



International Civil Aviation Organization

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

Bangkok, Thailand 23 – 27 July 2012

Agenda Item 16: Review and update Regional Performance Framework Objectives and forms:

2) MET related Performance Framework Forms

MET PERFORMANCE FRAMEWORK FORMS

(Presented by the Secretariat)

SUMMARY

This paper presents the updated Performance Framework Forms (PFFs) for MET for review.

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: All GPIs

Action by the meeting is at Para 3 to this paper.

1. Introduction

1.1 The ICAO planning objective is to achieve a performance based global air traffic management system through the implementation of air navigation systems and procedures in a progressive, cost-effective and cooperative manner. One of the key aspects of the performance based approach is the development of regional performance objectives with measurable outcomes and metrics. APANPIRG/19 (September 2008, Bangkok) adopted Conclusion 19/1 - Regional Performance Framework.

1.2 APANPIRG/20 adopted the Asia Pacific Regional Performance Objectives and the associated Performance Framework Forms (PFFs) under Conclusion 20/2.

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Conclusion 20/2 – Asia Pacific Regional Performance Objectives

That, the Asia Pacific Regional Performance Objectives and associated Performance Framework Forms (PFFs) as contained in Appendix A to APANPIRG/20 Report on Agenda Item 3.0 be adopted

1.3 APANPIRG/21 adopted the revised PFFs proposed by the 20th Meeting of the ATM/AIS/SAR SG and 14th Meeting of the CNS/MET SG.

2. Discussion

2.1 The meeting will recall that APANPIRG/22 (September 2011) reviewed the updated status of the PFFs reported by the CNS/MET SG/15. The regional performance objectives in the MET field, based on the current regional work programme as included in the APANPIRG/22 report, are:

APAC Objective 12 – Implement International Airways Volcano Watch (IAVW), International Tropical Cyclone Watch (ITCW), and improve the quality of Meteorological Warnings and Advisories

APAC Objective 13 – Implement WAFS and associated developments

APAC Objective 14 – Develop regional MET requirements to support ATM

APAC Objective 15 – Improve OPMET exchange efficiency

2.2 The **Attachment** to this paper contains the performance framework forms associated with these regional performance objectives (from APANPIRG/22 report; Attachment 3 to Agenda Item 3.0) to be reviewed by the meeting and updated if necessary.

Aviation System Block Upgrade (ASBU) Methodology

2.3 The ASBU initiative will be integrated in the revised Global Air Navigation Plan with intent to seek the endorsement of ANConf/12 scheduled from 19 to 30 November 2012 under the concept of One Sky. The revised GANP will also include related technology roadmaps such as CNS, AIM, and Avionics. Consequential amendments will also take place in the Regional and National Performance Framework for Air Navigation Systems and reflected appropriately in the air navigation plans.

2.4 As ICAO will be migrating to the ASBU framework, consequently, the Performance Framework Form will be modified and renamed Air Navigation Report Form (ANRF). The new form will be effective from 2013.

3. Action required by the Meeting

3.1 The meeting is invited to:

- a) review the Asia Pacific Regional Performance Objectives and associated Performance Framework Forms shown in the Attachment to this paper;
- b) provide updates if necessary; and
- c) note the revised format of PFF.

Attachment

(From APANPIRG/22 report; Attachment 3 to Agenda Item 3.0)

ASIA/PACIFIC REGION

PERFORMANCE FRAMEWORK FORM

(REGIONAL)

(Amended 22 July 2011)

REGIONAL PERFORMANCE OBJECTIVE: <u>APAC Objective 12</u>				
IMPLEMENT INTERNATIONAL AIRWAYS VOLCANO WATCH (IAVW), INTERNATIONAL TROPICAL CYCLONE WATCH (ITCW), AND IMPROVE THE QUALITY OF METEOROLOGICAL WARNINGS AND ADVISORIES				
Benefits				
Safety Efficiency	<ul style="list-style-type: none"> • Improve in-flight safety by providing information on volcanic ash, tropical cyclone and other hazardous weather by way of meteorological advisories and warnings • Improve pre-flight planning by optimizing flight routes with respect to volcanic ash, tropical cyclone and other hazardous weather phenomena by way of meteorological advisories and warnings 			
Strategy				
Short term (2011-2012)/Medium term (2013 - 2016)				
ATM OC COMPONENTS	TASKS	TIME FRAME	RESPONSIBILITY	STATUS
MET	<ul style="list-style-type: none"> • Monitor and provide assistance in the regional implementation of meteorological warnings and advisories that include volcanic ash (VA) and tropical cyclone (TC) advisories and meteorological warnings and advisories based on current and future requirements 	2011 - 2016	METWARN/I TF	In progress

