INTERNATIONAL CIVIL AVIATION ORGANIZATION
ASIA AND PACIFIC OFFICE

REPORT OF THE FOURTH REGIONAL OPMET DATA BANKS COORDINATION (RODB/4) MEETING

Chiang Mai, Thailand
11 – 12 February 2010

HISTORY OF THE MEETING

REPORT ON AGENDA ITEMS

I. HISTORY OF THE MEETING

1. Introduction

1.1 The Fourth RODB Coordination Meeting was hosted by AEROTHAI and held at the Chiang Mai Air Traffic Control Centre, Chiang Mai, Thailand from 11-12 February 2010.

2. Attendance

2.1 The meeting was attended by experts from RODBs Bangkok, Singapore, and Tokyo as well as MET departments from Australia and Thailand, and the ICAO Regional Office. The List of Participants is provided in **Attachment 1** to the Report.

3. Opening of the meeting

3.1 The meeting was opened by Chris Keohan, Regional Officer MET, ICAO Asia and Pacific Office who thanked AEROTHAI for hosting the meeting. In his opening remarks, he emphasized the importance of continued positive trends in regional OPMET exchange and SIGMET test participation as it relates to direct benefits to airline operations. In particular, OPMET information is used by operations to optimize flight trajectories and produces time and fuel savings.

4. Chairperson and the Secretariat

4.1 Mrs. Susan O'Rourke, National Manager Aviation Weather Services of the Australian Bureau of Meteorology Weather Services Branch was nominated Chairperson for the meeting. Mr. Chris Keohan, Regional Officer MET acted as Secretary for the meeting.

5. Organization, Language and Documentation

5.1 The working language was English only, inclusive of all papers and this report. Nine Working Papers and five Information Papers were considered by the meeting. The list of Papers is provided at **Attachment 2** to this Report.

6. Agenda of the Meeting

6.1 The agenda adopted by the meeting was in accordance to WP/1.

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II. REPORT ON AGENDA ITEMS

Agenda Item 1: Review of RODB/3, OPMET/M TF/7, CNS/MET SG/13 (via APANPIRG/20) meetings

1.1 The meeting agreed that action items from the RODB/3 Meeting held in Melbourne from 29-30 January 2009 and action items from the OPMET/M TF/7 meeting held in Bangkok from 2-4 June 2009 be combined into one OPMET exchange action item list provided in **Attachment 3** to this report. Any updates to a task will lead with the meeting it was provided (RODB4, OPMETMTF7, etc…). This action item list is referred as the OPMET Exchange Action Item List and will be posted with the OPMET/M TF TORs and membership webpage (http://www.bangkok.icao.int/edocs/apanpirg/apanpirg_sg/met/opmetm_tfmem.pdf) and presented to the OPMET/M TF/8 meeting (23-25 March 2010, Bangkok).

1.2 The OPMET action item list is extensive and updates provided in **Attachment 3** to this report and recorded with the designator RODB4. Eleven new action items were provided and five action items were closed.

1.3 The meeting then reviewed the progress of MET Conclusions from the APANPIRG/20 meeting held in Bangkok from 7-11 September 2009 provided in the Attachment to WP/4. Of particular note, the meeting requested that IATA perform the monitoring of SADIS reception timeliness of OPMET data (reference Conclusion 20/62).

Agenda Item 2: Review the operations of RODBs

2.1 The meeting discussed operations of RODBs with regards to open action items from the RODB/3 meeting. In particular, the meeting agreed that the inquiry on AFTN ICAO international requests from Brasilia (SBBR) to RODB Brisbane be closed. Despite no response as to why many OPMET requests are made to the RODB Brisbane by Brasilia, the meeting agreed that it would not be worth pursuing since there was no direct operational benefit to know why.

2.2 The meeting agreed to keep the task open with regards to the non IA5 characters from KWBC (Washington) since a response had not yet been obtained by the United States as to whether or not this issue was remedied. RODB Brisbane should determine whether or not this still occurs.

