



Agenda Item 4: Report on GESEA and Subgroup Activities and Deliverables

**ASSESSMENT OF THE SAM REGION'S PARTICIPATION IN COMPASS AND
INTEROPERABILITY OPPORTUNITIES WITH THE PORTAL ATFM SAM**

(Presented by SG3 ATFM)

SUMMARY

This working paper presents an assessment of the participation of SAM Region specialists in the Collaborative Operation and Management Platform for Air Traffic Services and Synchronization (COMPASS) meetings, a platform developed by CANSO to facilitate the exchange of operational information among Air Navigation Service Providers (ANSPs), airports and airspace users.

The paper analyses the potential benefits of the participation of the SAM Region States, its complementarity with the Portal ATFM SAM, the Region's ATFM coordination tool, and proposes that GESEA SG3 continue evaluating opportunities for interoperability between both platforms while preserving the regional governance established by ICAO and avoiding duplication of processes.

References:

- International Civil Aviation Organization (ICAO). Doc 9971 – Manual on Collaborative Air Traffic Flow Management (ATFM). Latest Edition.
- International Civil Aviation Organization (ICAO). Doc 4444 – Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM). Latest Edition.
- International Civil Aviation Organization (ICAO). Annex 11 – Air Traffic Services. Latest Edition.
- ICAO South American Regional Office. SAM/IG/29 Working Paper 2.7 – Proposal for the Establishment of the Portal ATFM SAM. Lima, Peru, 2023.
- ICAO South American Regional Office. SAM/IG/26 Working Paper 2.5 – Proposal for the Establishment of the South American ATFM Briefing (BRISA). 2021.
- South American Airspace Study and Implementation Group (GESEA). Final Report of the Ninth GESEA Meeting (GESEA/9). ICAO South American Regional Office, 2026.

1. Background

1.1 The Collaborative Decision Making (CDM) concept establishes that efficient Air Traffic Flow Management depends on the timely exchange of operational information among all participants within the ATM network.

1.2 Since 2021, the SAM Region has been conducting the South American ATFM Briefing (BRISA) as a collaborative mechanism for the weekly exchange of operational information among the States, under the coordination of the GESEA ATFM Subgroup (SG3).

1.3 As an evolution of this collaborative process, Portal ATFM SAM has been developed as the SAM Region's tool to support ATFM activities. The Portal brings together, within a single collaborative environment, several operational functionalities, including BRISA, the exchange of operational information, cross-border ATFM coordination, capacity management, the recording of ATFM measures and integration with aeronautical and meteorological databases.

1.4 In parallel, CANSO maintains COMPASS, a collaborative platform currently used primarily by ANSPs in the CAR and NAM Regions for the exchange of operational information. COMPASS meetings are held twice a week, on Mondays and Thursdays at 1100 UTC, in English, allowing participants to share information on forecast traffic demand, ATFM measures, significant weather, operational restrictions, equipment outages, special events and other aspects relevant to Air Traffic Flow Management. COMPASS originated from CADENA (CANSO ATFM Data Exchange Network for the Americas), which subsequently evolved into CADENA OIS (Operational Information System) and, finally, into the current COMPASS platform.

1.5 Considering the SAM Region's interest in enhancing continental situational awareness, specialists from the BRISA Ad Hoc Group, designated by GESEA SG3, participated in COMPASS meetings with the purpose of identifying potential benefits and opportunities for cooperation.

2. Analysis

2.1 Current situation

2.1.1 The Portal ATFM SAM has consolidated the collaborative processes developed by the SAM Region, becoming the platform for ATFM coordination among the States.

2.1.2 Among these processes is the South American ATFM Briefing (BRISA), held weekly on Wednesdays at 1330 UTC, in Spanish. Currently, while the operational implementation of the Portal ATFM SAM is being completed, BRISA is conducted using a PowerPoint presentation to exchange relevant operational information, including forecast traffic demand, available capacity, meteorological conditions, operational restrictions, ATFM measures and special events that may affect air operations within the SAM Region. Once the implementation of the Portal is completed, BRISA will be supported by the Portal ATFM SAM, allowing all information shared by the States to be recorded, made available for consultation and used to support the Collaborative Decision Making (CDM) process.

2.1.3 The Portal ATFM SAM currently constitutes the collaborative environment of the Region for the planning, coordination and monitoring of ATFM activities.

2.2 Information Shared through COMPASS

2.2.1 Unlike BRISA, whose objective is exclusively focused on the operational coordination of the SAM Region, COMPASS meetings have a continental scope, with the participation of ANSPs from the CAR and NAM Regions, as well as other strategic partners. These meetings are currently held on Mondays and Thursdays at 1100 UTC, in English.

2.2.2 During the meetings observed, it was verified that COMPASS enables the sharing of, among others, the following types of information:

- a) forecast traffic demand;
- b) planned ATFM measures;
- c) significant meteorological conditions;
- d) operational restrictions;
- e) equipment outages;

- f) special events;
- g) relevant NOTAMs;
- h) volcanic activity;
- i) airport operational configuration; and
- j) other operational information of interest.