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	<ul style="list-style-type: none"> Track and investigate deficiencies in the format and dissemination of meteorological advisories and warnings and propose remediation plans and provide information to ICAO and WMO groups for possible assistance 	2011-2016	METWARN/I TF OPMET/M TF	In progress
	<ul style="list-style-type: none"> Conduct periodic tests for SIGMET on VA, TC, and phenomena other than VA and TC in view of assessing improvements in their implementation 	2011 – 2016	METWARN/I TF & RODB & VAACs & TCACs & OPMET/M TF	In progress
	<ul style="list-style-type: none"> Provide guidance and/or training related to the implementation of meteorological advisories and warnings, including the Regional SIGMET Guide as they relate to the Annex 3 amendment cycle 	2013	METWARN/I TF & OPMET/M TF & RO	In progress
	<ul style="list-style-type: none"> Develop framework for emergency plan for specific phenomenon including VA, radioactive cloud, TC and Tsunami. with consideration to global ICAO groups and WMO developments 	2011-2012	METWARN/I TF & MET/ATM TF	To begin
Linkage to GPIs	GPI/19 – Meteorological Systems			
References	<ul style="list-style-type: none"> <i>Annex 3</i> <i>Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds (Doc 9691)</i> <i>Handbook on the International Airways Volcano Watch (IAVW) Operational Procedures and Contact List (Doc 9766)</i> <i>Manual on Low-level Wind Shear (Doc 9817)</i> <i>Asia/Pacific Regional SIGMET Guide</i> 			

(amended 27 July 2011)

REGIONAL PERFORMANCE OBJECTIVE: <u>APAC Objective 13</u>				
IMPLEMENT WAFS AND ASSOCIATED DEVELOPMENTS				
Benefits				
Safety Efficiency	<ul style="list-style-type: none"> Improve the regional implementation of weather forecasts (including upper-winds and upper-air temperatures, direction, speed and height of maximum winds and tropopause heights, as well as turbulence, icing, cumulonimbus) used by airlines and ATM needed to optimize flight routes which will provide an increase in efficiency and reduced carbon emissions 			
Strategy				
Short term (2011-2012)/Medium term (2013 - 2016)				
ATM OC COMPONENTS	TASKS	TIME FRAME	RESPONSIBILITY	STATUS
MET	<ul style="list-style-type: none"> Assist the regional implementation of new gridded products for turbulence, icing and CB forecasts 	2011-2014	WAFS/I TF	In progress
	<ul style="list-style-type: none"> Facilitate in organizing regional training of new gridded products for turbulence, icing and cumulonimbus forecasts 	2011-2014	WMO & ICAO	In progress
	<ul style="list-style-type: none"> Monitor the operational use of WIFS noting the planned cessation of ISCS-G2 broadcast on 1 July 2012 	2011-2016	WAFS/I TF	In progress
	<ul style="list-style-type: none"> Monitor the operational use of Secure SADIS FTP service noting the planned cessation of SADIS FTP on 30 November 2012 	2011-2016	WAFS/I TF	In progress
	<ul style="list-style-type: none"> Maintain and distribute WAFS service reference document to ASIA/PAC States 	2011-2016	WAFS/I TF	In progress

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	<ul style="list-style-type: none"> • Monitor the implementation status of WAFS within the ASIA/PAC Regions, and report to CNS/MET SG • Report WAFS training needs of ASIA/PAC States to CNS/MET SG 	2011-2016	WAFS/I TF	In progress
		2011-2016	WAFS/I TF	In progress
Linkage to GPIs	GPI/19 – Meteorological Systems			
References	<ul style="list-style-type: none"> • <i>Annex 3</i> • http://www.icao.int/anb/wafsopsg/ • http://www.icao.int/anb/sadisopsg/ • <i>Asia/Pac WAFS Implementation Plan and Procedures</i> 			