2.3 RODB Singapore will provide instructions at the OPMET/M TF/8 meeting for forwarding to the EUR Regional Office on behalf of OPMET dissemination for Iraq. AFTN is not currently in place from Iraq to Jordan, which is why OPMET data not available on SADIS. Therefore, if Iraq concurs with the European Regional Office to send OPMET data to RODB Singapore via email, OPMET data would then be forwarded to SADIS for global use.

Agenda Item 3: Measures to minimize OPMET data shortfall

3.1 The meeting reviewed the performance indicators (PIs) of incoming OPMET data from RODBs Bangkok, Brisbane, Singapore and Tokyo for December 2009 as compared to November 2009 using the same reference table for SA and FT bulletins. The RODBs Bangkok and Brisbane PIs did not screen observation/filing times. In addition, RODBs Singapore and Tokyo performed their own analysis and provided Thailand the results of the analysis for comparison.

3.2 RODB Tokyo explained that a greater than one compliance indicator for some localities was due to the same OPMET bulletin being sent with a different header which was particularly common in India. The meeting agreed that an example from India be sent to the Regional Office to send to India requesting that only one bulletin be sent.

3.3 The meeting noted the significant improvement in TAF availability for WABB (Biak) (FTSR31 bulletin) over the four month period (October 2009 – January 2010). TAF availability increased 50% over the period reaching an 87% availability rate which gave reason to close this action item that originated at the RODB/3 meeting.

3.4 TAF format errors identified from Sri Lanka at the OPMET/M TF/7 meeting will be monitored by the RODB Bangkok for which the results will be reported at the OPMET/M TF/8 meeting. TAF format errors identified from MID Region at the RODB/3 meeting was not clearly resolved; however, any further reports will be forwarded to the European Regional Office for appropriate action. Therefore, this particular action item is closed.

Agenda Item 4: Status of mirroring of RODB contents

4.1 The status of RODB Brisbane-Singapore and Tokyo-Singapore backup tests will be provided at the OPMET/M TF/8 meeting. The second of the tests is to verify that OPMET data reaches ISCS when RODB Singapore acts as a backup for RODB Tokyo. In addition, another test for RODB Bangkok in backup mode for RODB Singapore will be conducted in March 2010. The objective is to determine transmission of OPMET to SADIS from RODB Bangkok when in backup mode as this is an outstanding issue from the OPMET/M TF/7 meeting. Furthermore, for a better understanding as to which RODB serves as a backup for another, the meeting agreed to add the global AFTN diagram to the ROBEX Handbook in the next amendment.

Agenda Item 5: Progress with ASIA/PAC OPMET Data Catalogue

5.1 The meeting agreed that the ASIA/PAC OPMET Data Catalogue is no longer needed since the ASIA/PAC Interface Control Document (ICD) is the document referenced by the RODBs. Therefore, this action item of posting the RODB data catalogue was closed. The meeting noted that the ICD is posted on the ICAO ASIA/PAC website and referenced by the Regional Air Navigation Plan.

Agenda Item 6: Relaying ASIA/PAC OPMET data to SADIS and ISCS and harmonization of OPMET data on SADIS and ISCS

6.1 The meeting was informed that another round of harmonization between ISCS and SADIS was in progress and necessary to complete APANPIRG/20 C20/63 and C20/64 (improvement of OPMET data availability for AOP and non-AOP aerodromes). ISCS has consulted SADIS on what is necessary for harmonization and completion expected in the near future.

Agenda Item 7: SIGMET Tests – current tests and plans for future tests

7.1 The meeting noted the increased participation in the WS SIGMET test that conducted on 24 November 2009 which was highlighted with an increase in State and MWO participation by 30 and 18%. A total of 71% and 81% of States and MWOs participated in the latest WS SIGMET test and attributed to the increased awareness through various communication methods (MWO contact list

for States who did not participate in the past, reminder letters, and emails). One caveat with the increased participation was a reduction in SIGMET test message reception by the RODBs. This could have been due to the use of incorrect AFTN addresses and/or an incomplete list of AFTN addresses used by the new participants.

