



International Civil Aviation Organization

**The Second Meeting of the APANPIRG ATM Sub-Group
(ATM /SG/2)**

Hong Kong, China, 4-8 August 2014

Agenda Item 6: AOP, MET, AIM, SAR

VOLCANIC ASH PREPARATION

(Presented by JAPAN)

SUMMARY

This paper presents the case for adopting the Air Traffic Management Volcanic Ash Contingency Plan, and implementation of Volcanic Ash Exercises in APAC Region.

1. INTRODUCTION

1.1 Volcanic ash caused by an eruption or explosion have a huge affect on aircraft in the air. If the engines swallow the volcanic ash, the worst scenario will be engine malfunction, and so both ATC and operator need to detour for safe flight.

1.2 Sharing information between Air Navigation Service Providers regarding ash from a volcanic eruption and the impact of volcanic activities will contribute to safe and efficient operation. Therefore, it is necessary to execute exercises of the scenario of eruption or explosion including the system or structure for exchanging both traffic and volcanic ash information.

2. DISCUSSION

2.1 In April 2010, when Mt. Eyjafjallajokull erupted for six months and the activity affected air traffic operation in the European region, ICAO established the International Volcanic Ash Task Force (IVATF), which met four times. At the end, the Task Force implemented the ATM Contingency Template.

2.2 Volcanic Ash Exercises (VOLCEX) have been conducted twice a year in the European Region since 2008.

2.3 The ICAO Paris office executed Volcanic Ash Exercise in KAMCHATKA (VOLKAM) in 2013 and 2014. Air Navigation Service Providers from Russia, the U.S. and Japan, metrological agencies, NOTAM office, and airlines joined those exercises. During the training, participants shared information of the volcanic activities, and executed coordination between Air Navigation Services Providers and airlines to avoid the ash and to find detour routing for both in-flight traffic and traffic on the ground heading toward this area.

2.4 The participants obtained knowledge of various possible influences of volcanic ash that accompany a volcanic eruption or explosion.

2.5 There are countries living with active volcanoes in the Asia Pacific region, and some of these volcanoes have been erupting or exploding releasing huge amounts of volcanic ash.

2.6 When the APAC region successfully improves its capability regarding crisis management skills in the future, Air Navigation Service Providers and Airlines will be able to manage any kinds of unexpected incidents including falling volcanic ash by eruption or explosion.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) encourage discussion of hypothetical exercises led by ICAO APAC office; and
- c) encourage improvement of crisis management skills through volcanic ash exercises with the cooperation of neighboring FIRs and led by ICAO APAC.