



*International Civil Aviation Organization*

**SIXTEENTH MEETING OF THE  
COMMUNICATIONS/NAVIGATION/SURVEILLANCE AND  
METEOROLOGY SUB-GROUP OF (CNS/MET SG/16) APANPIRG**

Bangkok, Thailand 23 – 27 July 2011

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**Agenda Item 14: Regional MET support to ATM**

**UPDATE ON MET/ATM TASK FORCE**

(Presented by the Secretariat)

**SUMMARY**

This paper provides an update on the Asia/Pacific MET/ATM Task force (MET/ATM TF).

This paper relates to

**Strategic Objectives:**

**A: Safety** - *Enhance global civil aviation safety*

**C: Environmental Protection and Sustainable Development of Air Transport** - *Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

**Global Plan Initiatives:**

GPI-18 Aeronautical information

GPI-19 Meteorological Systems

**1. Introduction**

1.1 The 2<sup>nd</sup> meeting of the Asia/Pacific MET/ATM Task force (MET/ATM TF/2) was held in Fukuoka, Japan from 27-28 January 2011 in conjunction with the ICAO/WMO joint APAC MET/ATM Seminar, also in Fukuoka, Japan from 24-26 January 2011. The objective of the seminar was for States to exchange information on MET developments for ATM. Outcomes of the seminar discussions were considered in more detail at the MET/ATM TF/2 meeting. Outcomes from both the MET/ATM TF/2 meeting and seminar were considered in detail by CNS/MET SG/15 (2011).

**2. Discussion**

2.1 The meeting will recall that the MET/ATM Seminar and TF/2 meeting (January 2011) was the latest collective activity of the TF, which deliberated on information on State arrangements between MET and ATM, Meteorological impacts on ATM such as volcanic ash, tropical cyclone, inter-tropical convergence zone and dust storms, use of meteorological information by ATM, ATM developments requiring additional/new MET information such as Meteorological Services in the

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Terminal Area (MSTA) and the future delivery method of MET data. The full report of the seminar may be accessed at: [http://www.bangkok.icao.int/cns/meeting.do?method=MeetingDetail&meeting\\_id=39](http://www.bangkok.icao.int/cns/meeting.do?method=MeetingDetail&meeting_id=39).

The full report of the TF/2 meeting may be accessed at:

[http://www.bangkok.icao.int/cns/meeting.do?method=MeetingDetail&meeting\\_id=37](http://www.bangkok.icao.int/cns/meeting.do?method=MeetingDetail&meeting_id=37).

2.2 The meeting is reminded that the MET/ATM TF terms of reference (TOR) were last revised by CNS/MET SG/15 (2011) in the adoption of Decision 15/36, that Singapore and the Russian Federation be included in the Asia/Pacific MET/ATM TF membership and the monitoring of collaborative decision making (CDM) for the possible future applications in the Asia/Pacific Regions be reflected in the MET/ATM TF TOR. The revised (2011) TOR document is included in the **Attachment**.

2.3 With reference to the MET/ATM TF membership, it should be noted that required updates, to reflect personnel changes in the ICAO Regional Office, as well as in the States represented on the TF, will be updated accordingly in the TOR document. Furthermore, the position of Chair, which was held by Australia, is now vacant and should be decided by the group at or before the next MET/ATM event.

2.4 The meeting is also reminded that the TOR of the MET/ATM TF provides a link with the Meteorological Warnings and Advisories Implementation Task Force (METWARN/I TF) for coordination on a framework for contingency plans for specific phenomenon including volcanic ash, radioactive cloud, tropical cyclone and Tsunami (with reference to developments made by the global ICAO groups and WMO developments). Furthermore, in relation to the global problem of providing optimal volcanic ash information, the recent METWARN/I TF/2 meeting (April 2012) agreed that the establishment of detailed user requirements in the Asia/Pacific regions should be a priority of the MET/ATM TF. Given the above, the meeting is invited to consider the adoption of the following draft Decision:

**Decision 16/x – MET/ATM TF TOR**

That, the MET/ATM TF TOR document be revised to reflect the establishment of detailed user requirements in the Asia/Pacific regions in relation to the provision of optimal volcanic ash information (as a priority task for the group).