7.2 The meeting noted that WSAU21 should be added to Appendix H to the SIGMET Guide for the Melbourne/World Met. Centre and that ABCS should be used as CCCC in the WMO SIGMET Header for Townsville. Other WMO Headers were not listed (i.e. Sunan, Kabul) and will be added in the next amendment to the SIGMET Guide. Furthermore, the Kansas City MWO should be italicized in Appendix H to the SIGMET Guide to assure it is not part of the results given it is outside the Region. With reference to the purple shaded entries Appendix 1 to WP/7, Australia should be notified by the Regional Office that many test messages were not received by the RODB Tokyo. States with incorrect WMO headers will be notified and marked in yellow shade in Appendix 1 to WP/7. States will be informed by the Regional Office for incorrect FIR names used in the second line of SIGMET (i.e. Mumbai and Jakarta should be VABF and WIIZ).

7.3 The meeting agreed that the test procedures (Appendix J to SIGMET Guide) be updated to include a clause that instructs States to inform the Regional Office and the test point of contact if an active SIGMET prevented participation in the test. This note will also be included in the State letter sent informing of the SIGMET test. The objective is not to include these States/MWOs in the statistics based on active SIGMET.

7.4 The meeting noted that RODB Fiji had not provided the WS SIGMET for analysis for any of the last five SIGMET tests and discussed possible remedies. Furthermore, RODB Fiji represents a critical point in data flow to Washington (ISCS) if RODB Tokyo were out of service (the route would then become Brisbane-Nadi-U.S.). The meeting agreed that the Regional Office seek advice from Headquarters for consistent involvement by the RODB Nadi.

7.5 The meeting was apprised of the ASIA/PAC SIGMET Test results for tropical cyclone (WC) and volcanic ash (WV) that were conducted on 10 and 17 November 2009. The Rapporteur of the VA/TC/I TF (Japan) informed the meeting of the increased participation in both tests. Specifically, 76% (28 out of 37) of MWOs listed in Appendix H reported WC SIGMETs. The meeting noted that several MWOs that did not participate (those in Myanmar, Bangladesh, Pakistan and partially in India) should not be included in the statistics since Tropical Cyclone Advisory Centre (TCAC) New Delhi did not issue test tropical cyclone advisories and likely due to a tropical disturbance in the Indian Ocean Basin. Therefore, the participation should be reflected in statistics presented to the OPMET/M TF/8 meeting (RO inform RODB Tokyo). Furthermore, VLVT participated and was not counted since Appendix H to the SIGMET Guide did not contain a WMO Header for Vientiane, which will be reflected in the next SIGMET Guide update. Errors identified in the report include all tropical cyclone advisories not reaching all RODBs, incorrect WMO Headings (format), incorrect priority (GG, DD).

7.6 Participation in the WV SIGMET test was highest of all three tests conducted as indicated by a SIGMET message availability of 87% (32 out of 37 MWOs). Furthermore, new participants (VECC, VRMM, and VYYY) were not counted in the statistics due to the fact that their WMO headers were not listed in Appendix H of the SIGMET Guide, which will be updated in the next amendment. Twelve MWOs from the Russian Federation issued WV SIGMET test messages and received by RODB Tokyo by GTS and forwarded to the other RODBs via AFTN. Errors identified include all volcanic ash advisories not reaching all RODBs, incorrect WMO Headings (WS), incorrect priority (GG,DD).

7.7 The meeting noted that MWOs in the MID region (Gulf States to Yemen) that receive tropical cyclone advisories from TCAC Delhi may be included in the ASIA/PAC WC SIGMET test later this year. To facilitate this effort, an amendment proposal (APAC 10/6) sent 10 February 2010 includes the MID MWOs in the FASID Table MET 3A under the TCAC Delhi (italics are used to denote these MWOs are outside the region). In addition, coordination with TCAC Delhi on this new concept is expected this month.

7.8 Japan informed the meeting that progress on the expanded WV SIGMET test was difficult due to the volcanic activity in Japan. Coordination with Japan Civil Aviation Bureau (JCAB) and major airlines will occur in March 2010 in determining a plan on conducting the expanded WV SIGMET test and this information will be reported to the OPMET/M TF/8 meeting. Possibilities of testing using real events were discussed, but no conclusion resulted.

