



WORKING PAPER

TWELFTH AIR NAVIGATION CONFERENCE

Montréal, 19 to 30 November 2012

Agenda Item 4: Optimum capacity and efficiency – through global collaborative ATM

4.1: Efficient management of airspace and improved flow performance through collaborative decision-making (CDM)

REGIONAL CRISIS MANAGEMENT AND COORDINATION

(Presented by the Presidency of the European Union on behalf of the European Union and its Member States¹; by the other Member States of the European Civil Aviation Conference²; and by the Member States of EUROCONTROL)

SUMMARY

This paper describes the establishment of the European Aviation Crisis Coordination Cell (EACCC); its activities and role in the 2010 volcanic ash event, and in more general, crisis management evolutions in Europe.

Action: The Conference is invited to agree to the recommendation in paragraph 5.

1. BUILDING ON LESSONS LEARNED IN THE 2010 CRISIS – ESTABLISHMENT OF THE EUROPEAN AVIATION CRISIS COORDINATION CELL (EACCC)

1.1 The volcanic eruption in Iceland in April and May 2010 demonstrated the vulnerability of the European aviation system in terms of pan-European coordination between States for emergency situations affecting safety. The level of disruption and impact on the air transport industry was extensive and required urgent action at both the European and global level.

1.2 Europe, led by the European Commission and EUROCONTROL, moved swiftly in the institutional area and used lessons learned in the Eyjafjallajökull eruption to establish the European Aviation Crisis Coordination Cell (EACCC) on 19th May 2010. Joined very soon by the European Aviation Safety Agency (EASA), EACCC's composition included the European Union (EU) Presidency and nominated representatives of airspace users, air navigation service providers (ANSPs), military and airports. Along with other regulatory authorities and industry stakeholders the EACCC was actively engaged in ensuring an improved level of preparedness in Europe for volcanic eruptions and other crisis

¹ Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom. All these 27 States are also Members of ECAC.

² Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Croatia, Georgia, Iceland, Moldova, Monaco, Montenegro, Norway, San Marino, Serbia, Switzerland, The former Yugoslav Republic of Macedonia, Turkey and Ukraine.

situations. The main role of the EACCC is to support coordination of the response to network crises impacting adversely on aviation, in close cooperation with corresponding structures in States. Its role includes proposing measures and taking initiative to coordinate the response to crisis situations, and in particular acquiring and sharing information with the aviation community (decision makers, airspace users and service providers) in a timely manner.

2. EACCC ACTIVITIES SINCE MAY 2010

2.1 Since its establishment in May 2010, the EACCC has been on alert on several occasions due to a number of major disruptions to the European aviation network. Over time, an additional role for the cell was identified – crisis aversion. Working closely with key players and decision makers, the EACCC seeks to ensure that communications are proportionate to the gravity of the event and its impact, in order to prevent overreaction and chaos in the network.

2.2 VOLCEX 11/01, ERUPTION OF Grímsvötn AND VOLCEX 12/01

2.2.1 In April 2011 the EACCC participated alongside Eurocontrol, the European Commission (EC) and EASA together with 77 airlines, 14 ANSPs, 10 CAAs and 3 VAACs in an ICAO volcanic ash exercise, VOLCEX 11/01. From many perspectives, the exercise was a success and resulted in many lessons learned. Some of the remedial actions were taken in time to ensure the effective management of the real eruption of Grímsvötn (Iceland) that occurred only a month after the exercise.

2.2.2 The eruption of Grímsvötn in May 2011 required full activation of the cell. On that occasion the EACCC applied collaborative decision-making to ensure comprehensive and coordinated actions across a number of aviation domains. The EACCC demonstrated its ability when formulating recommendations on actions to be taken in case of another volcanic eruption, recommendations that were the basis for the successful outcome of both the VOLCEX 11/01 exercise and the Grímsvötn eruption. Moreover, the cell has played a key role in facilitating the coordination and assurance of consistent messages on the status of the crisis, its management and evolution amongst the EACCC members, as well as working with the media.

2.2.3 In April 2012, EACCC took part in an ICAO volcanic ash exercise, VOLCEX 12/01. The majority of the European States which have participated in the exercise applied the safety risk assessment approach (SRA) in all areas of ash concentration and did not close their airspace. At the end of VOLCEX 12/01 EACCC noted that, at least for the States involved in the exercise, a significant step forward was made towards the establishment of a harmonized approach in Europe based on the SRA method.

