International Civil Aviation Organization

THIRTEENTH MEETING OF THE ASIA/PACIFIC REGIONAL OPMET BULLETIN EXCHANGE WORKING GROUP (ROBEX WG/13)

Seoul, Republic of Korea, 16 – 18 March 2015

Agenda Item 6:   Future work programme

REVIEW ROBEX WG TERMS OF REFERENCE AND WORK PROGRAMME

(Presented by the Secretariat)

SUMMARY
This paper presents the work programme of the ROBEX WG, including terms of reference, for review by the meeting. Updates may be proposed, as determined necessary by the meeting, for further consideration and possible approval by the MET SG/19 meeting in August 2015.

1.   INTRODUCTION

1.1   The ASIA/PAC OPMET Exchange Task Force (OPMET/E TF) was first established in 2003 with terms of reference and work programme adopted in accordance with the outcomes of APANPIRG/13 in September 2002 (APANPIRG/13 Decision 13/28 refers). Subsequently, at is second meeting in 2004, the OPMET/E TF was renamed the OPMET Management Task Force (OPMET/M TF) in accordance with outcomes from the CNS/MET SG/7 in July 2003 (CNS/MET SG/7 Decision 7-10/26 refers). Finally, at the eleventh meeting in 2013, the OPMET/M TF was renamed the Regional OPMET Bulletin Exchange Working Group (ROBEX WG) in accordance with outcomes from the CNS/MET SG/16 in July 2012.

1.2   Under the current framework of APANPIRG contributory bodies, the ROBEX WG reports to the MET SG which oversees the work programme and terms of reference of the ROBEX WG.

2.   DISCUSSION

2.1   The work programme and terms of reference of the ROBEX WG were last updated at the ROBEX WG/12 meeting in March 2014 and reviewed by the MET SG/18 meeting in August 2014. A copy of the ROBEX WG work programme and terms of reference is provided in the **Attachment** to this paper including initial draft changes for 2015 for further review and updates by the meeting.

3.   ACTION BY THE MEETING

3.1   The meeting is invited to:

a) Note the information in this paper; and

b) Provide further updates to the work programme document as necessary.

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ATTACHMENT

WORK PROGRAMME
ICAO APAC REGIONAL OPMET BULLETIN EXCHANGE
WORKING GROUP (ROBEX WG)

1. COMPOSITION

The ROBEX WG is made up of members from States representing the five APAC Regional OPMET Data Banks (RODBs): *Australia/Brisbane, Fiji/Nadi, Japan/Tokyo, Singapore and Thailand/Bangkok*; the World Area Forecast System (WAFS), Satellite Distribution System (SADIS) and WAFS Internet File System (WIFS) Provider States: *United Kingdom and United States*; the three APAC Volcanic Ash Advisory Centres (VAACs): *Australia/Darwin, Japan/Tokyo and New Zealand/Wellington*; the designated focal points for SIGMET tests and regional OPMET bulletin exchange (ROBEX); and the International Air Transport Association (IATA).

Secretariat	Address	Contact
Mr. Peter Dunda ICAO	Regional Officer MET International Civil Aviation Organization 252/1, Vibhavadi Rangsit Road Ladyao, Chatuchak Bangkok 10900 Thailand	Tel: +66 (2) 537-8189 Ext. 153 Fax: +66 (2) 537-8199 Email: PDunda@icao.int

Chair	Address	Contact
Mr. Tim Hailes AUSTRALIA (Brisbane RODB & Darwin VAAC)	National Manager Regional Aviation Weather Services Weather Policy Branch Australian Bureau of Meteorology GPO 1289 Melbourne VIC 3001	Tel: +61 (3) 9669 4273 Mob: +61 4 2784 0175 Email: t.hailes@bom.gov.au Cc: metauthority@bom.gov.au

Members	Address	Contact
Mr. Aidan Cooley AUSTRALIA (Brisbane RODB)	ATM Systems Specialist Airservices Locked Bag 747 Eagle Farm QLD 4009	Tel: +61 (7) 3866 3762 Mob: +61 417 434 975 Fax: +61 (7) 3866 3506 Email: aidan.cooley@airservicesaustralia.com
Mr William Reece FIJI (Nadi RODB)	Station Officer Telecoms (Training & Standards) Airports Fiji Limited, Private Mail Bag, Nadi Airport Fiji Islands	Tel: +679 673 1198 Mob: +679 990 6105 Fax: +679 673 1198 Email: williamr@afl.com.fj
Mr. Jun Ryuzaki JAPAN (Tokyo RODB)	Senior Scientific Officer Administration Division Forecast Department Japan Meteorological Agency (JMA) 1-3-4 Otemachi, Chiyoda-ku Tokyo 1008122	Tel: +81 3 3212 8341 (ext. 3351) Fax: +81 3 3284 0180 Email: jryuzaki@met.kishou.go.jp

