International Civil Aviation Organization

SEVENTEENTH MEETING OF THE METEOROLOGY SUB-GROUP (MET SG/17) OF APANPIRG

Bangkok, Thailand, 13 – 16 May 2013

Agenda Item 8: OPMET (TAF, METAR, SPECI) Exchanges

8.1) Review of ROBEX WG/11 meeting

ROBEX WORKING GROUP WORK PROGRAMME

(Presented by Sue O'Rourke, Chair of ROBEX WG)

SUMMARY

This paper presents the work programme of the Regional OPMET Bulletins Exchange Working Group (ROBEX WG) of the Meteorology Sub Group (MET SG) of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG). It contains details including the terms of reference and the activities to be undertaken by the ROBEX WG over the next year.

1. Introduction

1.1 The 13th Meeting of APANPIRG (Bangkok, September 2002) with its Decision 13/28 established the ICAO Asia/Pacific OPMET Exchange Task Force (OPMET/E TF). The Meeting adopted Terms of Reference (TOR), the work programme and the composition of the Task Force. The 7th Meeting of the CNS/MET Sub-group of APANPIRG (July 2003), adopted Decision 7-10/26, by which the OPMET Exchange Task Force was renamed to ASIA/PAC OPMET Management Task Force (OPMET/M TF). At the 23rd Meeting of APANPIRG (September 2012) it was agreed that, due to the on-going monitoring and testing role, the group should be migrated from a Task Force to a Working Group and renamed the Regional OPMET Bulletin Exchange Working Group (ROBEX WG).

1.2 Ms Sue O'Rourke is the current chairperson and Ms Sujin Promduang was elected as chairperson of the ROBEX WG commencing prior to the next meeting.

2. Discussion

2.1 The work programme of the ROBEX WG, which includes the TOR, composition and work plan of the group, is provided in the **Appendix** to this paper.

2.2 The activities to be undertaken by the group include:

- Improving the availability of OPMET data;
- Improving the timeliness and regularity of OPMET exchange;
- Identifying gaps in process, procedures and OPMET exchange;
- Review of the guidance material relating to OPMET data;

- Facilitating and monitoring the migration to AIM and the new MET codes such as XML; and
- Review of the RODB structure.

2.3 The work programme of the ROBEX WG was last reviewed at the 11th Meeting of the ROBEX WG, held in Bangkok from 11 to 13 March 2013, in which a number of changes were made to the composition of the group and its specific activities for the upcoming year, including:

- The member for Australia, Ms Sue O'Rourke, will be replaced by Mr Tim Hailes;
- There was no longer a need to identify OPMET data requirements and this activity was removed as it is specified in Annex 3;
- The participation of Nadi RODB in the activities would be monitored as part of the on-going work programme, so this specific activity was removed; and
- Monitoring progress on XML/GML is extended to participation in the review process for the XML Schema and testing of the OPMET products in XML.

2.4 The attributes of all the contributory bodies to the MET SG of APANPIRG have been standardized and can be accessed at http://www.bangkok.icao.int/apanpirg_sg.html. The standardized form contains activities to achieve milestones that may be updated by the relevant group.

3. Action by the Meeting

3.1 The meeting is invited to review and discuss the work programme of the ROBEX WG contained in the Appendix to this paper.

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APPENDIX
APANPIRG MET SG - ROBEX WORKING GROUP (ROBEX WG)