2.5 The meeting will recall that MET/ATM TF/2 (January 2011) decided the next MET/ATM TF meeting could address implementation issues related to Amendment 76 to Annex 3 and could be held in conjunction with another forum. The time frame of 12-24 months and back to back meetings with OPMET/M TF were suggested, however the group expected that the CNS/MET SG would address the time for the next MET/ATM event. In more recent communications, TF members further suggested that in order to allow more time for States to develop issues of significance to present at the next MET/ATM TF event, and to facilitate Members' attendance combined with the METWARN/I TF and OPMET/M TF meetings, the next meeting could be held in the week from 1 to 5 April 2013, in Bangkok, Thailand. The meeting is also reminded of the positive exposure to another State's developments in MET/ATM collaboration, which was attributable to the last MET/ATM event being held in Japan.

**3. Action required by the Meeting**

3.1 The meeting is invited to:

- a) note the information in this paper;
- b) review and update, if necessary, the TOR document, and consider adopting the related Decision; and
- c) consider the proposed date/location for the next MET/ATM event.

**ATTACHMENT**

Revised TOR document of the MET/ATM TF – adopted by CNS/MET SG/15 (2011) in Decision 15/36 – contained in Appendix A7 to the CNS/MET SG/15 Report



**ICAO APANPIRG CNS/MET  
Meteorology and Air Traffic Management  
TASK FORCE (MET/ATM TF)**

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<b>2. DESCRIPTION</b>	
Objective	Improve efficiency of ATM and airlines by providing tailored regional MET products needed to optimize flight routes in all weather conditions
Benefits	Increase efficiency – save time and fuel as well as reduce carbon emissions
Terms of Reference	Under guidance from ICAO Secretariat: <ul style="list-style-type: none"> <li>a) Evaluate the current and future requirements for MET in support of ATM (includes ATFM) in the ASIA/PAC Region and update Regional Air Navigation Plan accordingly and provide guidance material to assist States to develop MET services to meet these requirements;</li> <li>b) Assess aviation meteorological services, systems and architecture in the region and</li> </ul>

	<p>how they can integrate weather information into decision support tools;</p> <p>c) Investigate sub-regional exchange of MET information and associated agreements that facilitate ATM operations particularly over busy routes that overlap different FIRs;</p> <p>d) Promote coordination between MET and ATM communities in the ASIA/PAC Region to enhance the level of understanding of MET requirements and capabilities in support of ATM;</p> <p>e) To study the successful involvement of MET in the development of CDM in other regions with a view to future application in ASIA/PAC</p> <p>f) Monitor global policy associated with source data and delivery of MET products for ATM;</p> <p>g) Coordinate with METWARN/I TF on framework for contingency plan for specific phenomenon including volcanic ash, radioactive cloud, tropical cyclone and Tsunami with reference to developments made by the global ICAO groups and WMO developments <del>IVATF and WMO scientific steering committee</del>;</p> <p>h) Report to the CNS/MET Sub-group of APANPIRG for further co-ordination through the ICAO Secretariat with other relevant bodies (ATM/AIS/SAR Sub-group).</p>
Work Program	See section 6

<b>3. COMMUNICATION STRATEGIES</b>				
Description	Target Audience	Delivery Method	Frequency / Date	Responsibility
Work Plan	Task Force Members	Document via email	As required but reviewed at least quarterly	Chair
General correspondence	Task Force Members	Email	As required	Task Force Members
Task Force Meeting	Task Team Members	Meeting	As required, supplemented by teleconference	Chair
Status & Milestone Reports	ICAO Secretariat and Task Team Members	Report via email	At least half-yearly	Chair
Task Force Report	CNS/MET SG	Working Paper	Yearly	Chair

<b>4. PERFORMANCE FRAMEWORK FORM (PFF)</b>				
Tasks	Time Frame	Responsibility	Status	Milestone
Task 1: Conduct MET/ATM meeting in 2009 to determine actions needed to obtain regional MET requirements to support ATM	2009	MET/ATM TF	complete	1

