacity of aircraft to expedite the regional implementation of ADS-B in en-route operations. IATA will present a Working Paper with this information.

2.4.8 As part of the activities to improve the operation of surveillance systems especially ADSB, the development of a surveillance data evaluation system has been proposed to certify the quality of surveillance information. In this regard, the approval of the project is requested with the support of experts from the NAM/CAR/SAM region:

DRAFT CONCLUSION/DECISION GREPECAS/21/XX		DEVELOP A TERMS OF REFERENCE DOCUMENT FOR A TOOL FOR THE ASSESSMENT OF SURVEILLANCE DATA FROM CAR AND SAM STATES.	
What:		Expected impact:	
<ul style="list-style-type: none"> a) support the development of the terms of reference for an application (technical tool) to support CNS staff in the evaluation of data from surveillance systems, especially those originating from ADS-B sensors; and b) enable the document to be finalized in June 2024, with the support of experts from Brazil, COCESNA, Dominican Republic , United States and Uruguay. 		<input type="checkbox"/> Political / Global <input checked="" type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Operacional/Technical	
Why:			
To validate the quality of surveillance data information, to ensure that the data entering the control centers is correct and that it supports air traffic control operations effectively.			
When: November 2024		Status: <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed	
Who: <input checked="" type="checkbox"/> CAR and SAM States (a y b) <input checked="" type="checkbox"/> OACI NACC and SAM (b) <input checked="" type="checkbox"/> Others: COCESNA (a y b)			

3. Future activities

3.1 CNS is working jointly on:

- a) Development of activities in air navigation aid systems that will conclude with a NAM/CAR/SAM workshop in March 2024 that aims to provide States with the technical and operational criteria for the implementation of future aid systems to air navigation. Currently, there are personnel from Central America and Panama in this task, but the CAR and SAM States are invited to join this initiative.
- b) Work on updating the MEVA and South American Digital Network (REDDIG), their updating and interconnection.

4. Activities of the regional offices

4.1 The activities carried out by the Regional Offices are presented in the **Appendix**.

5. Suggested actions

5.1 The States are invited to:

- a) note the information provided in this working paper;
 - b) approve the proposed conclusion for the management of aeronautical frequencies;
 - c) take action to manage the access to the Eurocontrol BADA;
 - d) actively participate in the ADS-B working group to make decisions that benefit both regions; and
 - e) any other appropriate action.
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APPENDIX ACTIVITIES OF THE REGIONAL OFFICES

1. NAM/CAR ACTIVITIES

Second Meeting of Rapporteurs of the North American, Central American and Caribbean Working Group (NACC/WG/RAP/2)

1.1 The Second Meeting of Rapporteurs of the North American, Central American and Caribbean Working Group (NACC/WG/RAP/2) was held at the ICAO NACC Regional Office, in Mexico City, Mexico, and online, from 28 to 31 March 2023. During the meeting, the strategic issues of the CAR region regarding air navigation were discussed. The documentation is available at the following link:

<https://www.icao.int/NACC/Pages/meetings-2023-wgrap02.aspx>

Meetings of the MEVA Technical Management Group (MEVA/TMG)

1.2 During 2023, the NACC Regional Office has been working jointly with the CAR States in the development of the Caribbean Air Navigation Services Network (CANSNET) which will become the communications network of the Caribbean States that will interconnect the CAR States, in addition to the other communications networks of adjacent States.

<https://www.icao.int/NACC/Pages/meetings-2023-mevatmg38.aspx>

1.3 Other MEVA/TMG meetings are under the ICAO secure portal platform.

Sixth ATS Interfacility Data Communication (AIDC) and North American Interface Control Document (NAM/ICD) Implementation Follow-Up Meeting for the NAM/CAR Regions (AIDC/NAM/ICD/6)

1.4 The NAM/CAR States provided the implementation status of their AIDC and NAM/ICD protocols and the regional implementation plan was updated to establish the implementation status of air navigation in the CAR Region and respond to the decisions and conclusions of the Twentieth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/20) to provide the results at the GREPECAS/21 meeting.

<https://www.icao.int/NACC/Pages/meetings-2023-naccwg8.aspx>

2. SAM ACTIVITIES

Vigésima Novena Reunión del Comité de Coordinación de la REDDIG II (REDDIG RCC/29)

2.1 From March 13 to 17, 2023, the Twenty-Ninth Meeting of the REDDIG II Coordination Committee was held, with the objective of evaluating the activities developed, within the Regional Technical Cooperation Project RLA/03/901, planning and approving the activities of the next period, approve the technical specifications of REDDIG III, review the financial situation of the project, approve the budget for the next period and evaluate the project with respect to the expectations of the participating States.

