International Civil Aviation Organization
South American Regional Office
18° AIM Multilateral Workshop/Meeting of the SAM Region for the Transition from AIS to AIM (SAM/AIM/18)
Panama City, Panama, May 18 to 22, 2026

SAM/AIM/18-WP/11
14/05/2026

Agenda Item 5: Review of NOTAM Contingency Plans and AIS Contingency Plans for Volcanic Ash

VOLCANIC ASH CONTINGENCY PLAN FOR THE AIS/AIM

(Presented by the Secretariat)

SUMMARY

This Working Paper presents the status of implementation of the AIS/AIM Contingency Plans for volcanic ash in the SAM Region, including the degree of development in the States, the coordination between services (ATS, AIS, MET), and the application of procedures such as the issuance of ASHTAM.

The importance of strengthening these plans through regional coordination, updating of procedures and the conduct of exercises (VOLCEX) is highlighted.

References:

- ICAO, Annex 15 – Aeronautical Information Services
- ICAO, Doc 8126 – AIS Manual
- Reports of SAM/AIM meetings
- Plan Regional VACP/SAM (Volcanic Ash Contingency Plan)
- Lessons learned from the VOLCEX exercise

ICAO Strategic objectives:	*A - All flights are safe and secure* *D - No Country Left Behind*

1. Introduction

1.1 The SAM Region is characterized by the presence of potentially active volcanoes, which requires adequate preparation of AIS/AIM services to ensure service continuity and operational safety.

1.2 In this context, Volcanic Ash Contingency Plans are essential to manage aeronautical information in situations of volcanic eruptions, coordinate with ATS, MET, VAAC and volcanological observatories, in addition to issuing critical information related to a volcanic eruption or the presence of volcanic ash clouds in the FIR.

2. Discussion

2.1 In **Appendix A** to this Working Paper, the follow-up carried out by the Secretariat to the preparation and implementation of the Volcanic Ash Contingency Plan for the AIS in the States can be found.

2.2 According to the information in Appendix A, the status of preparation and implementation of the Volcanic Ash Contingency Plans for the AIM is as follows:

- ✓ Some States have plans established or integrated into their regulations (e.g. Argentina, Brazil, Uruguay)
- ✓ Others are in the process of development or revision (e.g. Bolivia, Colombia, Venezuela, Panama)
- ✓ Some States do not yet have formalized plans or have limitations (e.g., Paraguay, lack of evidence in other cases)

2.3 Also, according to the monitoring carried out by the Secretariat, cases are identified where the plans are integrated into quality management systems or there are agreements with the provider of meteorological services for navigation and with the volcanological observatory.

2.4 The Secretariat urges aeronautical information providers to establish or strengthen coordination mechanisms and channels, if already existing, between IFA/AIM (NOF), ATS services, MET providers, volcanic ash advisory centres (VAACs) as well as national volcanological observatories. This coordination will allow for the timely issuance of ASHTAM, the management of the affected airspace and the dissemination of reliable information to users.

2.5 With regard to the issuance of ASHTAMs, it has been identified as a critical area that not all States have procedures in place, and in some cases, it has been verified that ASHTAMs are not published or differences are included in the AIP in relation to the use of this message. This situation has a direct impact on the operational safety and compliance with the SARPs contained in ICAO Annex 15.

2.6 The SAM region carried out a VOLCEX exercise in 2024, in order to verify the application of the Contingency Plans for Volcanic Ash, and to test the levels of coordination ATS/AIS/MET/VAAC/Volcanological Observatories. Some lessons learned from this exercise are presented in **Appendix B.**

2.7 In conclusion, the following can be indicated:

- ✓ The SAM Region has made progress in the implementation of Contingency Plans for Volcanic Ash, but with heterogeneous levels between States.
- ✓ Gaps persist in the formalization of plans, inter-institutional coordination, and issuance of ASHTAM.
- ✓ Effective implementation of the VACP/SAM and the conduct of VOLCEX exercises are essential to strengthen regional preparedness.
- ✓ Continuous follow-up by SAM/AIM meetings remains key to improving these aspects.

3. Action Required

3.1. The Meeting is invited to:

a) Take note of the information submitted;
b) Update Appendix A information about its Contingency Plans;
c) Strengthen the implementation of procedures for the issuance of ASHTAM;
d) Promote coordination between AIS, ATS, METS, VAACs and national bodies;
e) To promote the participation of States in VOLCEX exercises;
f) Consider other actions that they deem necessary to improve the management of contingencies due to volcanic ash.