1. COMPOSITION OF THE GROUP		
The ROBEX WG is made up of members from States representing the 5 regional RODBs (Singapore, Bangkok, Brisbane, Tokyo & Nadi), the WAFS Provider States (UK and USA), the 3 regional VAACs (Darwin, Tokyo, Wellington), SIGMET Test & ROBEX Focal Points and IATA.		
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2. DESCRIPTION		
Objective	Increase OPMET availability and reliability needed for flight planning (efficiency) and in-flight re-planning (safety).	
Benefits	Increase in safety and efficiency (time and fuel savings).	
Terms of Reference	Under guidance from the ICAO Secretariat: ○ Review the OPMET exchange schemes in the APAC and MID Regions and develop proposals for their optimization, taking into account the requirements by the aviation users and the current trends for global OPMET exchange; ○ Develop standardized quality control, monitoring and management procedures related to ROBEX exchange and other exchanges of OPMET information; ○ Review the regional guidance material related to OPMET exchange; ○ Liaise with other groups dealing with communication and/or management aspects of the OPMET exchange in APAC and other ICAO Regions (APAC ATN Implementation Coordination Group, BMG EUR Region, CNS/MET SG MID Region, SADISOPSG).	
Work Program	The work to be addressed by the APAC ROBEX Working Group (ROBEX WG) includes: ○ Examine new and existing requirements for OPMET exchange in APAC and MID regions and assess the feasibility of satisfying these requirements, taking into account the availability of the data; ○ Keep the ROBEX scheme and other OPMET exchange schemes under review and prepare proposals for updating and optimizing the schemes; ○ Review and update of the procedures for inter-regional OPMET exchange and ensure the availability of the required APAC and MID OPMET data for SADIS and WIFs; ○ Review the regional guidance material on OPMET exchange; to ensure that guidance material contains procedures for the exchange of all required OPMET data types: SA, SP, FT, WS, WC, WV, FK, FV, UA; ○ Conduct trials and develop procedures for quality control, monitoring and management of the OPMET exchange; to foster implementation of quality management of OPMET data by the ROBEX centres and the RODBs; ○ Report on deficiencies in the format and dissemination of OPMET messages; ○ Participate in the testing and implementation of the transition to digital exchange of	

	OPMET using a code form based on XML/GML ○ Conduct regular regional VAAC backup and SIGMET tests; ○ Develop quality control guidance material and promote implementation of quality control for OPMET management.

3. COMMUNICATION STRATEGIES

Description	Target Audience	Delivery Method	Frequency / Date	Responsibility
Work Plan	ROBEX WG Members	Document via email & ROBEX WG Meeting	As required but reviewed at the ROBEX WG Meeting and the MET SG	Chair
General correspondence	ROBEX WG Members	Email	As required	ROBEX WG Members
Task Force Meeting	ROBEX WG Members	Meeting	Annually	Chair
Status & Milestone Reports	ICAO Secretariat and ROBEX WG Members	Report via email & WP at ROBEX WG Meeting	Annually	Chair
Task Force Report	All APAC States	Working Paper at MET SG	Annually	Chair

4. PERFORMANCE FRAMEWORK FORM (PFF)

Tasks	Time Frame	Responsibility	Status	Milestone
Task 1: Improve the availability of OPMET data	Ongoing	ROBEX WG		1
Task 2: Improve timeliness and regularity of OPMET exchange	Ongoing	ROBEX WG		2
Task 3: Identify gaps in processes, procedures and OPMET exchange	Ongoing	ROBEX WG		3, 4, 5
Task 4: Review regional guidance material related to OPMET data	Ongoing	ROBEX WG		3, 4, 5, 6
Task 5: Facilitate and monitor the migration to AIM and new MET codes (e.g. XML)	2013-2016	ROBEX WG		7
Task 6: Review the RODB structure	tbc	ROBEX WG		8

5. MILESTONES

Milestone	Accountability	Dates	Status
Milestone 1: Achieve 95% (90%) or greater OPMET availability for AOP (non-AOP) aerodromes at RODBs and WAFCs.	ROBEX WG	Annually Jun	
Milestone 2: Achieve OPMET timeliness and regularity index of 0.95 (0.90) for AOP (non-AOP) aerodromes at RODBs and WAFCs.	ROBEX WG	Annually Jun	
Milestone 3: Improved issuance and compliance of test SIGMETs Tests.	ROBEX WG	Annually Jun	
Milestone 4: VAAC back-up tests issues communicated to relevant States.	VAAC Backup Focal Points	Annually Jun	