2.3 Assessment of the Participation of the SAM Region

2.3.1 The difference in the days and times of the meetings allows specialists from the SAM Region to participate in COMPASS without interfering with the conduct of BRISA, facilitating the acquisition of complementary information that may subsequently contribute to the coordination activities carried out through the Portal ATFM SAM.

2.3.2 The participation of specialists designated by GESEA SG3 made it possible to identify several positive aspects:

- a) increased regional and continental situational awareness;
- b) early knowledge of operational events that may affect air traffic flows;
- c) strengthened exchange of experience among ANSPs;
- d) future possibility of interoperability between the Portal ATFM SAM, including the BRISA process, and COMPASS; and
- e) exchange of international best practices related to Collaborative Air Traffic Flow Management.

Likewise, some challenges were identified:

- a) differences between the operational objectives of the SAM, CAR and NAM Regions;
- b) the need to avoid duplication in data entry by the States;
- c) limitations in human resources to participate in multiple weekly meetings; and
- d) the need to preserve the regional governance established by GESEA.

2.4 Integration with the Portal ATFM SAM

2.4.1 Considering the complementarity between COMPASS and the Portal ATFM SAM, it is considered appropriate to evaluate interoperability mechanisms through the automated exchange of data, whenever technically feasible, avoiding duplication in data entry by the States. Such integration will make it possible to take advantage of the information available in both tools to strengthen situational awareness and support the Collaborative Decision Making (CDM) process in the SAM Region, while preserving the governance established by GESEA SG3.

2.5 Conclusions

2.5.1 COMPASS constitutes an important platform for the exchange of operational information among ANSPs throughout the Americas.

2.5.2 The Portal ATFM SAM constitutes the collaborative ATFM coordination tool of the SAM Region, integrating within a single environment the operational processes developed by GESEA SG3, including BRISA.

2.5.3 BRISA continues to be the main collaborative process for the exchange of information among the States of the SAM Region and, once the implementation of the Portal ATFM SAM is completed, it will be conducted through that platform.

2.5.4 The information shared through COMPASS has the potential to complement the situational awareness of the SAM Region.

2.5.5 The scheduling of COMPASS on Mondays and Thursdays (1100 UTC) and BRISA on Wednesdays (1330 UTC) demonstrates that both initiatives are complementary and can coexist without overlapping activities.

2.5.6 Any future integration initiatives should prioritize interoperability mechanisms between both platforms, avoiding duplication of activities and preserving the Portal ATFM SAM as the regional coordination tool.

3. **Suggested Actions**

3.1 The Meeting is invited to:

- a) take note of the information presented in this Working Paper;
- b) recognize the Portal ATFM SAM as the regional collaborative environment supporting the ATFM coordination processes of the SAM Region, including BRISA, in accordance with the governance arrangements established by GESEA SG3;
- c) invite the States to participate in COMPASS meetings with the purpose of identifying best practices and opportunities for cooperation;
- d) task GESEA SG3 with conducting studies on possible interoperability mechanisms between COMPASS and the Portal ATFM SAM, taking into consideration technical, operational and governance aspects; and
- e) present the results of these studies at a future SAM/IG meeting.

APPENDIX A

SWOT ANALYSIS

Comparison between COMPASS and the Portal ATFM SAM

Aspect	COMPASS	Portal ATFM SAM
Strengths	Well-established platform throughout the Americas; broad participation of ANSPs; enhanced continental situational awareness (CAR/NAM).	SAM Region platform developed under GESEA SG3; incorporates BRISA; designed to meet regional requirements; integration with aeronautical and meteorological information.
Weaknesses	Primarily focused on the CAR and NAM Regions; meetings conducted in English; manual data entry; does not include processes specific to the SAM Region.	Platform currently undergoing operational consolidation; dependent on the active participation of all SAM Region States.
Opportunities	Continental information exchange; international cooperation; interoperability with regional platforms.	Continuous enhancement of functionalities; process automation; interoperability with international systems; strengthening of regional Collaborative Decision Making (CDM).
Threats	Duplication of processes; increased workload; governance differences among organizations.	Need for continuous maintenance; ongoing technological evolution; consistent participation by all States.

APPENDIX B**COMPARATIVE TABLE OF FUNCTIONALITIES**

Functionality	COMPASS	BRISA	Portal ATFM SAM
Frequency	Twice a week	Once a week	Continuous (24x7)
Day and Time	Monday and Thursday – 1100 UTC	Wednesday – 1330 UTC	Continuous access
Language	English	Spanish	Spanish
Collaborative briefing	✓	✓	✓
Exchange of operational information	✓	✓	✓
Historical record of meetings	Partial	No	✓
Cross-border ATFM coordination	✓	✓	✓
Recording of ATFM measures	✓	Partial	✓
Capacity management	Partial	No	✓
Operational dashboard	✓	No	✓
NOTAM integration	Partial	No	✓
Meteorological information integration	✓	No	✓
Operational database	✓	No	✓
User management	✓	No	✓
Permanent collaborative environment	✓	No	✓
Functionalities specific to the SAM Region	No	Yes	✓
ICAO SAM (GESEA SG3) governance	No	Yes	✓
The regional collaborative ATFM coordination tool developed under GESEA SG3	No	Operational process of the Portal	✓