



International Civil Aviation Organization

**EIGHTEENTH MEETING OF THE METEOROLOGY
SUB-GROUP (MET SG/18) OF APANPIRG**

ICAO Regional Sub-Office, Beijing, China
18 – 21 August 2014

Agenda Item 7: Research, development and implementation issues in the MET field

7.4 Advisories and warnings

COORDINATION OF VOLCANIC ASH INFORMATION

(Presented by Indonesia and Australia)

SUMMARY

This paper presents recommendations and action plans resulting from a coordination meeting between BMKG, VAAC Darwin (BoM Australia), CHVGM and DGCA that was conducted in BMKG Headquarter Office, Jakarta, Indonesia. This meeting was conducted to strengthen communication mechanism related to volcanic ash information.

1. Introduction

1.1 Indonesia has more than one hundreds volcanoes. Volcanoes in Indonesia are monitored by Volcano Observatories operated by the Centre for Volcanology and Geological Hazard Mitigation (CVGHM), Geological Agency, Ministry of Energy and Mineral Resources.

1.2 Since 2010 the Indonesian Meteorological, Climatological and Geophysical Agency (BMKG) has signed MoUs (Memorandum of Understanding) with the Geology Agency and Indonesian Directorate General of Civil Aviation (DGCA) to strengthen the dissemination of Volcanic Ash activity reports to assist with minimizing the impact of volcanic eruptions to flight operations. The MoUs outline the obligations of both agencies regarding dissemination of volcanic reporting. Geology Agency should report to BMKG and DGCA for every volcanic activity.

1.3 In supporting the dissemination of volcanic report, BMKG established the Volcanic Activity Report Dissemination System which has officially operated since 1 May 2012 and made its first activation during an eruption of Lokon volcano. The system sends warnings to BMKG and DGCA promptly once volcanic activity occurs.

1.4 There are nine Volcanic Ash Advisory Centres (VAACs) operating under the ICAO International Airways Volcano Watch (IAVW). Volcanic Ash Advisory Centres are responsible for providing Volcanic Ash Advisories (VAA) whenever a volcanic event occurs in their area of responsibility. Indonesia is under the responsibility area of Darwin VAAC, Bureau of Meteorology (BoM, Australia. The area covered by the Darwin VAAC includes the volcanically active areas of Indonesia, Papua New Guinea and part of the Philippines. The Darwin VAAC uses satellite information, ground reports from volcanological agencies, pilot reports, meteorological knowledge and numerical models to observe and forecast volcanic ash.

1.5 In December 2012, the meeting between BMKG, Darwin VAAC, CHVGM and DGCA was conducted in BMKG Headquarter Office, Jakarta, Indonesia. The meeting discussed the best practice for sharing observations during a volcanic eruption event and for the VAAC supporting the Meteorological Watch Offices (MWO) and Area Control Centres (ACC). On 23 June 2014 a further coordination meeting between parties was held in BMKG Headquarter Office, Jakarta, Indonesia.

2. Discussion

2.1 The coordination meetings between BMKG, Darwin VAAC, CHVGM and DGCA that was conducted in BMKG Headquarter Office, Jakarta, Indonesia and resulted in the following recommendations and conclusions:

- a) This meeting appreciate to all parties (DGCA, CVGHM , BMKG and BoM) for providing volcanic activity information for aviation safety;
- b) All parties agreed to strengthen existing communication mechanism related to volcanic ash monitoring between institutions;
- c) Indonesia Volcanic Activity Report Dissemination System is aimed to improve timely dissemination of volcanic ash information include automatic SIGMET generation with timely input into the Volcanic Ash Advisory by Darwin VAAC; and
- d) Establish collaborative decision making mechanisms during crisis related to volcanic activity among parties.

2.2 This coordination meeting also resulted in the action plans as attached to this paper.

3. Action by the Meeting

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

ACTION PLAN

BMKG, VAAC Darwin (BoM Australia), CHVGM and DGCA COORDINATION MEETING

Action	PIC
Action 1: That an end to end test of the existing volcanic report dissemination system be conducted as part of the regional volcanic ash SIGMET test in November 2014.	BoM (Emile Jansons), CVGHM (Kristianto, Hendra Gunawan), BMKG (Mustari Heru Jatmika). DGCA (Endah Purnamasari, Dinni Noerdiani)
Action 2: BoM, CVGHM, ACCs, NOF, MWO's to review and update the operational email addresses listed in the IAVW Handbook.	All parties via BoM
Action 3: BoM to facilitate a webinar collaborative information session in July 2014.	BoM, BMKG
Action 4: That an ad hoc working group including representatives of BMKG, CVGHM, BoM and DGCA: <ul style="list-style-type: none">• Draft a agreement detailing the exchange of volcanic ash related information between parties; and• Meet to finalise the agreement at the upcoming Cities on Volcanoes conference in September 2014.	CVGHM, BMKG, DGCA CVGHM, BoM
Action 5 : Propose existing Indonesian VAR Dissemination System as a portal of exchange data and information related to VA monitoring to be maintained and extended to include BoM.	BMKG, BoM

Jakarta 23 June 2014