(Amended 22 July 2011)

REGIONAL PERFORMANCE OBJECTIVE: <u>APAC Objective 14</u>				
DEVELOP REGIONAL MET REQUIREMENTS TO SUPPORT ATM				
Benefits				
Safety Efficiency	<ul style="list-style-type: none"> Improve efficiency of ATM and airlines by providing tailored regional MET products needed to optimize flight routes in all weather conditions 			
Strategy				
Short term (2011-2012)/Medium term (2013 - 2016)				
ATM OC COMPONENTS	TASKS	TIME FRAME	RESPONSIBILITY	STATUS
MET	<ul style="list-style-type: none"> Conduct MET ATM meeting in 2009 to determine actions needed to obtain regional MET requirements to support ATM 	2009	MET/ATM TF	complete
	<ul style="list-style-type: none"> Conduct survey on regional ATM requirements for MET information 	2012	MET/ATM TF	Possibly discuss at next MET/ATM event
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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

	<ul style="list-style-type: none"> Facilitate implementation of Meteorological Services for the Terminal Area (under development by WMO) 	2013-2015+	MET/ATM TF	future
	<ul style="list-style-type: none"> Monitor global policy associated with source data and delivery of MET products for ATM 	2011-2016	MET/ATM TF	future
Linkage to GPIs	GPI/19 – Meteorological Systems Note that the MET/ATM TF will provide input to the METWARN/I TF in the developing a framework for contingency plan for specific phenomenon including VA, radioactive cloud, TC and Tsunami			
References	<ul style="list-style-type: none"> <i>Manual on co-ordination between Air Traffic Services, Aeronautical Information Services and Aeronautical Meteorological Services (Doc 9377)</i> 			

(Amended 22 July 2011)

REGIONAL PERFORMANCE OBJECTIVE: <u>APAC Objective 15</u>				
IMPROVE OPMET EXCHANGE EFFICIENCY				
Benefits				
Safety Efficiency	<ul style="list-style-type: none"> • Increase OPMET availability and reliability needed for flight planning (efficiency) and in-flight re-planning (safety) 			
Strategy				
Short term (2011-2012)/Medium term (2013 - 2016)				
ATM OC COMPONENTS	TASKS	TIME FRAME	RESPONSIBILITY	STATUS
MET	<ul style="list-style-type: none"> • Improve the availability of OPMET data at the Regional OPMET Data Banks (RODB) 	2011 - 2016	OPMET/M TF	In progress
	<ul style="list-style-type: none"> • Improve the inter-regional OPMET exchange 	2011 - 2016	OPMET/M TF	In progress
	<ul style="list-style-type: none"> • Improve the availability of OPMET data in the Pacific 	2011 - 2016	OPMET/M TF & TCB & PASO & States	In progress
	<ul style="list-style-type: none"> • Review and update regional ROBEX tables and guidance material 	2011 - 2016	OPMET/M TF & RO	In progress
	<ul style="list-style-type: none"> • Facilitate and provide guidance to the implementation new/modified standards before applicability date and carry out post implementation review to ensure that standardized procedures are followed 	2011 - 2016	OPMET/M TF	In progress
	<ul style="list-style-type: none"> • Conduct periodic quality checks and OPMET monitoring to improve the quality and timeliness of OPMET in the Asia/Pac Region 	2011 – 2016	OPMET/M TF & IATA	In progress

	<ul style="list-style-type: none"> Facilitate and monitor the migration to AIM and new MET codes (e.g. XML) for METAR/SPECI, TAF and SIGMET 	TBD	OPMET/M TF & RO	TBD
Linkage to GPIs	GPI/19 – Meteorological Systems (Note: the OPMETM TF will assist the METWARN/I TF in SIGMET test coordination and deficiency tracking of the format and dissemination of meteorological advisories and warnings and noted in the PFF of the METWARN/I TF)			
References	<ul style="list-style-type: none"> SADIS User Guide ROBEX Handbook Asia/Pacific OPMET Data Banks Interface Control Document 			