Members	Address	Contact
Ms. Yohko Igarashi Mr. Satoshi Harada JAPAN (Tokyo VAAC)	Scientific Officer Deputy Director Tokyo Volcanic Ash Advisory Center Volcanology Division Seismology and Volcanology Department Japan Meteorological Agency (JMA) 1-3-4 Otemachi, Chiyoda-ku Tokyo 1008122	Tel: +81 3 3212 8341 (ext. 47274532) Fax: +81 3 3212 3648 Email: y_igarashi@met.kishou.go.jp sharada@met.kishou.go.jp
Mr Keith Mackersy NEW ZEALAND (Wellington VAAC)	Senior Meteorological Specialist Civil Aviation Authority of New Zealand PO Box 3555 Wellington	Tel: +64 4 9040543 Fax: +64 4 9041543 Email: keith.mackersy@caa.govt.nz
Ms. Chua Guat Mui SINGAPORE (Singapore RODB)	Principal Technical Officer Meteorological Services Singapore P.O. Box 8, Singapore Changi Airport Post Office Singapore 918141	Tel: +65 6542 2861 Fax: +65 6542 2915 Email: chua_guat_mui@nea.gov.sg
Ms. Sujin Promduang THAILAND (Bangkok RODB)	General Administrative Manager Aeronautical Information Management Centre Aeronautical Radio of Thailand Ltd. 102 Ngamduplee, Sathorn, Bangkok 10120 Thailand	Tel: +66 (2) 285 9083 Fax: +66 (2) 287 3131 Email: sujin@aerothai.co.th
Mr. Chris Tyson UNITED KINGDOM (WAFC London)	SADIS Manager & International Aviation Analyst Met Office, Fitzroy Road Exeter Devon EX1 3PB	Tel: +44 (0) 1392 884892 Fax: +44 (0) 870 900 5050 Email: chris.tyson@metoffice.gov.uk
Mr. Steven Albersheim UNITED STATES (WAFC Washington)	Federal Aviation Administration Senior Meteorologist, Programme Lead International FAA Headquarters 800 Independence Ave, S.W. Washington, D.C. 20591	Tel: +1 (202) 385 7185 Fax: +1 (202) 385 7240 Email: steven.albersheim@faa.gov
Hans-Rudi Sonnabend IATA	Head of Meteorological Services Lufthansa Systems Aeronautics GmbH Am Prime Parc 2 D-65479 Raunheim Germany	Tel: +49 (69) 6969 0362 Fax: +49 (69) 6969 4736 Email: hans-rudi_sonnabend@lhsystems.com met.services@lhsystems.com

2. DESCRIPTION	
Objective	Increase OPMET availability and reliability needed for flight planning (efficiency) and in-flight re-planning (safety) in support of the Global Air Navigation Plan framework and the aviation system block upgrade (ASBUs) methodology.
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, MID and neighbouring 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 and other exchange schemes for 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, other ICAO Regions and the WAFS Provider States.
Work Programme	The work to be addressed by the ROBEX WG includes: - Examine new and existing requirements for OPMET exchange in APAC, MID and other neighbouring regions along with the WAFS Provider States 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 procedures are provided for the exchange of all required OPMET data types: SA, SP, FT, WS, WC, WV, FK, FV and 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, implementation and awareness of the transition to digital exchange of OPMET using a code form based on XML/GML; - Conduct regular regional VAAC back-up and SIGMET tests; - Provide support for the APAC Volcanic Ash Exercises; - 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, compliance 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, compliance 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 conducted, analysed and report complete.	VAAC Back-up 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	~~Jun 2014~~ Jun 2015	Draft ROBEX HB update in WP/15
Milestone 7: Report to ROBEX WG & MET SG on digital OPMET exchange (i.e. 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: Assist Nadi RODB in conducting OPMET availability testing	Brisbane RODB	-	Nov 2014	
Activity 1.2: Perform real time monitoring if required	RODBs & IATA	-	If required	