Milestone 5: IROG Back-up Tests conducted, analysed and report complete.		Bangkok RODB	Annually Mar	
Milestone 6: RODB Monitoring procedures updated in ROBEX Handbook.		Secretariat	Sep '13	
Milestone 7: Report to ROBEX WG & MET SG on digital OPMET exchange (ie. XML) & testing.		Secretariat & Chair	Annually Mar & May	
Milestone 8: RODB structure review complete.		ROBEX WG	tbc	
6. WORK PLAN				
Activity / Milestone	**Accountability**	**Predecessors**	**Date**	**Status**
Activity 1: Increasing OPMET availability at RODBs & WAFCs (95 and 90% for AOP and non-AOP aerodromes)				
Activity 1.1: Perform real time monitoring if required.	RODBs & IATA	-	If required	
Activity 1.2: Monitor RODB OPMET reception in Jan and use Dec as PI threshold.	RODBs	-	Annually Dec/Jan	
Activity 1.3: Monitor SADIS/WIFS OPMET reception.	IATA	-	Annually Jan	
Activity 1.4: Score against FASID Table MET 1A and 2A.	RODBs & IATA	1.2 & 1.3	Annually Feb	
Activity 1.5: Report results and deficiencies to ROBEX WG meeting.	RODBs & IATA	1.4	Annually Mar	
Activity 1.6: Report summary of OPMET availability results to MET SG.	Chair	1.5	Annually May	
Activity 1.7: Advise States of OPMET deficiencies.	Secretariat	1.6	Annually Jun	
Milestone 1: Achieve 95% (90%) or greater OPMET availability for AOP (non-AOP) aerodromes at RODBs & WAFCs.	ROBEX WG	1.7	Annually Jun	
Activity 2: Improving OPMET timeliness and regularity				
Activity 2.1: Monitor OPMET timeliness and regularity in Jan and use Dec as PI threshold.	RODBs & IATA	-	Annually Dec/Jan	
Activity 2.2: Collate and analyse data.	RODBs & IATA	2.1	Annually Feb	
Activity 2.3: Report State irregularities to ROBEX WG meeting.	RODBs & IATA	2.2	Annually Mar	
Activity 2.4: Report summary of OPMET timeliness and regularity results to METSG.	Chair	2.3	Annually May	
Activity 2.5: Inform States of compliance.	Secretariat	2.4	Annually Jun	
Milestone 2: Achieve OPMET timeliness and regularity index of 0.95 (0.90) for AOP (non-AOP) aerodromes at RODBs and WAFCs.	ROBEX WG	2.5	Annually Jun	

Activity 3: SIGMET Tests				
Activity 3.1: Review SIGMET Test procedures.	ROBEX WG	-	Annually Aug	
Activity 3.2: State Letter regarding SIGMET Tests.	Secretariat	3.1	Annually Sep	
Activity 3.3: Conduct WC SIGMET Tests.	RODBs	3.2	Annually 2nd Tue in Nov	To be conducted on 12 Nov '13
Activity 3.4: Conduct WV SIGMET Tests.	RODBs	3.2	Annually 3rd Tue in Nov	To be conducted on 19 Nov '13
Activity 3.5: Conduct WS SIGMET Tests.	RODBs	3.2	Annually 4th Tue in Nov	To be conducted on 26 Nov '13
Activity 3.6: Collate and analyse test data .	RODBs	3.3 - 3.5	Annually Jan	
Activity 3.7: Report to ROBEX WG.	SIGMET Focal Points	3.6	Annually Mar	
Activity 3.8: Report on SIGMET Test Results to MET SG.	Chair	3.7	Annually May	
Activity 3.9: Advise States of SIGMET deficiencies.	Secretariat	3.8	Annually Jun	
Milestone 3: Improved issuance and compliance of test SIGMETs.	ROBEX WG	3.9	Annually Jun	
Activity 4: VAAC Backup Tests				
Activity 4.1: Review VAAC Backup Test procedures to include Wellington and Volcano Observatories.	ROBEX WG and VAACs		Jun '13	
Activity 4.2: Update VAAC Backup Procedures in SIGMET Guide.	Secretariat	4.1	Aug '13	
Activity 4.3: State Letter regarding VAAC Backup Tests.	Secretariat	4.2	Annually Aug	
Activity 4.4: Conduct VAAC Backup Tests.	VAACs	4.3	Annually Sep/Oct	Darwin/ Wellington test Sep/Oct. Darwin/Tokyo test after Nov (tbc).
Activity 4.5: Collect test results and send to VAAC Backup Test Focal Point.	RODBs	4.4	Annually Sep/Oct	
Activity 4.6: Analyse test results.	VAAC Backup Focal Points	4.5	Annually Dec	
Activity 4.7: Report to ROBEX WG.	VAAC Backup Focal Points	4.6	Annually Mar	
Activity 4.8: Report to MET SG.	Chair	4.8	Annually May	
Activity 4.9: Advise relevant States, VAACs and RODBs of any deficiencies.	Secretariat	4.7	Annually Jun	