7.9 The meeting agreed that future analysis of SIGMET tests would be made easier if the same template were used when submitting test information to the analysts. Australia agreed to provide the RODBs a template of SIGMET reception information for review before making this a standard practice.

7.10 The RODB Tokyo agreed to monitor SIGMET issuance from Sunan MWO for the Pyongyang FIR before further consideration is made as to whether the deficiency of SIGMET issuance be removed from the list of APANPIRG deficiencies (AP-MET-16). The Sunan MWO did issue a WS SIGMET test that was received by the RODBs Tokyo and Brisbane. DPR Korea will be informed by the Regional Office to send SIGMET to all RODBs in the Region.

7.11 The RODB Bangkok agreed to monitor SIGMET issued by Yangon for the Yangon FIR for an active thunderstorm week sometime in April, May or June 2010 before further consideration of removing this deficiency from the APANPIRG list of deficiencies (AP-MET-13). Myanmar will be reminded to send SIGMET to all RODBs (RODBs Tokyo and Brisbane were missing from the WS SIGMET test).

7.12 The meeting agreed that SIGMET monitoring coordinated with EUR (Austro Control GmbH) in February and September of each year was not yet necessary since the RODBs are focused on monitoring of known deficiencies identified in the region. In addition, the meeting agreed no action be taken with regards to an email sent by ROC Vienna regarding SIGMET tests.

7.13 The meeting could not determine whether or not volcanic ash SIGMET for activity associated with the Mayon volcano in the Philippines was warranted. The appropriate VAAC could be consulted if operators raise the issue (the concept originated by the Regional Office management).

Agenda Item 8: Monitoring and quality control procedures – current RODB status

8.1 RODB Tokyo performance indicators for METAR and TAF were shared with the meeting by Japan. Using the monitoring periods of 1-30 November and 1-31 December 2009, performance indicators were calculated for availability, compliance and regularity (definition details in ROBEX HB Appendix H).

8.2 RODB Singapore provided PIs for OPMET data received in November and December 2009 based on OPMET reception between 21 and 30 September 2009 that used an average daily count. Observations included that TAF for OEDF and OEDR have a higher reception utilizing the FTSD31 OEJD bulleting (versus the FTBN31 OBBI bulletin). METAR for these aerodromes also had a higher reception using SASD31 OEJD.

8.3 Furthermore, compliance indicators were higher for RODB Singapore than RODBs Bangkok and Tokyo for bulletins FTTH31, 32 and 33 based on the expected number of TAF per day being 2 versus 4. Lastly, the missing PIs for some AU aerodromes listed in SAAU31 and SAAU32 bulletins may be due to the AUTO format of the METAR reports, for which the monitoring software would have to be modified for proper reception.

8.4 The meeting discussed the low performance indicators for non-AOP aerodromes and developed two potential considerations: (1) reconsider the distribution of OPMET data in the ROBEX scheme for non-AOP aerodromes that do not provide OPMET data on a routine basis and (2) correct information in the ROBEX Handbook such that the expected number of METAR and TAF per day are represented and note if the reception of OPMET data is variable.

Agenda Item 9: Review of implementation of TAF provisions in Amendment 74 to Annex 3, reports on implementation by RODBs

9.1 The meeting was informed by RODB Singapore that 2 TAF are being issued in Mongolia and Indonesia and the Regional Office will continue its notification of Amendment 74 to Annex 3 in that one TAF be available at an aerodrome at any given time. IATA had recently identified this issue for India and Pakistan, for which letters were sent on 9 February 2010. Further developments will be discussed at the OPMET/M TF/8 and CNS/MET SG/14 meetings.

9.2 With regards to the temperature group location error from Switzerland identified at the RODB/3 meeting, no reports of noncompliance have been received since and the meeting agreed that this action item should be closed.

9.3 Japan informed the meeting that the number of amended TAF had increased 1.7 times after the implementation of Amendment 74 to Annex 3 possibly due to the implementation of longer TAF.