2.2 The following conclusions were formulated during the REDDIG RCC/29 Meeting:

No.	Title	Page
RCC/29-1	AD-HOC GROUP TO STUDY AND PROPOSE AN ADVANCED STANDARD CONFIGURATION FOR THE FIREWALL EQUIPMENT ACQUIRED FOR THE REDDIG II.	3-3
RCC/29-2	MANAGEMENT AND ADMINISTRATION OF THE REGIONAL PROJECT RLA/03/901 WITH THE IMPLEMENTATION OF THE REDDIG III.	4-6
RCC/29-3	IMPLEMENTATION OF THE REDDIG III.	4-8
RCC/29-4	APPROVAL OF THE BUDGET OF PROJECT RLA/03/901 REV “X”.	5-2

2.3 In the following link you can access the documents and presentations of the event:

<https://www.icao.int/SAM/Pages/MeetingsDocumentation.aspx?m=2023-RLA03901-RCC29&t=1>

First Workshop/Meeting of the ATM/FPL Subgroup (SG ATM/FPL/1) (Lima, 27 to 31 March 2023)

2.4 From 27 to 31 March 2023, the First Workshop/Meeting of the ATM/FPL Subgroup (SG ATM/FPL/1) was held with the purpose of working on the analysis of the data collected with the application of the methodology adopted during the SAM/IG/28 Workshop/Meeting (Virtual, 3 to 7 October 2022); review the ATM/FPL Roadmap document; and, prepare the data/metrics obtained, in order to present them at the SAM/IG/30 Workshop/Meeting.

2.5 In the following link, you can access the documents and presentations of the aforementioned Workshop/Meeting:

<https://www.icao.int/SAM/Pages/MeetingsDocumentation.aspx?m=2023-RLA06901-SGATMFPL1&t=1>

Fourth Workshop/Meeting of AMHS COM Center Supervisors/Operators of the SAM Region

2.6 From 24 to 27 April 2023, the Fourth Workshop/Meeting of the Supervisors/Operators of COM AMHS Centers of the SAM Region (COM AMHS/4) was held, which dealt with the following topics regarding AMHS implementation: contingency plans, routing tables, updating information in the AMC (AMHS Management Center) and supporting the CNS/ANP Subgroup with the task of updating the tables of Part III (CNS) of Volume II of the CAR/SAM ANP.

2.7 In the following link you can access the documents and presentations of the event:

<https://www.icao.int/SAM/Pages/MeetingsDocumentation.aspx?m=2023-RLA06901-COMAMHS4&t=1>

AMHS 2023 Virtual Workshop

2.8 From 25 to 27 September 2023, the AMHS 2023 Virtual Workshop was held, with the objective of reviewing the concepts used, consolidating the work carried out to interconnect the AMHS COM Centers and updating the information in the Eurocontrol AMC web application.

2.9 During the AMHS 2023 Virtual Workshop, it was recognized that all the planned interconnections between the centers of the SAM Region had already been established. Likewise, all planned interconnections of the centers of the SAM Region with adjacent centers of other regions were established, except for the interconnections of the COM AMHS Center of Caracas with the COM AMHS Center of Curaçao and of the COM AMHS Center of Georgetown with the COM Center Piarco AMHS. In addition to the planned interconnections, 9 extra-plan interconnections were established, increasing the connectivity of the centers of the Region. The **Attachment** of this Appendix presents the current AMHS interconnection status of the SAM Region.

2.10 With the following link you can access the material and presentations of the AMHS 2023 Virtual Workshop:

<https://www.icao.int/SAM/Pages/MeetingsDocumentation.aspx?m=2023-RLA06901-VirtualAMHS&t=1>

3. NAM/CAR/SAM JOINT ACTIVITIES

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

Meeting of the Ad-hoc Group on Regional Management of Aeronautical Frequencies

3.2 From 30 January to 2 February 2023, in compliance with Decision GREPECAS/20-5, the meeting of an Ad-hoc Group was held to develop a GREPECAS Project for the CAR/SAM regional management of the radio spectrum for aviation.

3.3 In the following link you can access the documents and presentations of the event:

<https://www.icao.int/NACC/Pages/meetings-2023-afm.aspx>

3.4 The GREPECAS/21-WP/31 working paper presents greater details of the activities carried out within the framework of the GREPECAS Project for the CAR/SAM regional management of the radioelectric spectrum for aviation.

Workshop/Training on the “Frequency Finder 2023” application

3.5 From 29 May to 2 June 2023, the Workshop/Training on the “Frequency Finder 2023” application was held at the SAM Regional Office, with the participation of representatives from 14 States of the CAR and SAM Regions (Argentina, Bolivia, Brazil, Costa Rica, Cuba, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Trinidad and Tobago and Uruguay), one representative of COCESNA and two ICAO CNS Regional Officers, totaling 21 people.

