



**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

**ATM - IMPLEMENTATION OF THE AIR TRAFFIC FLOW MANAGEMENT (ATFM)
 SERVICE IN CAR/SAM REGIONS**

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
<p>This note analyses the implementation of the ATFM service. The particularities of each State and the two Regions are considered in the management of imbalances between demand and capacity. Given the interregional nature of the service, coordination and interoperability requirements have been identified. In this regard, collaborative initiatives between CAR and SAM are promoted.</p>	
Action:	Suggested actions are included in Section 4
<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"> • Doc 9750, Global Air Navigation Plan (GANP) • Doc 9971, Collaborative Traffic Flow Management (ATFM) Manual • Reports of GREPECAS Meetings

1. Introduction

1.1 The GREPECAS/21 Meeting approved Conclusion GREPECAS/21/08 - Operational development of the ATFM service in the CAR/SAM regions (See **Appendix** to this working paper), with the following objectives:

- a) To improve capacity and efficiency, as well as to make optimal use of the ATM/CNS and airport infrastructure installed.
- b) To promote the implementation of the ATFM in the CAR/SAM Regions in accordance with ICAO provisions, as a contribution to the fulfilment of the infrastructure matters and operational efficiencies stipulated in the Aspirational Long-Term Objective (LTAG).
- c) To constitute an effective ATFM tactical coordination mechanism for responses (H24) to contingency situations or unforeseen events.

1.2 The CAR and SAM regions, through their respective working groups, have been developing the implementation of the ATFM service, considering the specific characteristics of each State with respect to the management of demand-capacity imbalances. For such implementation, the coordination and interoperability requirements are identified, considering that the ATFM service has a regional and interregional character. Therefore, collaborative work between the two regions is promoted through initiatives such as CADENA, dashboards for demand analysis and indicators, training, etc.

2 Analysis

2.1 The CAR and SAM Regions make up a highly interdependent airspace system, which supports intense intercontinental, regional and domestic traffic flows between North America, South America and the Caribbean. Large *hub airports*, ocean corridors and high-density TMAs generate a strong operational interconnection, in terms of the demand-capacity balance, between adjacent FIRs or, in some cases, encompassing non-adjacent FIRs.

2.2 Operational disruptions—caused by weather, infrastructure constraints, special use of airspace, space operations, and major international events—frequently propagate across multiple FIRs. However, coordination remains uneven and often bilateral or tactical, rather than regionally integrated.

2.3 While the SAM Region has developed structured mechanisms such as BRISA, regional dashboards, cross-border working groups and harmonized ATFM guides, the States of the CAR Region face greater constraints in automation, human resources and access to demand and capacity data.

2.4 The CADENA initiative is the first collaborative CAR-SAM digital environment for the exchange of traffic, capacity and event information, enabling near real-time situational awareness and collaborative decision-making support.

2.5 With the 2026 FIFA World Cup approaching and continued traffic growth, the CAR-SAM operational interdependence will intensify, making regional ATFM coordination an operational necessity.

2.6 The SAM Implementation Group (SAM/IG) with the contribution of the GESEA Group, addresses the activities of the implementation of the ATFM service.

2.7 The following describes the progress made by the States on the implementation of the ATFM SAM Guide, addressing topics such as runway capacity and ATS sector calculations, coordination of ATFM measures, distribution of the Daily Plan, participation in BRISA sessions, portal development tasks, among others.

- Argentina — Made progress in runway capacity calculations for Aeroparque and Ezeiza (not yet published in AIP). Implementation of the BAIREZ TMA will allow ATC capacity calculations at ACC Ezeiza. Work on data loading for Dashboard and portal.

- Bolivia — Completed runway capacity calculations at La Paz and Santa Cruz; publication through the AIP supplement. Uploading data to the Dashboard is done regularly.
- Brazil — Complies with all ATFM phases through CGNA, with automated processes. Promotes improvements in ATFM measures: studies on GDP and wait mitigation. Analyzes flight variability to manage advances and delays.
- Chile — Runway capacity calculations published on AIP. Keeps the data load in Dashboard and portal up to date.
- Colombia — Operates with Harmony automated system. Develop runway capacity calculations in major cities. Delays in data delivery for Dashboard, but they are being fixed.
- Ecuador — Updated data in the National Dashboard; pending charge to the regional. Track capacities and ATC sectors updated in the second half of 2024. Limitations due to lack of operational personnel to participate in BRISA. Implemented use of service messages for ATFM (NOTAM replacement) measures. FMU Guayaquil participates in specific events; requested dedicated AMHS-AFTN address.
- Panama — Manages formalization of the ATFM area in its organizational structure. Delayed calculation publishing and data delivery for Dashboards. Coordination with COPA for adjustments; Participation in Portal.
- Paraguay — You need to resume loading data into Dashboard. It must advance in integration into portal activities.
- Peru — Maintains data upload within deadlines. It has calculations of runway capacity (Lima and Cusco) and ATC sectors.
- Uruguay — Follow ATFM guide and participate in task force. Attend BRISA sessions as an observer; limitations due to lack of personnel. Track and sector capabilities published on AIP. Participation in cross-border ATFM activities.
- Venezuela — Difficulties in loading data for Dashboard (delayed deliveries). Track capacity calculations in Maiquetia completed, not published. Planning for ATC sector capacity calculation.