Agenda Item 10: Review Amendment 75 to Annex 3 changes (subject to adoption Mar 2010)

10.1 The meeting was informed of the changes expected with Amendment 75 to Annex 3 applicable 18 November 2010. MET elements requiring Quality Management Systems will be effective in 2012 (WMO/ICAO QMS Seminar will be held at the ICAO Regional Office in 2010). Other changes entail tropical cyclone advisory changes (inclusion of gale force wind extent and frequent CB in graphic form and no name storms indicated as NN versus current NIL) and the inclusion of the forecast time in the first line of SIGMET. In addition, Amendment 75 to Annex 3 will enable the use of the public Internet for the exchange of MET data that is used for flight planning.

Agenda Item 11: Any other business

11.1 The RODB Bangkok informed the meeting of its plans to implement the optional group (RRx) in the WMO Header to identify multi OPMET bulletins on 1 April 2010. This is in compliance with the WMO Manual on the Global Telecommunication System (WMO No. 386). Other RODBs discussed their compliance with the use of the optional group for multi OPMET bulletins in accordance with WMO No. 386 in that RODB Singapore and Tokyo are compliant at the time of the meeting and RODB Brisbane informed the Regional Office of a deferred implementation (date unknown) and no information is available from RODB Fiji. The Regional Office will inquire on the implementation dates of the RODBs Fiji and Brisbane.

11.2 The meeting agreed that the ASIA/PACIFIC OPMET Data Banks Interface Control Document be updated and that RODBs provide the Regional Office their respective updates in May 2010 for an amendment in June 2010.

11.3 Japan agreed to provide the Regional Office with non-AOP aerodromes for inclusion in Table B to the ROBEX Handbook as per action item from the RODB/3 meeting. The changes would be needed by April for inclusion in the next amendment.

11.4 The meeting agreed that OPMET data updates from the MID region be included in the ROBEX Handbook if provided by the European Regional Office. The present action item can be closed as this is not under the jurisdiction of the ASIA/PAC Region.

11.5 The meeting agreed that the results of real time monitoring by RODB Singapore conducted in late September 2009 be included in the next amendment of the ROBEX Handbook.

11.6 The meeting agreed to maintain Table C of the ROBEX Handbook. That is, OPMET bulletins are reference to FASID Table MET 1A.

11.7 The meeting agreed that the current information on SA and TAF for Afghanistan is incorrect since entries for Afghanistan do not utilize SAIR32 OIII and a note should be placed that OAKB METAR and TAF are in SAAH10 and FTAH10 bulletins and are obtained by ISCS and relayed to the Singapore IROG to SADIS.

11.8 The meeting agreed that the AFTN routing chart in the region be included in the ROBEX Handbook and that the OPMET exchange display diagram conform to this chart.

11.9 The RODB Bangkok agreed to continued coordination with Lao for the inclusion of 4 aerodromes (VLLB, VLLN, VLSK and VLPS) to Bangkok TAF bulletins. Further information is expected at the OPMET/M TF/8 meeting.

11.10 Japan proposed updates to the ROBEX Handbook with regards to AFTN addresses for Tokyo's METAR, TAF and AIREP bulletins. The meeting agreed that AFTN addresses of the RODBs should remain unchanged since they are specific to the RODB section. That is, METAR are sent to RODB Singapore using WSZZYPYM and TAF are sent to RODB using WSZZYPYX versus more generic MET office address for Singapore of WSSYMYX. The changes that will be made are to include adding EGZZFRXX, LIIBYMYX, and NWCCYMYX to the FTJP31 bulleting in Table B of the ROBEX Handbook and adding EGZZFRXX, KWBCYMYX and NWCCYMYX to FTJP32 bulleting in Table B of the ROBEX Handbook. In addition, the AIREP bulletin UAJP31 be changed to UAFE31 and change AYPYYMYX to AYPMYMYX and add PANCYMYX and PGUMCOAX to the new UAFE31 bulletin in Table D of the ROBEX Handbook.

11.11 The meeting was made aware of Pandemic Business Continuity Plan Workshop in Malaysia from 26-27 May 2010 to promote contingency plans in the aviation sector. Those who wish to participate can contact the Secretariat.