Milestone 4: VAAC back-up tests issues communicated to relevant States.	Secretariat	4.9	Annually Jun	
Activity 5: IROG Backup Tests				
Activity 5.1: Identify feasibility for IROG backup testing of IROG Tokyo & Brisbane.	Secretariat	-	May '13	
Activity 5.2: Review IROG Backup Test procedures to include all IROG.	All IROGs	-	Sep '13	
Activity 5.3: Updated IROG Backup Procedures in ROBEX Handbook.	Secretariat	5.2	Sep '13	
Activity 5.4: Identify list of MET Bulletins to monitor.	All IROGs	-	Annually Jan/Feb	
Activity 5.5: Conduct IROG Backup Tests.	All IROGs	5.4	Annually Jan/Feb	
Activity 5.6: Collect & analyse test results.	All IROGs	5.5	Annually Feb	
Activity 5.7: Report to ROBEX WG.	Bangkok RODB	5.6	Annually Mar	
Milestone 5: IROG Back-up Tests conducted, analysed and report complete.	Bangkok RODB	5.7	Annually Mar	
Activity 6: APAC RODB Monitoring procedures				
Activity 6.1: Letter to ROBEX Centres requesting confirmation that ROBEX Handbook Appendix A, B & C has the correct information regarding the Bulletins. Also ask for Hours of Operation and Issue Times of METAR and TAF.	Secretariat	-	May '13	
Activity 6.2: Review ROBEX Handbook Appendix A & B table structure to include columns for Hours of Operation and Issue Times.	Chair	6.1	Jul '13	
Activity 6.3: Review monitoring procedure in ROBEX Handbook.	All RODBs	-	Jul '13	
Activity 6.4: RODBs to indicate differences in procedures and resolve these differences.	All RODBs	6.3	Aug '13	
Activity 6.5: Any changes to RODB monitoring procedures and updates to Appendix A, B and C in ROBEX Handbook.	Secretariat	6.2 & 6.4	Sep '13	
Milestone 6: RODB Monitoring procedures updated in ROBEX Handbook.	Secretariat	6.5	Sep '13	
Activity 7: New OPMET Exchange Formats				
Activity 7.1: Monitor migration to AIM and new OPMET codes (ie. XML/GML).	Secretariat	-	As required	

Activity 7.2: Review documentation relating to the XML schema version 1.0, release candidate 2. Feedback through Secretariat.	RODBs		May '13	
Activity 7.3: Report to MET SG on plans for implementation of XML schema at APAC RODBs.	Secretariat		May '13	
Activity 7.4: Conduct a trial of the new XML schema developed by WMO TT-AvXML.	Singapore RODB	-	after Jul '13	
Activity 7.5: Report to ROBEX WG regarding testing and implementation of digital OPMET exchange in APAC.	Secretariat		Annually Mar	
Milestone 7: Report to ROBEX WG & MET SG on digital OPMET exchange (ie. XML) & testing.	Secretariat	7.1 - 7.4	Annually May	
Activity 8: Review RODB Structure				
Activity 8.1: Review optimum inter-regional exchange of APAC OPMET data. In particular consolidate data sent to AFI from either Bangkok or Brisbane.	Bangkok & Brisbane RODBs	-	May '13	
Activity 8.2: Review ROBEX Scheme diagram vs Table in 11.1 of ROBEX Handbook.	All RODBs	8.1	May '13	
Activity 8.3: Review AFTN network diagram and add an AMHS diagram in the ROBEX Handbook.	Secretariat	-	Aug '13	
Activity 8.4: Review RODB structure taking into account: o Capability; o Message structure (XML) readiness; o Delivery methods (internet, AHMS); o New Products (ie. ATM requirements).	ROBEX WG	-	tbc	
Milestone 8: RODB structure review complete.	ROBEX WG	-	tbc	