6. WORK PLAN				
Activity / Milestone	**Accountability**	**Predecessors**	**Date**	**Status**
Activity 1.3: Monitor RODB OPMET reception in Jan and use Dec as PI threshold.	RODBs	-	Annually Dec/Jan	
Activity 1.4: Monitor SADIS/WIFS OPMET reception.	IATA	-	Annually Jan	
Activity 1.5: Score against FASID Table MET 1A and 2A.	Singapore, Tokyo, Bangkok RODBs & IATA	1.3 & 1.4	Annually Feb	
Activity 1.6: Report results and deficiencies to ROBEX WG meeting.	Bangkok RODB & IATA	1.5	Annually Mar	
Activity 1.7: Report summary of OPMET availability results to MET SG	Secretariat & Chair	1.6	Annually May	
Activity 1.8: Advise States of OPMET deficiencies.	Secretariat	1.7	Annually Jun	
Activity 1.9: Provide support for States to rectify deficiencies if requested.	RODBs	1.8	As required	
Activity 1.10: Develop a common dataset and assess the consistency between RODBs of the 'availability' calculation and standardise.	Singapore, Tokyo, Bangkok RODBs	-	Jul 2014	
Milestone 1: Achieve 95% (90%) or greater OPMET availability for AOP (non-AOP) aerodromes at RODBs & WAFCs.	ROBEX WG	1.9	Annually Jun	
Activity 2: Improving OPMET timeliness, compliance and regularity				
Activity 2.1: Assist Nadi RODB to collect the data for conducting OPMET testing	Brisbane RODB	-	Nov 2014	
Activity 2.2: Monitor OPMET timeliness, compliance and regularity in Jan and use Dec as PI threshold.	RODBs & IATA	-	Annually Dec/Jan	
Activity 2.3: Collate and analyse data	Singapore, Tokyo, Bangkok RODBs & IATA	2.2	Annually Feb	
Activity 2.4: Report State irregularities to ROBEX WG meeting	Bangkok RODB & IATA	2.3	Annually Mar	
Activity 2.5: Report summary of OPMET timeliness, compliance and regularity results to METSG	Chair	2.4	Annually May	
Activity 2.6: Inform States of compliance	Secretariat	2.5	Annually Jun	

6. WORK PLAN				
Activity / Milestone	**Accountability**	**Predecessors**	**Date**	**Status**
Activity 2.7: Provide support for States to rectify deficiencies if requested.	RODBs	2.6	As required	
Activity 2.8: Develop a common METAR dataset and assess the consistency between RODBs of the 'compliance' and 'regularity' calculation and standardise.	Singapore, Tokyo, Bangkok RODBs	-	Sep 2014	
Activity 2.9: Correct identified issues relating to inconsistencies identified.	Singapore, Tokyo, Bangkok RODBs	2.8	Nov 2014	
Milestone 2: Achieve 95% (90%) or greater OPMET timeliness, compliance and regularity for AOP (non-AOP) aerodromes at RODBs & WAFCs.	ROBEX WG	2.9	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 1st Wed in Nov	To be conducted on 4 Nov 2015
Activity 3.4: Conduct WV SIGMET Tests	RODBs	3.2	Annually 2nd Wed in Nov	To be conducted on 11 Nov 2015
Activity 3.5: Conduct WS SIGMET Tests	RODBs	3.2	Annually 3rd Wed in Nov	To be conducted on 18 Nov 2014
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 Back-up Tests				