11.12 Final report and photos will be posted on the web after distribution for comment in one to two weeks.

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The Fourth OPMET Data Banks (RODB)
Coordination Meeting in Asia and Pacific Regions
Chiang Mai, Thailand
11-12 February 2010

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International Civil Aviation Organization

FOURTH REGIONAL OPMET DATA BANKS (RODB) COORDINATION MEETING

Chiang Mai, Thailand, 11 – 12 February 2010

LIST OF WORKING PAPERS

WP/No. IP/No.	Agenda Item	Title	Presented by
1	-	Provisional Agenda	Secretariat
2	1	Review RODB/3 Meeting Action Items	Secretariat
3	1	Review OPMET/M TF/7 Action Items	Secretariat
4	1	Review APANPIRG/20 Conclusions Progress	Secretariat
5	2	Proposal for Amendment to ROBEX Handbook	Japan
6	3	ASIA/PAC RODB's Performance Indices	Thailand
7	3	WG SIGMET Test 5	Australia
8	3	Current Status of OPMET Data Shortfall	Singapore
9	7	Progress with SIGMET Tests – WC and WV	Japan

LIST OF INFORMATION PAPERS

1	-	Meeting Bulletin	Secretariat
2	11	Review Status of OPMET Data Representation	Secretariat
3	8	RODB Tokyo Performance Indices for METAR and TAF	Japan
4	8	OPMET Performance Indices Compiled by Singapore RODB	Singapore
5	11	The Identification of Multi OPMET Bulletins	Thailand

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OPMET Exchange Action Item List

(Latest update: RODB/4 meeting, Chiang Mai, Thailand, 11-12 February 2010)

Meeting list contributing to progress
RODB/3 – Melbourne, Australia, 29-30 January 2009
OPMET/M TF/7 – Bangkok, Thailand, 2-4 June 2009
CNS/MET SG/13 – Bangkok, Thailand, 20-24 June 2009
APANPIRG/20 – Bangkok, Thailand, 7-11 September 2009
MID MET SG/2 – Cairo, Egypt, 15-17 December 2009
RODB/4 – Chiang Mai, 11-12 February 2010

Action	Assigned	Progress
Non ROBEX Scheme Issues		
Inquiry on AFTN ICAO Int'l requests from Brasilia (SBBR) to RODB Brisbane	RO APAC/SAM	RODB-3: Email sent to RO SAM. RO SAM contacted SBBR. SBBR wanted more details in reference to time of occurrence, which was forwarded to RO SAM given the monitoring period. No response since. RODB-4: Closed (deemed low priority)
Request US to issue OPMET bulletins that contain only IA5 characters from KWBC (Washington)	RO RODB Brisbane	RODB-3: Sent email to NOAA. Information being forwarded to appropriate group. Waiting for response. RODB-4: Still open and assigned to RODB Brisbane for monitoring
OPMET data required at SADIS for aerodromes in Iraq: ORBI (Baghdad) – SA, 24-h TAF ORMM – (Basrah) – SA, 24-h TAF ORSU – Sulaymaniyah - SA ORER – Ebil – SA SA, TAF are available throughout 24 hours IRAQ should be using LOZZMMID AFTN destination address for the Inter-Regional OPMET Gateway (IROG) in Vienna,	Meeting/RODB Singapore	RODB4: As reported by the EUR Bulletin Management Group (BMG), OPMET data for these IRAQI aerodromes are required at SADIS and requested by users, but are not available. It may take some time before direct connections (to Regional Centres such as in Jordan) are installed. Waiting on response by Iraq to EUR RO for verification that reliable email exists – if so – RODB Singapore will provide information on emailing OPMET at the OPMET/M TF/8

