



**Fifth GREPECAS–RASG-PA Joint Meeting (GREPECAS-RASG-PA/5) and
 Twenty-Third Meeting of the CAR/SAM Regional Planning and Implementation Group
 (GREPECAS/23)**

Virtual Phase (Asynchronous, 19 January to 17 February 2026)
 In-Person Phase (Mexico City, Mexico, 4 to 6 March 2026)

Agenda Item 8: CAR/SAM Air Navigation Implementation

COOPERATION AND JOINT ADVANCES IN COMMUNICATIONS IN CAR AND SAM

(Presented by Secretariat)

EXECUTIVE SUMMARY

In compliance with GREPECAS Conclusion 21/06, the working paper presents the joint progress made by the CAR and SAM Regions in modernising aeronautical communications, under the coordination of the NACC and SAM Regional Offices. During 2024–2025, the South American Digital Network (REDDIG III) and Caribbean Air Navigation Services Network (CANSNET) projects promoted more robust multi-service IP/MPLS networks, improving interregional interoperability, continuity of critical services, and the transition to secure digital environments, in line with the Global Air Navigation Plan (GANP) and ICAO strategic guidance.

Action:	Actions suggested under item 4 of this working paper.
<i>Strategic Objectives 2026-2050:</i>	<ul style="list-style-type: none"> • Every flight is safe and secure • Aviation is environmentally sustainable • Aviation delivers seamless, accessible, and reliable mobility for all • No country left behind • The International Civil Aviation Convention and Other Treaties, Laws and Regulations Address All Challenges • The Economic Development of Air Transport Assures the Delivery of Economic Prosperity and Societal Well-Being for All
<i>References:</i>	<ul style="list-style-type: none"> • NACC/WG/TF/41 meeting of the CAR Region (Dec 2025) • SAM/IG /33 Meeting • GREPECAS/21 Meeting, Salvador de Bahía, Brazil, November 2024.

1. Introduction

1.1 In compliance with GREPECAS Conclusion 21/06, ICAO's NACC and SAM Regional Offices continue to strengthen interregional cooperation in aeronautical communications, with the aim of

ensuring the interoperability, resilience and operational continuity of CNS/ATM communications services between the CAR and SAM Regions. The Appendix to this paper shows the follow up on the Conclusion 21/06.

1.2 Regional communications networks are a critical enabler for the safe and efficient provision of aeronautical services, supporting essential applications such as AMHS, AIDC, VoIP ATS and the exchange of operational data between ATS units and CNS centres.

1.3 In this context, activities carried out during the period 2024–2025 have focused on the technological modernisation of regional networks, the adoption of multi-service IP/MPLS architectures, the strengthening of network supervision and monitoring mechanisms, and improving interregional interoperability, in line with GANP (Doc 9750) and aligned with the CAR and SAM Strategic Plans.

2. Modernisation of Regional Communications Networks (CAR/SAM)

2.1 Within the framework of Conclusion GREPECAS 21/06, the CAR and SAM Regions are making progress in modernising their respective regional aeronautical communications networks through the CANSNET-NextGen and REDDIG III projects, aimed at providing high-availability multi-service IP/MPLS services.

2.2 In the SAM Region, the REDDIG III project is currently in the tendering process, with the aim of progressively replacing the REDDIG II infrastructure with an MPLS network offering greater capacity, resilience and operational flexibility. REDDIG II currently operates under a hybrid architecture, combining terrestrial IP/MPLS links and satellite capacity for contingency purposes, which support the operational services of the participating States.

2.3 In the CAR Region, the CANSNET project is moving towards implementation, with a multi-service MPLS architecture and a backup satellite network, which will improve regional interoperability and the continuity of aeronautical communications services.

2.4 REDDIG II currently operates with a hybrid architecture. An IP/MPLS section supported by Cirion, which carries operational services (AMHS, AIDC, ATS/VoIP voice, surveillance data and CNS/ATM applications); and its own satellite segment with transponder capacity leased from Intelsat for contingency and/or provision of specific routes.

2.5 Monitoring is carried out from the REDDIG Network Control Centres (NCCs), in coordination with the provider's NOC and the focal points of the States.

2.6 The CAR Region currently operates through the MEVA III network, a network managed by Frequentis, which provides NACC Region services with centralised operation and maintenance by the contractor (through its NOC) and technical mechanisms agreed with the participating States. Interconnection with SAM is channelled through the operating arrangements in force between the parties.

2.7 The supervision and monitoring of both networks is carried out through the respective NCCs, in coordination with the network operators and focal points designated by the States, allowing for continuous monitoring of performance, availability and quality of service.

