



International Civil Aviation Organization CAR/SAM Regional Planning and Implementation Group (GREPECAS)

WORKING PAPER

GREPECAS/21 — WP/43 02/11/23

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

Santo Domingo, Dominican Republic, 14 to 17 November 2023

Agenda Item 43 Global and Regional Developments

3.3 CAR/SAM Air Navigation Services (ANS) Implementation Level

ATFM SAM PORTAL

(Presented by Brazil)

EXECUTIVE SUMMARY

This Working Paper will present the proposal made by Brazil in Subgroup 3 (ATFM) of the Study Group for Implementation of SAM Airspace (GESEA) to develop a web tool aiming at sharing data and information with the international ATM community, as well as standardizing ATFM message exchange to coordinate ATFM Crossborder solutions among the participating States.

Action:	Insert action required.
Strategic	Air Navigation Capacity and Efficiency
Objectives:	Economic Development of Air Transport
	• Environmental Protection
References:	 Guía para implementación del Servicio ATFM en la Región SAM 2021 - 2025;
	• Plan de Operaciones para la Región SAM (OPSAM) 2023;
	• ICAO Doc 9973 - ATFM.

1. Introduction

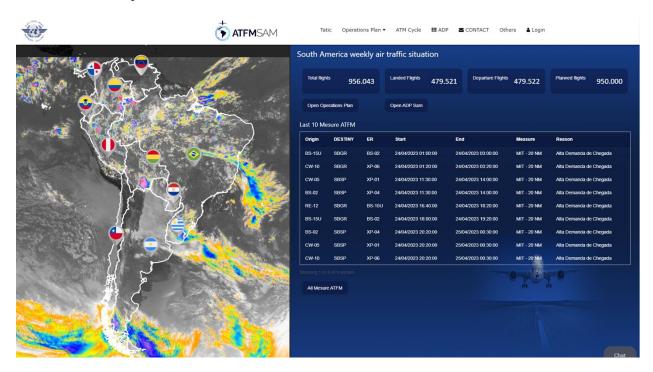
- 1.1 During SAM/IG/22 in 2018, the creation of the SAM Airspace Study and Implementation Group (GESEA) was proposed and approved with the following objectives:
 - a. Coordinate the implementation of SAM route versions.
 - b. Harmonize the implementation of PBN in the main SAM TMA, applying international best practices.
 - c. Support SAM States in the implementation of STAR, SID and PBN approaches.
 - d. Coordinate the migration process of the RNAV nomenclature to RNP.
 - e. Develop a harmonized methodology for post-implementation evaluation, with application of key performance indicators.

- f. Support the implementation of a regulatory framework for design service of instrument flight procedures; and
- g. Share best practices in the design and publication of instrument flight procedures to increase flight safety and efficiency.
- 1.2 Subsequently, on 22 June 2021, GESEA approved the creation of an ATFM Subgroup (SG3), as the participants identified a number of needs in the Region for the consolidation of an integrated and more robust ATFM service.
- 1.3 The GESEA ATFM Subgroup contributed to the delivery of several products, such as the SAM Operations Plan, the South American Operational Briefings SAM ATFM (BRISA), the Guide to the Implementation of the ATFM Service in the SAM Region 2021 2025, among others.
- 1.4 In 2022, SG3 approved the creation of a Working Group for the development of the ATFM Crossborder service (GT XB), aiming at the standardization and the establishment of tools for ATFM coordination among States of the Region.
- 1.5 In this context, and in order to support the implementation of the ATFM Crossborder in the Region, Brazil presented the proposal for the development of the ATFM SAM Portal, a web tool produced by GESEA and that will be the basis of the South American ATFM Crossborder service.
- 1.6 During SAM/IG/29, in 2023, the design and functionalities of the ATFM SAM Portal were presented by the Brazilian members of SG3. The objective was that the representatives of the States took note so that the development of the Portal could follow in an integrated way and with the participation of all (NE/2.7 ATFM Portal for SAM Region).

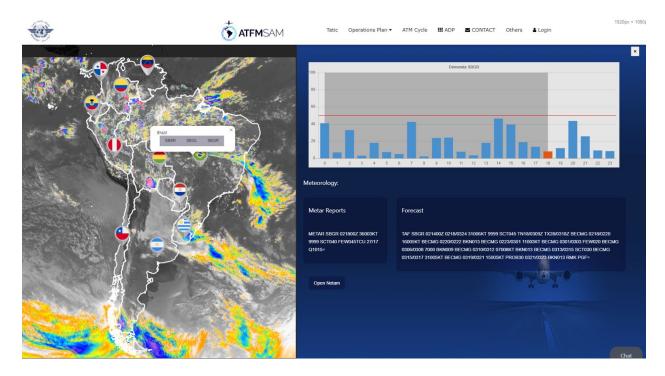
2. Analysis

- 2.1 The ATFM SAM Portal is a collaborative web application among the States of the SAM Region that allows stakeholders to interact and exchange information related to the ATFM Crossborder.
- 2.2 It should be noted that the ATFM SAM Portal is an initiative of GESEA SG3 and that its development, future improvements and maintenance will take place collaboratively among the States of the SAM Region, with the mediation of ICAO-Lima.
- 2.3 The main objective of the portal is to promote communication, collaboration and coordination between all stakeholders, with shared information for the purpose of improving the efficiency of air operations in the airspace of the SAM Region, through the following functionalities:
 - a. promoting regional integration of the ATFM;
 - b. sending messages between ATFM units in real time;
 - c. monitoring air traffic demand and declared ATC capacity;
 - d. monitoring ATFM measures;
 - e. monitoring meteorological phenomena in airspace;
 - f. monitoring events with a significant impact on the flow;
 - g. producing and standardizing publications of the ATFM Daily Plan;
 - h. providing results of ATM performance indicators; and
 - i. others.

- 2.4 The ATFM SAM Portal will provide information of interest to the international ATM Community in English, Spanish and Portuguese.
- 2.5 The ATFM SAM Portal development schedule includes the following project milestones:
 - a. presentation of the initial version (BUILD 1) of the platform at a virtual meeting coordinated by ICAO-Lima in 2023;
 - b. online workshop for training and validation in January and February 2024; and
 - c. beginning of tool operation in February 2024.
- 2.6 The development of the tool, its functionalities, layout and other decisions will occur within the GT XB of GESEA SG3.
- 2.7 The ATFM SAM Portal will be integrated with weather radars, providing real-time information for airspace users.



2.8 Participating States shall define the airports which will have information made available on the ATFM SAM Portal, in a harmonized way with OP-SAM. Thus, data on demand, capacity, possible infrastructure degradation, application of ATFM measures, NOTAM of interest, among others, will be available for consultation by the international ATM community through the Portal.



2.9 Participating States will also be able to provide future (strategic and pre-tactical planning), current (tactical) and past (post-operations) information regarding air traffic demand of the monitored airports, declared capacities, main occurrences, infrastructure works and degradation, among others.



2.10 The ATFM SAM Portal will use the servers provided by OACI-Lima, which will coordinate the development and possible future maintenance actions.

2.11 Through a secure environment (login and password), the flow managers of the participating States will be able to exchange messages aiming at the implementation of an ATFM measure, which will be published in the external area of the Portal and stored in a database for future reference.

3. Suggested Actions

- 3.1 The participating States of the Meeting are invited to:
 - a. Note the information presented in this Working Paper;
 - b. Participate in the presentation of the initial version of the platform; and
 - c. Participate in a Workshop on the tool.