Austria, but this is not being done and direct connections to other regional centres being investigated.		meeting
METAR/TAF non compliance		
Monitor WABB TAF availability via Civil Aviation Transformation Team (CATT)	RODB Singapore RO	RODB 3: RODB Singapore monitored the availability of TAF for WABB from 1 to 10 April 2009. Only 3 of 40 TAF messages were received. RO sent ICAO CATT summary of OPMET deficiencies on 3 July 2009 that included unavailability of TAF from WABB (since 13 May to reporting time of 30 June 2009) Summary provided for CATT delegation received in Bangkok in Sep 2009 RODB 4: Closed (availability increased to 87% in Jan 2010 and meeting as reported by RODB Singapore)
Indonesia 2 TAF valid at one aerodrome (non compliance to Annex 3)	RO RODB Singapore/IATA/RO RO	RODB 3: errors in TAF format in Indonesia need to be re-addressed OPMET/M TF/7: continue monitoring TAF in June 2009 and forward to RO States that are non compliant Indonesia non compliant in TAF in June 2009 (source Singapore RODB), SL sent 3 July 2009 Indonesia non compliant in TAF on 25 Nov 2009 (source IATA), SL sent 14 Dec 2009 RODB 4: RODB Singapore determined in meeting that 2 TAF still being issued by Indonesia – RO inform Indonesia
India 2 TAF valid at one aerodrome (non compliance to Annex 3)	RO Singapore RODB/IATA/RO	RODB 3: errors in TAF format in India need to be re-addressed OPMET/M TF/7: continue monitoring TAF in June 2009 and forward to RO States that are non compliant India non compliant in TAF in June 2009 (i.e. VABB) (source Singapore RODB), SL sent 3 July 2009 Indonesia non compliant in TAF on 25 Nov 2009 (source IATA), SL sent 14 Dec 2009

		RODB 4: IATA informed RO of noncompliance and SL sent on 9 Feb 2010
Mongolia 2 TAF valid at one aerodrome (non compliance to Annex 3)	RODB Singapore/RO RODB Singapore/RO RO	Post RODB 3: Singapore RODB identified 2 TAF valid at the same time in Mongolia in February 2009, SL sent 13 March 2009 OPMET/M TF/7: continue monitoring TAF in June 2009 and forward to RO States that are non compliant Mongolia non compliant in TAF in June 2009 (source Singapore RODB), SL sent 3 July 2009 RODB 4: Mongolia still issues 2 TAF as determined by RODB Singapore in the meeting – RO to re-inform Mongolia
Sri Lanka TAF format errors	RO RODB Bangkok	OPMET/M TF/7: reported TAF format errors in Sri Lanka (blank line before WMO header and use of "Z" in date/time group of WMO AHL), email sent RODB 4: Monitor for format errors and report to Regional Office by the OPMET/M TF/8 meeting
Address temperature group location error and multiple min/max temperatures from Switzerland	RO	RODB 3: Sent email to RO EUR but response not received due to transition of personnel RODB 4: Closed (deficiency would be reported to EUR RO)
Errors in TAF format in MID (Amman, Beirut, Jeddah, Tehran filing time and format (Amman) errors)	RO	RODB 3: Sent EUR RO format errors, but due to transition of personnel, response not provided RODB 4: Closed (deficiency would be reported to EUR RO)
Improve OPMET timeliness	IATA/RO	OPMET/M TF/7: improving the elapsed time from METAR observation and TAF creation to reception to user is desired by operators. WP35 – CNS/MET SG/13 meeting produced **APANPIRG Conclusion 20/62**, Harmonization of procedures for OPMET data issuance. Subsequently, guidance material on OPMET timeliness was clarified on pages 18 and 19 of the ROBEX HB in the September 2009 Amendment. Part c) of this conclusion, "consult the RODBs to monitor the progress of OPMET data issuance in compliance with the Regional Air Navigation Plan for reporting at the OPMET/M TF/8 Meeting"