2.8 The BRISA mechanism remains key in the SAM Region for ATFM coordination. The BRISA Ad-Hoc Group, led by Chile together with Peru, Brazil and Argentina, has been reactivated with the aim of improving the format and content of the ATFM Briefing. Work is being done to simplify reports, focus them on events with operational impact, shorten interventions and define criteria to convene BRISA Extraordinary. Regional criteria for the Extraordinary BRISA are being developed and coordination between States is being strengthened to ensure coherence in all phases of the mechanism.

2.9 During 2025, the participation of some States in BRISA sessions and other ATFM activities has been affected by shortages of human resources and support. Letters have been sent to the States reiterating the importance of the development of the ATFM, stressing the assignment of dedicated personnel in the service to maintain the sharing of demand data for the Dashboard, hoping that in the coming months the ATFM Portal will be automating several tasks.

2.10 With the aim of strengthening regional interoperability, the ATFM Cross-border Task Group (GT ATFM XB) was organized in accordance with the ATFM SAM Guide 2021-2025. This group is working on the development of a regional manual that standardizes ATFM procedures between SAM States, facilitating the implementation of phases III and IV of the Cross-border ATFM service.

2.11 Working Groups have been organized to update the ATFM technical documents of the SAM Region, including the ATFM Guide and the OPSAM Operations Manual.

3 Conclusions

3.1 The implementation of the ATFM in the CAR and SAM Regions has a diverse maturity. Several States in the SAM Region operate advanced ATFM environments, including automated systems, runway and sector capacity calculations, collaborative planning, and cross-border mechanisms, with Brazil's CGNA as a regional reference.

3.2 Regional interoperability has been strengthened through the BRISA mechanism, its reactivated Ad-Hoc Group, the ATFM Cross-Border Task Group, and the development of standardized regional manuals and procedures to support pre-tactical and tactical coordination

3.3 In the CAR Region, ATFM capacity remains uneven, with several FIRs operating manual or ad-hoc processes. Limited access to integrated traffic data, staffing constraints, and lack of harmonized procedures reduce predictability and coordinated capacity management.

3.4 CADENA provides the basic layer of CAR–SAM integration, allowing States and ANSPs to exchange demand, capacity and event information, and facilitating the progressive transition to a regional ATFM.

3.5 However, regional coverage is still incomplete. Several FIRs are not yet fully connected to CADENA, BRISA or regional dashboards, which limits the effectiveness of collaborative decision-making and regional flow management.

3.6 In the SAM Region, ATFM implementation has been strengthened through activities, practices, and deliverables on data management and demand-capacity analysis. Cross-border ATFM studies are being promoted including a tool to support pre-tactical and tactical coordination and CDM management of ATFM measures at the regional level and, in the second stage, at the interregional level.

3.7 In accordance with Conclusion GREPECAS/21/08, it is a high priority for States and ANSPs to direct the necessary resources (personnel, training, procedures, etc.) to the FMU units, so as to ensure adequate ATFM services during 24-hour hours or at the times required for each unit.

4 Suggested Actions

4.1 The Meeting is invited to:

- a) Take note of the information presented in this working paper;
- b) Support the actions outlined in Section 3; and
- c) propose other actions as needed.

APPENDIX

CONCLUSION GREPECAS/21/08	OPERATIONAL DEVELOPMENT OF THE ATFM SERVICE IN CAR/SAM REGIONS	
<p>What:</p> <p>That,</p> <p>a) States/Territories and users prioritize resources for ATFM implementation, including the allocation and training of human resources;</p> <p>b) ICAO NACC and SAM Regional Offices develop a diagnosis on the operational implementation of the ATFM service effectively in the CAR and SAM Regions, and encourage collaborative work between ATFM units at the Regional and Interregional levels by GREPECAS/22; and</p> <p>d) States/Territories and users initiate the implementation of the optimization of the ATFM and CDM coordination tools</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input checked="" type="checkbox"/> Inter-regional</p> <p><input checked="" type="checkbox"/> Economic</p> <p><input checked="" type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>	
<p>Why:</p> <p>a) To improve capacity and efficiency, as well as to make optimal use of the ATM/CNS and airport infrastructure installed.</p> <p>b) To promote the implementation of the ATFM in the CAR/SAM Regions in accordance with ICAO provisions, as a contribution to the fulfilment of the infrastructure matters and operational efficiencies stipulated in the Aspirational Long-Term Objective (LTAG).</p> <p>c) To constitute an effective ATFM tactical coordination mechanism for responses (H24) to contingency situations or unforeseen events.</p>		
<p>When: GREPECAS/22</p>	<p>Status: <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed</p>	
<p>Who:</p> <p>a) CAR/SAM States, Territories and users</p> <p>b) ICAO NACC and SAM RO: CAR/SAM States, Territories and users</p>	<p>Responsible:</p>	