

# **AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG)**



## **AFI VOLCANIC ASH EXERCISE STEERING GROUP**

**(AFI VOLCEX/SG)**

### **TERMS OF REFERENCE**

*Version 1.1, July 2022*

# Revision Index

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## **ABBREVIATIONS**

<b>AFI</b>	<b>: Africa – Indian Ocean</b>
<b>AFI VOLCEX/SG</b>	<b>: AFI Volcanic Ash Exercise Steering Group</b>
<b>AFI VOLCEX 21/01</b>	<b>: AFI Volcanic Ash Exercise n°1 of the year 2021</b>
<b>AIM</b>	<b>: Aeronautical Information Management</b>
<b>AIS</b>	<b>: Aeronautical Information Service</b>
<b>APIRG</b>	<b>: AFI Planning and Implementation Regional Group</b>
<b>ATM</b>	<b>: Air Traffic Management</b>
<b>ATS</b>	<b>: Air Traffic Service</b>
<b>RODB</b>	<b>: Regional OPMET Data Bank</b>
<b>VAAC</b>	<b>: Volcanic Ash Advisory Centre</b>
<b>VOLCEX</b>	<b>: Volcanic Ash Exercise</b>
<b>VO</b>	<b>: Volcanic Observatory</b>
<b>MWO</b>	<b>: Meteorological Watch Office</b>
<b>BCC</b>	<b>: Bulletin Compiling Centre</b>
<b>NOTAM</b>	<b>:</b>
<b>ASHTAM</b>	<b>:</b>
<b>OPMET</b>	<b>:</b>

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## 1. Purpose

1.1. To maintain safety, regularity, and efficiency in support of aviation industry in the event of a volcanic eruptions.

## 2. Charing the AFI VOLCEX/SG

2.1. The VOLCEX/SG is led by a chairperson elected at the beginning of the regular annual meeting of the Steering Group (SG). The Chairperson shall be elected from the representatives designated by member States of the SG.

2.2. A Vice-Chairperson may be elected from the said representatives if necessary. The term of the Chairperson/Vice-Chairperson shall be for a maximum period of two years.

## 3. Membership of the AFI VOLCEX/SG

1.1. The AFI VOLCEX SG shall be comprised of the following:

Stakeholders	Role(s)	Responsibility
Elected Chairperson of the SG	Chair /Rapporteur	<ul style="list-style-type: none"><li>Coordinate all matters and aspects related to the exercise;</li><li>Present the exercise report to the IIM/SG and APIRG.</li></ul>
Appointed AFI VOLCEX Leader State	Exercise Leader	Conduct the exercise and provide the GO/NO decision.
APIRG IIM MET Project 2	Support	Provide technical support for the conduct of the exercise.
AFI Volcano Observatory States	Participant	Send information on volcanic activity including Volcano Observatory Notice for Aviation (VONA).
Air Navigation Services Providers (ANSPs)	Participant	Inform aircraft, issue ASHTAM/NOTAM, and activate contingencies, forward special air-reports.
Airport Operators	Participant	Provide tactical response.
Airspace Users	Participant	Provide tactical response.
Meteorological Watch Offices (MWOs)	Participant	Provide MET watch, issue SIGMET, and supply information on Volcanic Ash (VA).
Regional OPMET Data Banks (RODBs)	Support	Conduct OPMET exchange.
Regulators	Participant	Provide related regulatory frameworks.
Volcanic Ash Advisory Centres (VAACs)	Co-Rapporteur	<ul style="list-style-type: none"><li>Issue Volcanic Ash Advisory information (VAA) including graphical format (VAG).</li><li>Provide support to the Rapporteur.</li></ul>
Relevant industry organizations (CANSO, IATA, AIC, IFALPA)	Participant	Use of volcanic ash information, support in managing air traffic flow.
ICAO	Facilitator	Support the steering group, meetings and exercises.

## 4. Scope

4.1. The International Airways Volcano Watch (IAVW) was established globally to mitigate the risks related to VA. However, the diverse nature of the AFI region, in terms of topography, geographical features, and the communities, it is reflected by the diverse challenges faced in responding to volcanic ash events. Therefore, each AFI exercise may have different objectives, by which the scenario will have to be designed to address specific objectives. For instance, any or all of the activities listed below may be tested depending on the scope of the individual exercise:

- a) AFTN, e-mail addresses, websites, message routing and voice communications;
- b) Alerting and observation of ash (e.g. use of VONA and VAR);
- c) VAAC response (e.g. volcanic ash information);
- d) ATS response (including air traffic control and AIS for NOTAM issuance);
- e) ATM response;
- f) Aircraft operator response (including safety risk assessment);
- g) MWO response (i.e. issuance of SIGMET); and
- h) Suitability of information, its frequency, format and content.

## 5. Objectives of the AFI VOLCEX /SG.

5.1. The objectives of the AFI VOLCEX/SG includes::

- a) Coordinate all aspects of the organization, conduct volcanic ash exercises in the AFI region to test volcanic activity alerting, AIS and MET message routing, volcanic ash information, air traffic control procedures, air traffic flow and capacity management , aircraft operator response and the CDM between the various actors in accordance with regional and global procedures.
- b) Design the exercises to:
  - Practice the conduct of volcanic activity response in accordance with the regional reference documents.
  - Verify existing information, AIS and MET message routing via AFTN addresses, relevant e-mail addresses, telephone and fax numbers, and internet addresses (URLs);
  - Maintain appropriate information and message routing between all involved agencies and organizations;
  - Provide volcanic activity response training for key personnel involved;
  - Allow regulators to assess the preparedness and operational response in terms of planning, process, and procedures of operations;

- c) Provide, when appropriate, recommendations for amendment of the reference documents, in accordance with the lessons learned and conclusions contained in the final exercise report; and
- d) Practice and develop inter-agency response to volcanic activity.

## 6. Tasks:

The Steering Group shall:

- 6.1. Appoint an exercise leader for each volcanic ash exercise;
- 6.2. Conduct planning meetings for volcanic ash exercise(s);
- 6.3. Publish volcanic ash exercise directive(s), including:
  - a) Scenario/s – location/s should cover an area/s that could be affected by volcanic ash and the time/period/s should ensure volcanic ash would impact international routes;
  - b) Procedures/instructions;
  - c) Participants;
- 6.4. Coordinate with all participants in the volcanic ash exercises (VO, ACCs, airlines, VAACs, MWOs, BCCs, ATMC, and RODBs) the schedule for the exercises and their scenarios; ensuring that the exercises cover all parts of the AFI Regions that could be affected by volcanic ash;
- 6.5. Keep under review the regional volcanic exercise procedures and make improvements based on the lessons learnt. (Regional volcanic ash Exercise Procedures to be posted on the ESAF and WACAF websites);
- 6.6. Organize in parallel with the volcanic ash exercises awareness events, seminars and presentations, in order to enhance the awareness of the participants regarding the hazardous effects of volcanic ash and the established contingency measures;
- 6.7. Revise and improve the volcanic ash exercise directive/s (based on lessons learnt);
- 6.8. Recommend improvements to the regional volcanic ash ATM contingency plan;
- 6.9. Based on the outcome of the volcanic ash exercises, propose to IIM/SG and APIRG improvements to the regional contingency plans, as well as, to the National and Regional operational procedures;
- 6.10. Report on the results of its activities to the IIM/SG and APIRG;
- 6.11. Review the lessons learnt, and;
- 6.12. Update the future work plan for subsequent volcanic ash exercise(s)

... END ...