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Task 2: Conduct survey on regional ATM requirements for MET information	2012 - 2013	MET/ATM TF	Possibly at next MET/ATM event	1
Task 3: Conduct MET seminar in coordination with WMO in 2011 to further develop list of possible regional MET requirements to support ATM	Jan 2011	MET/ATM TF	complete	1
Task 4: Assess aviation meteorological services, systems and architecture in the region and how they can integrate weather information into decision support tools	2011-2016	MET/ATM TF	In progress	2
Task 5: Investigate sub-regional exchange of MET information and associated agreements that facilitate ATM operations particularly over busy routes that overlap different FIRs	2011-2016	MET/ATM TF	In progress	3
Task 6: Facilitate implementation of Meteorological Services for the Terminal Area (under development by WMO)	2011-2016	MET/ATM TF	future	4
Task 7: Monitor global policy associated with source data and delivery of MET products for ATM	2011-2016	MET/ATM TF	future	5

<b>5. MILESTONES</b>			
<b>Milestone</b>	<b>Accountability</b>	<b>Dates</b>	<b>Status</b>
<b>Milestone 1: Determine regional MET requirements for ATM</b>	MET/ATM TF		To begin
<b>Milestone 2: Develop methods to use weather information in decision support tools</b>	MET/ATM TF		To begin
<b>Milestone 3: Develop sub-regional exchange of MET information to facilitate ATM operations in busy routes</b>	MET/ATM TF		To begin
<b>Milestone 4: Develop regional implementation plan for the Meteorological Services for the Terminal Area</b>	MET/ATM TF		future
<b>Milestone 5: Monitor global policies associated with source data and delivery of MET products for ATM</b>	MET/ATM TF		To begin

<b>6. WORK PLAN</b>				
<b>Activity / Milestone</b>	<b>Accountability</b>	<b>Predecessors</b>	<b>Date</b>	<b>Status</b>
<b>Activity 1: Develop regional MET requirements for ATM</b>				
Activity 1.1: Conduct MET/ATM meetings (TF meetings, Seminars) to contribute in developing MET requirements for ATM	MET/ATM TF	-	Jan 11-completed (at least every 18 months)	In progress
Activity 1.2: Analyse existing surveys (e.g. ATFM survey) and develop new surveys, when necessary, to determine regional ATM requirements for MET	MET/ATM TF	-		To begin
Activity 1.3: Recommend regional MET requirements for ATM to CNS/MET SG and AMOFSG (through direct membership) meetings	MET/ATM TF	-	Annual (AMOFSG – 18 months)	To begin
Milestone 1: Determine regional MET requirements for ATM				
<b>Activity 2: Developing methods to use weather information in decision support tools</b>				
Activity 2.1:	MET/ATM TF	-		To begin
Activity 2.2:		-		
Activity 2.3:		-		
Milestone 2: Develop methods to use weather information in decision support tools				
<b>Activity 3: Developing sub-regional exchange of MET information to facilitate ATM operations</b>				
Activity 3.1: States develop agreements on the exchange of MET information that provides benefits to ATM operations on sub-regional level	States	-		To begin
Activity 3.2: States report developments to MET/ATM TF and CNS/MET SG meetings	States/ MET/ATM TF	3.1		To begin
Milestone 3: Develop sub-regional exchange of MET information to facilitate ATM operations in busy routes				To begin

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<b>Activity 4: Developing regional implementation plan for MSTA</b>				
Activity 4.1: Monitor developments of MSTA (pending approval at conjoint ICAO/WMO Divisional meeting 2014)	MET/ATM TF	-		In progress
Activity 4.2: Monitor Annex 3 developments (requirements for MSTA)	MET/ATM TF	4.1		future
Activity 4.3: Develop regional implementation plan for MSTA	MET/ATM TF	4.2		future
Activity 4.4: Monitor regional implementation of MSTA	MET/ATM TF	4.3		future
Activity 4.5: Report implementation progress to CNS/MET SG	MET/ATM TF	4.4		future
<b>Milestone 4: Develop regional implementation plan for Meteorological Services for the Terminal Area</b>				<b>future</b>
<b>Activity 5: Monitoring global policies associated with source data and delivery of MET products for ATM</b>				
Activity 5.1: monitor global policies associated with source data and delivery of MET products for ATM	MET/ATM TF	-		To begin
Activity 5.2: report results to MET/ATM TF and CNS/MET SG meetings	MET/ATM TF	5.1		future
<b>Milestone 5: Monitor global policies associated with source data and delivery of MET products for ATM</b>				

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