APÉNDICE A / APPENDIX A

Plan de Contingencias AIS/AIM por Cenizas Volcánicas

Contingency Plan for Volcanic Ash

Número / Number	Estado / State	¿Cuenta su Estado con un Plan de Contingencia? / Does your State have a Contingency Plan?	Servicios y organizaciones involucrados en su Plan de Contingencia / Services and organizations involved in its Contingency Plan
1	Argentina	It is provided for in its Regulation and the ANSP will include it in its MADE of the NOF under development (subject to the agreement that is under review). Also under review are the agreements with SEGEMAR For the AGA, Appendix 2 of RAAC 153. Establishes procedures and responsibilities for each area and the activation of the COE	ANAC, EANA, SMN, SEGMEAR, AGA
2	Brasil	It has a CIRCEA 63-2 Plan	
3	Bolivia	They are in the process of transitioning the documents and will prepare him for the 2023 administration. Bolivia has the Regulation in relation to the subject.	
4	Chile	It has a letter with SERNAGEOMIN. They are working on a Contingency Procedure with ATS/MET/AIS	

5	Colombia	They are organizing working groups to sign letters of agreement ATS/AIS/MET (Aerocivil and IDEAM) and Ingeominas to review, update and improve this Plan. The Contingency Plan is entered into the Quality Management System	ATS, AIS, MET, Centro de Meteorología
6	Guyana		
7	Ecuador		
8	French Guyana		
9	Panamá	It has its National Contingency Plan, but they are in the process of harmonizing it with the Regional Plan. There is no date because the MET service is working on it	It has a signed Contingency Plan. MET has coordinated it-
10	Paraguay	They do not have a VA Contingency Plan. They hope to develop it by the first half of 2026.	There is no knowledge of the existence of a Contingency Plan by VA for the FIR of Asunción.
11	Perú	They do not publish ASHTAM. Verify Difference Publication.	
12	Suriname		
13	Uruguay	They have a Contingency Plan for Volcanic Ash for the AIS. Tests are carried out on the dates stipulated by ICAO	
14	Venezuela	They are in the process of reviewing the Contingency Plan with SERMETAVIA to be implemented in 2023. It is under review by Legal Advice	

APÉNDICE B / APPENDIX B

Lessons learned from the 2024 SAM Region Volcanic Ash Exercise

SAM VOLCEX 24/01

- **Date:** between December 2 and 6, 2024
- **Coverage:** the entire South American Region (SAM) with the participation of the 14 States

a) Important context

- This exercise was the first regional VOLCEX SAM formally coordinated by ICAO under this scheme
- It was planned during 2023 2024 through regional preparation meetings and workshops.
- Simulated the simultaneous eruption of fictitious volcanoes in several States (Chile, Peru, Colombia, etc.)

b) Relevance to AIM

The VOLCEX SAM 24/01 made it possible to specifically assess:

- Issuance of ASHTAM and NOTAM
- AIS ATS MET Coordination
- Dissemination of aeronautical information in crisis scenarios
- Application of VACP/SAM

(c) Strengthening inter-agency coordination

One of the main achievements was to validate the coordination between:

- AIS/AIM (NOF)
- ATS

- MET
- VAAC
- Volcanological observatories

The exercise showed that the interaction between these actors is essential for the management of volcanic ash events, especially in the generation and dissemination of critical aeronautical information.

d) AIM Result:

Greater clarity in roles, responsibilities and coordination flows.

e) ASHTAM Emission Capacity Assessment

The VOLCEX made it possible to verify:

- The ability of NOFs to issue ASHTAMs
- Response times to simulated events
- The quality and consistency of aeronautical messages

It was identified that:

- Some States have procedures in place
- Others have limitations or lack of operational practice
- There are gaps in the timely and correct issuance of ASHTAM.

f) Validation of AIS procedures within the VACP/SAM

The exercise made it possible to evaluate the practical application of:

- Volcanic Ash Contingency Plan (VACP/SAM), including:
- Publication of aeronautical information

- Coordination to define hazardous or restricted areas
- Airspace management support
- Confirmation of the need to fully integrate AIS procedures into national air navigation plans.

g) Identifying gaps in national plans

VOLCEX showed that:

- Not all states have fully developed plans
- Some are in the process of being updated or harmonized
- There are differences in maturity levels between States

It is concluded that there is a need to homogenize the implementation in the SAM Region.

(h) Need for standardized procedures in NOF

The exercise highlighted the importance of NOFs having:

- Documented procedures for VA contingencies
- Clear coordination protocols
- Staff training

These recommendations would reinforce the operational component in the NOF, not just documentary.

(i) Importance of periodic exercises

VOLCEX was confirmed to be key to:

- Validate plans
- Detect operational failures

- Improve response times
- Align criteria between States

The exercises should be periodic, coordinated, and measurable (with KPIs).

(j) Overall conclusion

From the AIM point of view, VOLCEX in the SAM Region has demonstrated that:

- There is a functional basis for regional coordination
- Important gaps persist in ASHTAM and AIS procedures
- The implementation of plans is heterogeneous
- Exercises are critical for AIM maturity