2.8 Due to the contract signing processes of the different States, the CANSNET project has suffered a considerable delay. In particular, COMM/TF/41 highlighted the need to ensure the operational continuity of the MEVA III network during the transition period to the new CANSNET regional network, approving the extension of the **MEVA III contract from 1 April 2026 to 31 March 2027**, in order to avoid interruptions in the ATS voice and data links used for inter-centre coordination in the CAR Region. This element reaffirms the importance of orderly management of technological transitions in critical aeronautical communications infrastructure.

2.9 Likewise, NACC/WG COMM/TF/41 documented temporary technical solutions for ATS voice interconnection between CAR Region States and SAM Region States, using the MEVA III infrastructure, COCESNA and the REDDIG network, highlighting the interregional and cross-border nature of aeronautical communications. These solutions made it possible to maintain ATS coordination in the face of node departures and structural changes in the network, underscoring the need for ongoing technical coordination between CAR and SAM until CANSNET becomes operational in 2027.

2.10 Future networks will operate under multi-service MPLS infrastructure with IPsec encryption and dual monitoring from the respective NCCs, achieving high availability and a 40% reduction in interregional latency. However, while the new networks are coming into operation, common weaknesses were identified in the updating and harmonisation of voice and data communications contingency plans, leading to the approval of the update of the MEVA/CANSNET and REDDIG Regional Contingency Plan and its validation through inter-centre exercises. This aspect reinforces the importance of operational resilience as a fundamental pillar of operational safety. This contingency plan will be developed in the first quarter of 2026.

2.11 Within the framework of GREPECAS Conclusion 21/06, the modernisation and optimisation of regional aeronautical communications networks is a key element in ensuring its effective implementation, as it allows for full technical interoperability between the CAR and SAM Region infrastructures and a significant reduction in interregional latency. This technological development strengthens operational integration and the capacity for secure and efficient exchange of critical aeronautical information.

2.12 The progressive implementation of multiservice IP/MPLS networks will enable the consolidation of a resilient, high-availability regional communications infrastructure, ensuring the continuity of critical aeronautical communications services (AMHS, AIDC, VoIP ATS and operational data). This approach contributes directly to strengthening CAR/SAM interconnection and constitutes a fundamental pillar for CNS/ATM interoperability at the regional level, in line with ICAO's regional and global strategies.

2.13 In terms of digitisation, the successful progress of AMHS interoperability tests for the dissemination of OPMET data in IWXXM format was confirmed, including Phase I, II and III tests between CAR States, SAM States and the FAA. These advances support the transition to interoperable digital environments, aligned with GANP and SWIM concepts, which depend on robust, secure and resilient communications infrastructures.

3. Conclusion

3.1 The regional initiatives CANSNET-NextGen in the CAR Region and REDDIG III in the SAM Region are consolidating their position as key enabling infrastructures for the provision of high-availability multiservice IP/MPLS services, reducing interregional latency and strengthening the resilience of the aeronautical communications system. The experience documented by COMM/TF/41 shows that delays in the signing of contracts or in implementation by one or more States have a direct impact on the regional system as a whole.

3.2 The need for close monitoring, interregional coordination and sustained commitment by States is recognised in order to ensure that technological transitions, the digitisation of services and contingency planning are carried out in a harmonised and secure manner consistent with the objectives of the GANP and the current conclusions of GREPECAS.

4. Suggested Actions

4.1 The Meeting is invited to:

- a) Take note of the progress made by the CAR and SAM Regions in modernising regional aeronautical communications networks, in compliance with GREPECAS Conclusion 21/06.
 - b) Recognise the importance of the REDDIG III and CANSNET-NextGen projects as enabling infrastructures for the interoperability and continuity of aeronautical communications services between CAR and SAM.
 - c) Support the continuation of joint CAR/SAM technical activities during 2026 aimed at updating regional and interregional contingency plans and strengthening the resilience, availability, and oversight of regional communications networks.
 - d) Invite the NACC and SAM Regional Offices to continue reporting to GREPECAS on the progress of regional activities in the communications area, in line with the GANP (Doc 9750).
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APPENDIX**FOLLOW-UP TO CONCLUSIONS AND ACTIVITIES COMMUNICATIONS (CAR/SAM)**

Technical Area	Associated GREPECAS Conclusions	Title/Activity	Purpose and Description	Expected Impact	Level of Compliance	Forecast/Horizon	Follow-up/Observations
Communications (REDDIG III – CANSNET-NextGen)	21/06	Modernisation and interconnection of regional multiservice networks	Replace current networks with a secure, redundant, low-latency IP/MPLS infrastructure between the NACC and SAM regions. The implementation will enable greater operational integration and reduce interregional latency.	Provide secure, resilient, and interoperable multiservice IP/MPLS infrastructure.	advanced progress	2027	NNI interconnection; coordinated operation between regional NCCs; ISO/IEC 27001 security framework in progress.