3.6 In the following link you can access the documents and presentations of the event:

<https://www.icao.int/SAM/Pages/MeetingsDocumentation.aspx?m=2023-RLA06901-FREQUENCYFINDER&t=1>

NAM/CAR/SAM Workshop on the Development of the regulation for the implementation of Automatic Dependent Surveillance – Broadcast (ADS-B) (ADS-B-Imp)

3.7 From 17 to 21 July 2023, the NAM/CAR/SAM Workshop on the Development of the regulation for the implementation of Automatic Dependent Surveillance – Broadcast (ADS-B) (ADS-B-Imp) was held in-person and online, which included the participation of 73 representatives (in person and online) from 23 States/Territories and three International Organizations from the NAM/CAR/SAM Regions

3.8 In the following link you can access the documents and presentations of the event:

<https://www.icao.int/NACC/Pages/meetings-2023-adsb.aspx>

Interconexiones AMHS – Región SAM / AMHS Interconnection – SAM Region

	Conexión P1 / P1 Connection	Situación / Situation	Operativa en / Operational in	Observaciones / Notes
1	SAEZ – SBBR	Operativa / Operational	04/04/2018	
2	SAEZ – SCSC	Operativa / Operational	21/01/2020	
3	SAEZ – SGAS	Operativa / Operational	30/11/2018	
4	SAEZ – SLLP	Operativa / Operational	10/02/2020	
5	SAEZ – SPIM	Operativa / Operational	10/05/2019	
6	SAEZ – SUMU	Operativa / Operational	30/11/2022	
7	SBBR – SGAS	Operativa / Operational	30/11/2018	
8	SBBR – SLLP	Operativa / Operational	30/07/2019	
9	SBBR – SKBO	Operativa / Operational	22/05/2017	
10	SBBR – SMJP	Operativa / Operational	06/09/2018	
11	SBBR – SOCA	Operativa / Operational	22/01/2020	
12	SBBR – SPIM	Operativa / Operational	14/12/2015	
13	SBBR – SUMU	Operativa / Operational	14/02/2023	
14	SBBR – SVCA	Operativa / Operational	28/02/2018	
15	SBBR – SYCJ	Operativa / Operational	06/07/2017	
16	SCSC – SPIM	Operativa / Operational	14/12/2015	
17	SEQU – SKBO	Operativa / Operational	16/01/2020	
18	SEQU – SPIM	Operativa / Operational	14/07/2012	
19	SEQU – SVCA	Operativa / Operational	11/10/2018	
20	SKBO – MPPC	Operativa / Operational	30/07/2020	
21	SKBO – SPIM	Operativa / Operational	15/11/2010	
22	SKBO – SVCA	Operativa / Operational	01/12/2017	
23	SLLP – SPIM	Operativa / Operational	10/05/2019	
24	SMJP – SVCA	Operativa / Operational	31/03/2019	
25	SMJP – SYCJ	Operativa / Operational	11/10/2018	
26	SOCA – SVCA	Operativa / Operational	22/01/2020	
27	SPIM – SVCA	Operativa / Operational	01/12/2017	
28	SVCA – SYCJ	Operativa / Operational	27/08/2019	

Interconexiones AMHS – Región SAM / AMHS Interconnection – SAM Region

	Conexión P1 / P1 Connection	Situación / Situation	Operativa en / Operational in	Observaciones / Notes
1	MPPC – MHTG	Operativa / Operational	2018	
2	MPPC – KATL	Operativa / Operational	2018	
3	SPIM – KATL	Operativa / Operational	02/03/2020	
4	SVCA – KATL	Operativa / Operational	27/01/2021	
5	SBBR – KATL	Operativa / Operational	06/08/2019	
6	SVCA – TNCC			
7	SVCA – TTPP	Operativa / Operational	26/04/2021	
8	SYCJ – TTPP			
9	SVCA – LEEE	Operativa / Operational	23/02/2023	
10	SBBR – LEEE	Operativa / Operational	11/10/2018	
11	SBBR – GOOO	Operativa / Operational	25/06/2020	
12	SBBR – SITA	Operativa / Operational	16/08/2018	
13	SAEZ – SITA	Operativa / Operational	18/07/2019	
14	SAEZ – FAOR	Operativa / Operational	01/06/2023	
E1	SAEZ – SVCA	Operativa / Operational	06/06/2022	Extra plan (Argentina – Venezuela)
E2	SAEZ – LEEE	Operativa / Operational	08/03/2023	Extra plan (ENAIRES)
E3	MPPC – SPIM	Operativa / Operational	24/04/2023	Extra plan (Panamá - Perú)
E4	SKBO – MHTG	Operativa / Operational	15/08/2022	Extra plan (CENAMER)
E5	SVCA - MHTG	Operativa / Operational	06/09/2022	Extra plan (CENAMER)
E6	SPIM – MHTG	Operativa / Operational	30/08/2022	Extra plan (CENAMER)
E7	SPIM – SUMU	Operativa / Operational	07/12/2022	Extra plan (Peru - Uruguay)
E8	MPPC - SVCA	Operativa / Operational	21/06/2023	Extra plan (Panamá - Venezuela)
E9	SAEZ - MHTG	Operativa / Operational	30/09/2022	Extra plan (CENAMER)

AMHS Interconnections / Interconexiones AMHS ASBU COMI-B0/7 (02 October 2023 / 02 Octubre 2023)

