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Agenda Item 46: Other Issues to be Considered by the Technical Committee

**AIRLINE INDUSTRY RECOMMENDATIONS FOR
OPERATIONS IN THE PRESENCE OF VOLCANIC ASH**

(Presented by IATA)

EXECUTIVE SUMMARY

This information paper presents a summary of the International Air Transport Association (IATA) proposals presented at the recent International Volcanic Ash Task Force (IVATF) meeting.

<i>Strategic Objectives:</i>	This information paper relates to Strategic Objectives A, D and E
<i>Financial implications:</i>	Not applicable
<i>References:</i>	Doc 9691, <i>Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds</i>

1. INTRODUCTION

1.1 Safe and responsible airline operations are being conducted in and around volcanic activity on an almost daily basis in many of the world's regions. Invariably these operations have been carried out without incident. The threat of volcanic activity is not new to aviation. The issue at hand is to try and improve the availability and accuracy of the information provided in order to enhance the decision-making process undertaken by the industry.

2. BACKGROUND

2.1 Currently, reporting practices for volcanic ash advisories are centered on nine volcanic ash advisory centers (VAACs). Their three specific duties are to:

- monitor satellite data to detect the existence and extent of volcanic ash in the atmosphere;
- activate the volcanic ash numerical model; and
- issue advisory information regarding the extent and movement of the volcanic ash "cloud".

2.2 Other than the three specific duties above the VAACs are required to distribute advisory information to a number of organizations including:

- Meteorological watch offices (MWOs) who are responsible for the issuance of SIGMETs;
- area control centers and flight information centers; and
- directly to airlines themselves.

2.3 Currently this information is updated every six hours, with the report containing both an observation and a future forecast element using only satellite imagery. It should be noted that:

- not all VAACs have access to all the same resources and/or procedures;
- not all VAACs have access to the same depth of analysis or profile on regional volcanoes; and
- not all ANSPs have the same plans to cope with volcanic activity and existing plans are not necessarily harmonized between the ANSPs.

2.4 The decision-making process, until recently in the case of events in Europe, has been left to the expertise of the airlines in determining whether flight operations can be conducted safely within the vicinity of active volcanic areas and their subsequent fallout. This practice, as with any other meteorological phenomena, has hitherto been left to those (the airlines) that have daily experience of encountering such weather hazards.

2.5 The current requirements for volcanic activity reports should be reassessed and consideration given to establishing one standard acceptable to all, as well as acknowledging that the issuance of reports should be increased, or decreased, to reflect the particular volcanic activity. Other new and available resources for gathering information should be explored along with ensuring current available methods for reporting activity are all used to the best and fullest advantage.

- attention should be paid to developing on-board, ground-based and satellite technologies; and
- the use of alternative communication processes, such as the internet, should be explored to verify if this could play a more significant role in the timely dissemination of data and information

2.6 Coordination of the various air traffic management (ATM) procedures is also vital to ensure the required support of the airlines and these procedures should be reviewed and harmonized worldwide to better support safe and efficient operations near volcanic ash. IATA promotes that the ANSP/ATMs actively work and ensure that airspace remains open and available for operations and that processes be established to ensure effective communication between neighboring ATMs and FIRs. ATM's must keep aircrew fully informed and aware of volcanic ash hazards and assist with re-routing and avoidance when required.

2.7 Original equipment manufacturers (OEMs) should be encouraged to develop effective inspection methodologies and techniques to be incorporated into approved technical publications (ATPs) to enable safe, timely and cost effective maintenance actions to be performed. The use of a phased or stepped approach to these inspections should be developed, based upon initial findings.

2.8 Recent events in Europe highlighted differences within the existing volcanic models, even within Europe; consensus on the mathematical model dispersions should be achieved.

3. CONCLUSION

3.1 Working with ICAO through the IVATF, IATA believes the decision process should be left with the airlines. It is recommended the industry develop and outline guidelines, appropriate risk management tools and operational procedures for both the operators and regulatory authorities to use as part of the assessment process.

3.2 Working with ICAO through the IVATF, IATA believes that accurate modeling and the timely reporting and dissemination of information are essential tools that will enable the operators to make effective and safe decisions.

3.3 The importance of accurate and reliable information to airline operators and ANSPs, provided from current and new resources, cannot be over-emphasized.