



International Civil Aviation Organization

**The First Meeting of the Asia/Pacific Volcanic Ash Exercises Steering Group
(VOLCEX/SG/1)**

Manila, Philippines, 27-29 May 2015

Agenda Item 3: Review Background Information

RELATED AIR TRAFFIC MANAGEMENT MEETING OUTCOMES

(Presented by the Secretariat)

SUMMARY

This paper presents outcomes from meetings relevant to the VOLCEX/SG.

1. INTRODUCTION

1.1 The Regional ATM Contingency Plan Task Force (RACP/TF) was formed by the 22nd Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/22, Bangkok, Thailand, 27 June – 1 July 2011), through the following Conclusion:

Conclusion 22/9 – Regional ATM Contingency Plan Task Force

That, a Regional ATM Contingency Plan Task Force (RACP/TF) be formed, reporting to APANPIRG through the ATM/AIS/SAR Sub-Group for planning, coordination and implementation of a regional ATM contingency plan, with a link to the METWARN/I Task Force, in accordance with the Terms of Reference as provided in Appendix G to the Report on Agenda Item 3.2

1.2 RACP/TF held its 4th meeting in Bangkok, Thailand, from 26 – 30 January 2015.

1.3 The Air Traffic Flow Management Steering Group (ATFM/SG) was formed by APANPIRG/20 (Bangkok, Thailand, 7 – 11 September 2009). Having completed all tasks assigned at its first meeting, ATFM was placed in recess. The meeting was re-convened by APANPIRG/24 (Bangkok, Thailand, 24 – 26 June 2013) through the following Conclusion:

Conclusion 24/15: Asia/Pacific ATFM Steering Group

That, States participate in, and support the Asia/Pacific ATFM Steering Group to develop a common Regional ATFM framework, which addresses ATFM implementation and ATFM operational issues in the Asia/Pacific region.

1.4 ATFM/SG held its 5th meeting in Bangkok, Thailand, from 30 March – 3 April 2015.

2. DISCUSSION

RACP/TF Outcomes

2.1 **RACP/TF/1** acknowledged that significant work had already been done on Volcanic Ash Cloud (VAC) contingency responses, noting the METWARN/I Special Coordination Meeting (SCM) in Singapore (31 January to 1 February 2011) involving Indonesia, Malaysia, Philippines, Singapore

and Thailand, and the follow-up teleconference and table-top exercise on 26 August 2011. The intent of the SCM was the development of an interim arrangement for response to volcanic eruptions in the absence of a harmonized contingency plan. The METWARN/I TF recognized that this initiative could be adopted as a model for other sub-regions, with the aim to harmonize procedures among all the sub-regions.

2.2 The link between the RACP/TF and METWARN/I TF was discussed, including the requirement for each of these Task Forces to develop an understanding of the other's needs. While primarily considered in response to VAC, this link is also a necessary facilitator to the contingency response to other catalysts such as nuclear emergencies (radioactive cloud).

2.3 **RACP/TF/2** was advised that the International Airways Volcano Watch Operations Group (IAVWOPSG) had determined that additional standards in Annex 3 for radioactive cloud were not necessary, and that guidance would be included in Part II of the Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds (Doc 9691).

2.4 The meeting noted that volcanic ash could easily affect States that did not have volcanoes, such as Australia experienced with the recent Chilean volcanic eruption.

2.5 The meeting examined the results of an Asia/Pacific Region ATM contingency readiness survey, which indicated that 53% of respondent administrations (19% of the Region) included consideration of VAC in their level 1 (State) contingency planning. 47% of respondent administrations (17% of the Region) indicated that they had formal inter-State contingency agreements.

2.6 **RACP/TF/4** recognized that Air Traffic Flow Management ATFM measures can be an effective ATM contingency response where airspace capacity may be constrained by adverse conditions including VAC. It was recognized that the ATFM measure *Collaborative Trajectory Options* as defined in ICAO Doc 9971 – *Manual on Collaborative ATFM*, provided the capability to re-route traffic around airspace constraints using pre-defined or tactically determined routes. They may provide an effective tool for the avoidance of volcanic ash clouds.

2.7 It was agreed that RACP/TF would examine documents including ICAO Doc 9691 *Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds*, the ICAO *Volcanic Ash Contingency Plan Template*, the EUR Region Doc. 019 – *EUR Volcanic Ash Contingency Plan* and the *Volcanic Ash Contingency Informal Arrangement (Indonesia and Singapore)*, with a view to developing basic regional volcanic ash contingency guidance. Further development of the guidance would be supported by the outcomes of the volcanic ash exercise planned to be held in 2015.

2.8 The latest draft version of the Regional ATM Contingency Plan, as agreed by RACP/TF/4, includes performance objectives for the implementation of ATM contingency arrangements including those associated with response to 'unsafe airspace' such as VAC, with expected implementation by 10 November 2016.

ATFM/SG Outcomes

2.9 ATFM/SG/5 produced the final draft version of the Regional Framework for Collaborative ATFM. The document will be presented for endorsement by the ATM Sub-Group of APANPIRG in August 2015, and subsequently to APANPIRG/26 in September 2015 for adoption.

2.10 While recognizing the value of *Collaborative Trajectory Options* in the management of contingency events such as VAC, it was also recognized that the regional network of ATS routes, particularly in South East Asia sub-Region, was currently insufficiently developed to provide full capability for the wide-scale alternate routing options initiated by the planned regional ATFM

network, as in the examples of Europe and North America, for avoidance of airspace affected by VAC. The development of a Collaborative Trajectory Options program for the region will therefore be the subject of further research and future development.

2.11 Performance objectives in the draft Regional Framework for Collaborative ATFM include capability for airspace capacity measurement, and ATFM measures to manage demand in constrained airspace, by the use of airborne or ground delay programs. Such measures could be applied to airports and airspace sectors where demand may be greater than capacity; in situations where aircraft are operating on non-normal routes to avoid airspace affected by VAC.

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.

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