6. WORK PLAN				
Activity / Milestone	**Accountability**	**Predecessors**	**Date**	**Status**
Activity 4.1: Review VAAC Back-up Test procedures	ROBEX WG and VAACs		~~May 2014 and then a~~Annually Jan	
Activity 4.2: Update VAAC Back-up Procedures	Secretariat	4.1	Annually May	
Activity 4.3: State Letter regarding VAAC Back-up Tests	Secretariat	4.1	Annually Aug	
Activity 4.4: Conduct VAAC Back-up Test between Darwin and Tokyo	VAACs	4.3	Annually Oct – TBC	
Activity 4.5: Conduct VAAC Back-up Test between Darwin and Wellington	VAACs	4.3	Annually Oct – TBC	
Activity 4.6: Collect test results and send to VAAC Provider State members	RODBs	4.4	Annually Oct – TBC	
Activity 4.7: Analyse Test results	VAAC Back-up Focal Points Members	4.5	Annually Nov	
Activity 4.8: Report to ROBEX WG	VAAC Back-up Focal Points Members	4.6	Annually Feb	
Activity 4.9: Report to MET SG.	Chair	4.8	Annually May	
Activity 4.10: Advise relevant States, VAACs and RODBs of any deficiencies.	Secretariat	4.7	Annually Jun	
Milestone 4: VAAC Back-up Tests conducted, analysed and report complete.	VAAC Back-up Focal Points Members	4.8	Annually Jun	
Activity 5: IROG Back-up Tests				
Activity 5.1: Investigate back-up arrangements of IROG Tokyo & Brisbane	Secretariat	-	~~Oct 2014~~ May 2015	
Activity 5.2: Review IROG Back-up Test procedures to include all IROG.	All IROGs	-	Annually Feb	
Activity 5.3: Updated IROG Back-up Procedures in ROBEX Handbook.	Secretariat	5.2	Annually May	
Activity 5.4: Identify list of MET Bulletins to monitor.	All IROGs	-	Annually Jan/Feb	
Activity 5.5: Conduct IROG Back-up Tests	All IROGs	5.4	Annually Jan/Feb	
Activity 5.6: Collect & analyse test results	All IROGs	5.5	Annually Feb	

6. WORK PLAN				
Activity / Milestone	**Accountability**	**Predecessors**	**Date**	**Status**
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	-	Annually May	
Activity 6.2: Review ROBEX Handbook Appendix A & B table structure to include columns for Hours of Operation and Issue Times.	Chair	6.1	Annually Jul	
Activity 6.3: Review monitoring procedure in ROBEX Handbook.	All RODBs	-	Annually Aug	
Activity 6.4: RODBs to indicate differences in procedures and resolve these differences.	All RODBs	6.3	Annually Aug	
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	Annually Sep	
Milestone 6: RODB Monitoring procedures updated in ROBEX Handbook	Secretariat	6.5	Annually Sep	
Activity 7: New OPMET Exchange Formats				
Activity 7.1: Monitor migration to AIM and new OPMET codes (i.e. XML/GML).	Secretariat	-	As required	
Activity 7.2: Review documentation relating to the XML schema.-Feedback through Secretariat.	RODBs		May 2014	
Activity 7.3: Report to MET SG on plans for implementation of XML schema at APAC RODBs.	Secretariat		Next meeting MET SG	
Activity 7.4: Conduct a trial of the new XML schema developed by WMO TT-AvXML.	Singapore RODB	-	Oct 2014	

6. WORK PLAN				
Activity / Milestone	**Accountability**	**Predecessors**	**Date**	**Status**
Activity 7.5: Consider options and strategies to deal with digital data exchange of OPMET data in its area of responsibility, including non-compliance of OPMET products with requirements of WMO TT-AvXML schema.	RODBs		Feb 2015	
Activity 7.6: Increase awareness of the requirement of digital exchange of OPMET data and the impact.	RODBs & Secretariat		As required	
Activity 7.7: Report on the status of the testing and implementation of digital OPMET exchange.	RODBs		Annually Mar	
Activity 7.8: Report to ROBEX WG regarding testing and implementation of digital OPMET exchange in APAC.	Secretariat	7.1-7.7	Annually Mar	
Milestone 7: Report to ROBEX WG & MET SG on digital OPMET exchange (i.e. XML) & testing.	Secretariat	7.8	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	-	Dec 2014	
Activity 8.2: Implement optimum inter-regional exchange to AFI	Bangkok or Brisbane RODBs		Jan 2015	
Activity 8.3: Review ROBEX Scheme diagram vs Table in 11.1 of ROBEX Handbook.	All RODBs	8.2	Oct 2014 May 2015	
Activity 8.4: Review AFTN network diagram and add an AMHS diagram in the ROBEX Handbook.	Secretariat	-	~~Oct 2014~~ <mark>May 2015</mark>	<mark>Chart CNS 1 to be addressed by e-ANP CNS Development Working Group, 08 – 10 April 2015</mark>
Activity 8.5: Review RODB structure taking into account: o Capability; o Message structure (XML) readiness; o Delivery methods (internet, AMHS); o New Products (i.e. ATM requirements).	ROBEX WG	-	2017	
Milestone 8: RODB structure review complete.	ROBEX WG	-	2017	

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