



**Agenda Item 1: ANS context (ATM/CNS) Global and Regional level
b) Status review of conclusions**

BRAZIL - STATUS OF CONCLUSIONS

(Prepared by Brazil)

Summary
This information paper presents the implementation status of SAM/IG conclusions in Brazil.
References
- SAM/IG/26 Meeting report

1. Background

1.1 This paper proposes to present the status of implementation of SAM/IG previous conclusions in Brazil.

1.2 The items listed in this information paper are the ones presented in the Appendix B of SAM/IG 26 final report excluding the items considered implemented.

2. Analysis

2.1 **Conclusion SAM/IG/18-01:** PANS-OPS recommendations for harmonizing instrument procedures in the SAM Region: that SAM States implement and apply, as soon as possible, the recommendations of the PANS-OPS group, with a view to harmonizing instrument procedures and the associated processes and enhance safety.

2.1.1 Brazil recognizes and continue to apply PANS-OPS recommendations from regional groups and ICAO.

2.2 **Conclusion SAM/IG/21-01:** Regional and interregional harmonized PBN implementation goals: that SAM States, organizations, users, and stakeholders double efforts to meet regional and interregional performance-based air navigation implementation goals, based on GREPECAS projects, and contemplating the strengthening of national PBN implementation plans so that they include performance indicators and the use of recognized project management tools and methods.

2.2.1 Brazil established the Study Group on Procedures and Airspace (GEPEA), which has, among other objectives, the function of identifying PANS-OPS best practices and implementing such practices in a harmonized way at the national level.

2.3 **Conclusion SAM/IG/21-03:** Activities required in the AIDC pre-operational phase to reduce migration times to the operational phase That SAM States currently in the pre-operational phase of AIDC, in order to reduce time in this phase and migrate to the operational phase: a) operate AIDC for a period of time to obtain the skills required for the use thereof; b) monitor AIDC operation, recording errors made during the reporting, coordination and transfer stages; c) conduct statistical measurements based on the results of b), in order to identify the most frequent errors; d) based on the results of c), take the necessary action to mitigate errors; and e) report the results obtained in c) and d) and disseminate the lessons learned at events, teleconferences and AIDC implementation meetings of the SAM Region, so that they may serve as a reference for other AIDC implementation.

2.3.1 ACC Amazonico – ACC Maiquetia.

Pre-operational tests carried out in the first half of February 2022. Control transfers carried out between the two centers were, for the most part, successful. The Amazon ACC, based on a report generated by SAGITARIO (Brazilian ATC System), is in the process of analyzing the failures that have occurred. The report will serve as a subsidy for adjustment in the system configuration, in the operating procedures in accordance with Maiquetia and software correction requests

2.3.2 ACC Curitiba – ACC Asunción.

Initiated, by the DECEA Operations Sub department, the negotiations for Memorandum of Understanding between the Centers which will contain the parameters and norms for carrying out the pre-operational tests.

2.3.3 ACC Atlantico – ACC Dakar.

ACC Atlantico received representatives from the Dakar Center to discuss the start-up of the AIDC with ACC-AO. Representatives from DECEA also participated in the meeting. It was agreed, between the Centers, the preparation of some documents with the parameters and schedule of the tests to be carried out, as well as the future operation of the AIDC. In early 2022, pre-operational tests began and, in the current phase, the errors obtained by both parties are being evaluated for their subsequent correction and configuration adjustments.

2.3.4 ACC Amazonico – ACC Lima

Last tests carried out in June and July 2021. A high rejection of ABI messages sent from ACC-AZ to Lima was observed. 94% of ABI messages generated by ACC-AZ received a Logical Reject Message (LRM) in response. The SDOP Operations Sub department analyzed the errors reported by the LRM produced by the Lima system and found that the content of the indicated FPL fields was not inconsistent. The result of the analysis was presented to those in charge of Lima, confirming an error in the interpretation of the Lima system of the contents of the fields. In August 2021, Lima reported the problem for analysis by the system provider, the company Indra. DECEA expects, from this moment, the correction of errors in the Indra System to later schedule new tests between the Manaus and Lima Centers.

