**Seventeenth Meeting of the Cross Polar Trans East Air Traffic Management Providers’ Work Group (CPWG/17)**

(Samara, Russia, 3-6 June 2014)

**Agenda Item 5:Provide Status on CPWG/16 Actions**

**Lessons Learned of VOLKAM14**

**(Action Item CP 15-07)**

(Presented by JAPAN)

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| SUMMARY  This working paper presents information for the Group’s consideration about the lessons learned from VOLKAM14. In addition, we would like to have a small discussion on CHG message from in-flight aircraft with all the participants. |

1. **Introduction**

1.1 In order to confirm the procedures for sharing information on volcanic eruption and estimate influence on air traffic by spreading volcanic ashes, we carried out the VOLKAM14 exercise on the assumption that a volcano erupts in the Kamchatka Peninsula in March 2014. Airlines, meteorological facilities, State ATM Corporation, Federal Aviation Administration (FAA) and the Civil Aviation Bureau, Japan (JCAB) participated in the exercise.

1.2 Although some issues remained unresolved at VOLKAM13, the participants were able to resolve most of them and to greatly advance the work at VOLKAM14 this year. We would like to give a presentation on the intervals of Volcanic Ash Advisory (VAA) issue and the effectiveness of information sharing sheet. In addition, we would like to have a small discussion on CHG message from in-flight aircraft with all the participants.

1. **Discussion**
   1. VAA Issue Interval

2.1.1 At VOLKAM14 exercise, domestic airlines had an opinion that they would like to receive the VAA at intervals of every 6 hours to shorter. We had a discussion on the VAA with Tokyo VAAC so we would like to share the details.

2.1.2 Volcanic Ash Advisory Center (VAAC) issues VAA/VAG every 6 hours. Even if the expected airspace in 6 hours is out of volcanic ashes distribution, airlines shall consider the area as “the airspace where no aircraft is allowed to fly”.

2.1.3 If VAAC shortens the VAA/Volcanic Ash Graphic (VAG) issue intervals, airlines could define the restricted areas in a short period. As a result of that, they can have more choices to detour their aircraft in order to avoid volcanic ashes.

We had a discussion on the proposal with Tokyo VAAC.

2.1.4 Tokyo VAAC answered as follows:

* In ICAO standards, it is prescribed that VAA/VAG normally shall be issued every 6 hours.
* It is possible for Tokyo VAAC to grant the request because they issued the VAA every 3 hours when Sarychev Peak erupted in 2009.
* Tokyo VAAC have burdened themselves with issuing all VAA every 3 hours.
* Tokyo VAAC has been investigating at Meteorological International Committee if they could issue VAA instantly in case a volcano catastrophically erupts and airlines or related facilities request VAA/VAG issue every 3 hours.

2.2 Utilization of Teleconference Format (VOLKAM Sheet)

# 2.2.1 The information sharing sheet that was developed for the teleconference during the volcanic ashes exercise is called the VOLKAM sheet. Although Fukuoka Air Traffic Management Center (ATMC) prepared the VOLKAM sheet at VOLKAM 14 exercise in advance, it was not utilized by the participants because registration on the WEB had not completed.

If the participants verbally report important matters at a teleconference, we might miss hearing about beneficial information. If we record them in writing, however, it is valuable as an information sharing tool.

We would like to give a presentation on how effective the VOLKAM sheet is at CPWG.

2.2.2 VOLKAM sheets are utilized in order to share information on each participant by fill in the sheet in advance so that they can concentrate on discussing the problems at the teleconference.

2.2.3 In addition, each participant fills in, updates and shares the VOLKAM sheet in case of any matter of importance, which makes it possible for other participants to take effective measures on the basis of the information.

2.2.4 The advantage of VOLKAM sheets is to be re-readable. We might miss hearing about verbal report and it causes us not to be able to utilize the teleconferences as a source of valuable information. Re-readable VOLKAM sheets raise the value of teleconferences.

2.2.5 We can instantly share the same contents with many related personnel without discrepancies by publishing VOLKAM sheets. It will be of benefit to not only the participants in the teleconference but the Aeronautical Operational Control (AOC) as well. It is not indirect information reception but instant information sharing, so AOC can refer to how other airlines manage the operation.

2.2.6 The advantage above is on the assumption that a real volcano erupts. One piece of information combines with other information by sharing VOLKAM sheets with related personnel, and it can be worthwhile information in order to save lives on the aircraft.

2.2.7 JCAB will try to improve the VOLKAM sheet in order to cover valuable opinion and information from the participants as much as possible, and provide them with format which can be easily utilized.

2.3 CHG message for In-Flight Status Aircraft

2.3.1 There was an inquiry from an airline concerning why ATC facilities does not accept route change intentions by receiving CHG message when in-flight aircraft changes its route within Fukuoka FIR. The specifications of JCAB system do not apply to CHG message from in-flight aircraft.

We would like to have a small discussion on CHG message from in-flight aircraft with all the participants

2.3.2 Operators send CHG message to ATC facilities when their in-flight aircraft need to change its route. Although the specifications of Russia and FAA system are designed to accept CHG message from in-flight aircraft, the one of JCAB is not. We have some questions for our discussion:

* Does the Flight Data deal with CHG message or is it automatically updated in flight plan?
* Do dispatch and the pilot agree with each other when CHG message is sent to ATC facilities?
* In Russia and FAA, do they issue re-route clearance when they receive CHG message from in-flight aircraft? If so, how do they issue clearance when the aircraft change its route outside of the controlled airspace?
* Is there any disadvantage when an ATC directly receive a route change request from in-flight aircraft?

JCAB has been summarizing the opinions from ATC facilities and airlines, and investigating the procedures for the receipt of CHG message from in-flight aircraft.

1. **Action by the Meeting**

3.1 The meeting is invited to:

* 1. review the information contained in this Working Paper;
  2. endorse the information provided in this Working paper.