3. EACCC ROLE IN VOLCANIC ASH EVOLUTIONS

3.1 Enhancing VAAC products

3.1.1 On the initiative of the United Kingdom and Irish CAAs in May 2011, and with the support from the EACCC, a number of meetings took place between representatives of the CAAs, scientists and VAAC London on how input from the scientific community and local observations could be used to enhance VAAC products.

3.1.2 Some airlines that participated in VOLCEX 12/01 used the opportunity to test submission and processing of special air reports on volcanic ash. These test AIREPs were then used by VAAC Toulouse to enhance their products.

3.2 EVITA

3.2.1 EVITA (European crisis Visualisation Interactive Tool for ATFCM) is a tool that supports decision-making in crisis events that have adverse impacts on aviation in Europe. It has been developed by Eurocontrol through a wide consultation with representatives of airlines, national supervisory authorities, air navigation service providers and meteorological offices.

3.2.2 EVITA is being fed with ash concentration data from VAAC and NOTAM from States. Moreover, EVITA gives the possibility to operators to upload and display locally their own defined area, in accordance with principles of their safety risk assessment. As a result EVITA users have access to relevant charts and information about flights, aerodromes and airspace forecast to be contaminated by volcanic ash.

3.2.3 The EVITA prototype was first made available in VOLCEX 11/01. Following the eruption of Grimsvötn in May 2011 many airlines approached EUROCONTROL with a request to activate EVITA. EUROCONTROL mobilized its operational and technical staff, who worked day and night towards this goal. As a result EVITA was made available for operational use on 25 May 2011 at 08.00 UTC, only three days after the decision was made.

4. FUTURE DEVELOPMENTS IN EUROPE

4.1 The ICAO International Volcanic Ash Task Force (IVATF) was established in May 2010 in response to the disruptions of civil aviation that resulted from the eruption of the Eyjafjallajökull volcano in Iceland in April and May of the same year. In June 2012, after four meetings the task force delivered its results and was dissolved. It is anticipated that the IVATF conclusions will be considered in amending the documents that support management of volcanic ash events in Europe; that ICAO will revise its ICAO EUR/NAT Volcanic Ash Contingency Plan (EUR Doc 019/NAT Doc 006, Part II); and that EASA will update its Safety Information Bulletin (SIB) on volcanic ash that supports its rulemaking approach.

4.2 In accordance with the EU Implementing Rule for the ATM network functions adopted in summer 2011 the EACCC composition was modified to include a representative of the EU Member State holding the Presidency of the European Council, a representative of the EC, a representative of EASA, a representative of EUROCONTROL, one representative of the military, one representative of the ANSPs, one representative of airports, and a representative of airspace users. The composition of the EACCC may be augmented on a case-by-case basis by experts, depending on the nature of the specific crisis. At the time of writing of this paper, EACCC Rules of Procedure were being finalized to include, among others, descriptions of roles and responsibilities, EACCC crisis management processes, and the EACCC role in normal operations. EACCC coordinates with relevant State focal points from the early stages of the crisis. Sharing information and linking national contingency plans with those established at the network level, as well as coordinating a response and mitigation actions are essential parts of the EACCC role in establishing a consistent approach across Europe.

4.3 Given the significant level of uncertainty which still prevails (e.g. volcanic ash propagation forecasting dependent on meteorological conditions, the absence of threshold values for

volcanic ash hazardous for safe flight operations, etc.) it is desirable to modify current arrangements within ICAO to support future volcanic ash developments. Hence, greater involvement of the decision makers is required and in particular, representatives of airspace users and competent authorities in States and at the regional level responsible for airspace and airworthiness. These should be leading the work within the ICAO framework in establishing the institutional and operational environment whereby airspace users would be allowed to make operational decisions in accordance with conclusions of their safety risk assessment. Representatives of MET and ATM service providers should support these developments by providing products and services adapted to meet needs of aircraft operators to conduct safe flight operations in volcanic ash events.

5. **RECOMMENDATIONS**

5.1 The Conference is invited to:

- a) note the establishment of the European Aviation Crisis Coordination Cell (EACCC) in Europe;
- b) recommend that the ICAO regions consider how similar crisis coordination arrangements for potential disruptive events, like volcanic ash dispersions, could be adopted;
- c) ensure a prominent role for decision makers in work that supports crisis coordination; and
- d) recommend that the ICAO regions publish, maintain and exercise practical contingency plans for potential disruptive events, including those that may impact safety.

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