2.4 **Conclusion SAM/IG/25-01:** Implementation of strategic direct routing - EDE SAM States analyze the guidance material prepared by the GESEA SG1 on the strategic direct routing (EDE) concept, which has been made available to the administrations, and coordinate with IATA and international airlines, as well as with adjacent States, for its implementation.

2.4.1 Brazil implemented Strategic Direct Routing (EDE) in four FIR. Working Paper will be presented.

2.5 **Conclusion SAM/IG/25-04:** Adoption of the Regional guide on the implementation of PBN visual runway procedures SAM States adopt the Regional guide on the implementation of PBN visual runway procedures developed by GESEA and, on this basis, approve national regulations on the implementation of these procedures.

2.5.1 Brazil has actively participated in the development of criteria for the implementation of PBN procedures for visual RWY and has already been applying these criteria at the national level. The procedures were elaborated for 4 Aerodromes and 8 more will be published by 2024.

2.6 **Conclusion SAM/IG/25-06:** Approval of the ATM/FPL Roadmap and of the format for acknowledgment (ACK) and rejection (REJ) of flight plans and associated messages That States: a) Approve the ATM/FPL Roadmap and the format for acknowledgment (ACK) and rejection (REJ) of flight plans and associated messages; and b) Adopt the guidelines and procedures of the ATM/FPL Roadmap.

2.6.1 Brazil has implemented, in 2021, an automated system for the centralized management of flight plans that provides feedback messages to FPL originators, sending acceptance (ACK) or rejection (REJ) messages of the plans of flights submitted. The Secretariat highlighted that the format adopted in Brazil does not exactly comply with the format indicated in the document prepared by the ATM/FPL Subgroup, because the Brazilian system was developed before the publication of the ATM/FPL Roadmap. It was urged that Brazil analyze the possibility of adapting the system to the format proposed in the ATM/FPL Roadmap.

2.7 **Conclusion SAM/IG/26-01:** Adoption of the ATFM Operations Plan (OPSAM).

2.7.1 The OPSAM is being used in international operational meetings (BRISA) at the pre-tactical (weekly) and strategic (monthly) levels, with states sending the data to the CGNA to update the panel.

2.8 **Conclusion SAM/IG/26-02:** Adoption of the Guide for the implementation of the ATFM in the SAM Region 2022- 2026.

2.8.1 Brazil already has ATFM fully implemented in airspace under the jurisdiction of DECEA.

2.9 **Conclusion SAM/IG/26-03:** Revision of the CNS tables of Vol II of the CAR/SAM Air Navigation Plan and support in the elaboration of Vol III of the ANP CAR/SAM, on CNS topics.

2.9.1 The participants of the CNS/ANP Subgroup must carry out a critical review of which tables should be included in the Plan, as well as propose changes in the formats of the tables, if necessary, in order to have a document that reflects the planning of the States, taking into consideration the document describes the planning of the States of two regions (CAR and SAM).

2.9.2 The strategy to be adopted is to approve the review and update of the information contained in Volume II, referring to SAM States, at a Meeting of the SAM Region Implementation Group (SAM/IG). In this regard, the Secretariat indicated that the SAM/IG/27 Meeting is scheduled for the period from May 30 to June 3, 2022, to be held virtually.

2.9.3 The Secretariat suggested that after completing the task of revising Volume II, the CNS/ANP Subgroup may work on updating the COM Lists of frequency assignments (navaids, VHF, etc.), using the Frequency Finder application as a tool. In this sense, coordination will be resumed with the Secretariat of the Frequency Spectrum Management Panel (FSMP), to carry out training for the use of this application by all States of the SAM Region.

3. **Suggested actions**

3.1 The Meeting is invited to take note and review the information provided in this Information Paper.

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