INTERNATIONAL CIVIL AVIATION ORGANIZATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG)

AFI OPMET MANAGEMENT TASK FORCE (AFI OPMET MTF)
FIFTH MEETING (AFI OPMET MTF/5
Nairobi, Kenya, 3 – 5, July 2013

Agenda Item 3: Provisions of tropical cyclone and volcanic ash advisories for the AFI Region and of the corresponding SIGMET by MWOs and Review of report on SIGMET Tests conducted in November 2012

REVIEW OF THE REPORT ON SIGMET TESTS CONDUCTED IN NOVEMBER 2012

(Presented by the Secretariat)

SUMMARY

This paper reviews the provisions of Tropical Cyclone and Volcanic ash advisories and corresponding SIGMET by MWO in AFI Region, the AFI SIGMET Test report for 2012 and the IAVWOPSG/7 report.

1. Introduction

1.1. The Task force may recall that SIGMET warning is of the highest priority among other types of meteorological information provided to the aviation users.

1.2. The meeting will recall that Annex 3 provides that SIGMET information shall be issued by a meteorological watch office (MWO) and shall give a concise description in abbreviated plain language concerning and /or expected occurrence of specified en-route weather phenomena, which may affect the safety of operations, and of the development of those phenomena in time and space. It also provides the required technical specifications relating to the preparation and issuance of SIGMET

1.3. The Annex further recommends that SIGMET messages concerning volcanic ash cloud and tropical cyclones should be based on advisory information provided by VAACs and TCACs, respectively designated by regional air navigation agreement.

1.4. The meeting will also recall that, following concerns by users, the MET Divisional Meeting (2002) formulated recommendation 1/12 b), urging for periodic tests of SIGMET messages to be conducted.

1.5. The seventh meeting of the International Airways Volcanic Watch Operations Group (IAVWOPSG/7), held from 18 to 22 March, 2013 in ICAO APAC office discussed amongst other things, issues relating to the development of the IAVW in order to meet evolving operational requirements. The possibility of replacing SIGMET (VA) by advisory information in alphanumeric and graphical formats (VAA/VAG) was also discussed.

2. Discussions

2.1. SIGMET tests have been conducted in the AFI region on annual basis since 2008. The latest was conducted in November 2012, for tropical cyclone (TC), volcanic ash (VA) and for other weather phenomena (WS). The test report is attached at Appendix A to this working paper. The report shows an increased level of participation by States in the tests and improvements relating to issuance, dissemination and formatting of SIGMETs. It also shows that, in 2012, 37% of the MWOs have never issued SIGMET whereas the figure for 2011 was 51%, an improvement of 14%. This positive impact could be as a result of a SIGMET training conducted in September 2012. ~~recently (2012)~~

2.2. The IAVWOPSG/7 was made aware of the need to develop definitions for *visible ash* and *discernible ash* for robust operational use of volcanic ash forecasting and flight planning purposes. The group considered that further guidance be provided to MWOs following further discussions in its subsequent meeting.

2.3. The group reviewed an assessment on whether or not the volcanic ash advisory information in alphanumerical and graphical formats (VA Advisory and VAG) could be used to replace the Volcanic ash SIGMET and the capabilities of the nine VAACs ,including VAAC Toulouse, to provide such service. No consensus was reached on this matter and as such, it was considered that continuation of assessment of further options would not be productive.

2.4. Regarding SIGMET information for large, complex volcanic ash events, the group evaluated the options for depiction of SIGMET for volcanic in graphical format and noted that not all meteorological watch offices (MWOs) may be in a position to provide a graphical SIGMET. As such, users would need to be aware of those MWOs that are able to support this capability. It was also noted that the challenge for the MWOs would be to translate complex information from VAACs into a textual message (SIGMET information) if they are not able to provide a complex graphical product for the SIGMET. It was further noted that, if a complex graphical SIGMET was translated into a few coordinates to become the text SIGMET, all users of the SIGMET information would benefit from the strengths of each product. It was then agreed that, through appropriate training material, users could be advised of the two messages and an ad-hoc working group was constituted to develop guidance material to be included in the *Manual of aeronautical Meteorological Services* (DOC 8896). Considering the information provided and the developments that are likely to follow with regard to Volcanic ash SIGMETs, the Task Team may wish to formulate the following Decision

Decision 5/xxx: SIGMET information for large, complex volcanic ash events

That, the secretariat liaises with the concerned ICAO operations group to follow-up on the development and regional implications of SIGMET for complex volcanic ash and report back in time for the AFI OPMET/M TF/7 meeting.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) Note the information in this paper,

b) decide on the above decision proposed for the Sub-group's consideration.