	RO to ask IATA	RODB 4: Meeting agreed IATA is best equipped to monitor OPMET reception times at SADIS (reception time of METAR and TAF should be 15 and 25 minutes after observation and creation) – RO to ask IATA
SIGMET non compliance/ monitoring		
Monitor issuance of SIGMET from Sunan MWO (ZKPY) for the Pyongyang FIR (ZKKP)	RODB Tokyo RO	OPMET/M TF/7: No SIGMET received from Pyongyang MWO (ZKPY) for 50 days monitored during convection season (9 and 30 June; 18-31 July, 1-14 August 2009) Participated in WS SIGMET test 24 Nov 2009 RODB 4: RODB Tokyo monitor for validation of SIGMET before proposing removal of AP-MET-16 to be reported to the RO Inform DPR Korea that all RODBs be sent SIGMET (RODBs Bangkok and Singapore did not receive test SIGMET)
Monitor progress of the issuance of SIGMET by Myanmar	RODB Bangkok RO	OPMET/M TF/7: SIGMET is issued by Myanmar; however, the format of the validity period is incorrect. This information was forwarded to Myanmar in June 2009. Participated in WV and WS SIGMET tests on 17, 24 Nov 2009 (exempt from WC since advisory from TCAC Delhi not issued and likely due to disturbance in Indian Ocean) RODB 4: RODB Bangkok monitor for validation of SIGMET before proposing removal of AP-MET-13 to be reported to the RO Inform Myanmar that all RODBs be sent SIGMET (RODBs Tokyo and Brisbane did not receive test SIGMET)
IROG Backup tests		
IROG backup tests	RODB Singapore and Tokyo	RODB 3: RODB 4: Status of Brisbane – Singapore; Tokyo – Singapore to be reported at OPMET/M TF/8 meeting

Resolve non transmission of OPMET data to SADIS from Bangkok RODB identified when operating in backup mode for the Singapore RODB	RODB Singapore and Bangkok	OPMET/M TF/7 (2/09): investigate possible correlation of OPMET data filing on the half hour RODB 4: Test expected March 2010 to be reported at OPMET/M TF/8 meeting
RODB data catalogue		
Post RODB data catalogue on ICAO APAC website	RO	RODB 3: RODB 4: Closed (ICD is referenced by RODBs and is posted on web site)
SIGMET test issues		
Propose expanded WV SIGMET test with added details to the OPMET/M TF/7	RODB Tokyo	RODB 3: WP23 – OPMET/M TF/7; IP32 – CNS/MET SG/13; **APANPIRG C20/68**, Expanded WV SIGMET Test Development RODB 4: active volcanoes makes it difficult for testing – plan to coordinate with JCAB and major airlines report to the OPMET/M TF/8 meeting
Inclusion of MID Region MWOs that receive Tropical Cyclone Advisories from TCAC Delhi in the November 2010 SIGMET tests	EUR RO EUR&ASIA/PAC ROs	MID METSG/2: Proposal to include MID in ASIA/PAC TC SIGMET test was pragmatic since TCAC Delhi participates and would already be sending TC Advisories to the western Indian Ocean for MWOs in Iran, Kuwait, Bahrain, United Arab Emirates, Oman, and Yemen. Note - Qatar is covered by Bahrain. RODB 4: RO sent amendment proposal to FASID Table MET 3A (APAC 10/6) that includes the MID MWOs under TCAC Delhi in italics and will note in *SIGMET Gui*de of this added participation
Use standard spread sheet for collecting data from RODBs in preparation for the analysis of SIGMET tests	Australia	RODB 4: Template will be sent to RODBs for review by OPMET/M TF/8 meeting
SIGMET Guide updates		

Add inclusion of MID MWOs under TCAC Delhi in WC SIGMET test procedures	RO	MID METSG/2 RODB 4: RO will update by June 2010
Update Appendix H for missing WMO SIGMET Headers (including new entry for Afghanistan) and Melbourne correction	RO	RODB 4: RO will update by June 2010
Update Appendix J to note that the RO and SIGMET test point of contact be made aware of nonparticipation in SIGMET test due to active SIGMET – for accurate accounting And include in SL of notification of SIGMET test	RO	RODB 4: RO will update by June 2010 RO will include in SL of notification of SIGMET test
ROBEX HB updates		
SA and FT bulletins, SAPS31, SAPS32 NFFN and FTPS31 NFFN are not received from Nadi ROBEX Centre via AFTN RODB The following is received by ISCS: SAPS31 NZKL (NCRG, NFTF, NGFU, NIUE, NSFA) SAFJ31 NFFN (NFFN) FTFJ31 NFFN (NCRG, NFFN, NFTF, NSFA)	RO	RODB4: General concept of RODB functions (use of AFTN in distributing OPMET data to other RODBs, participation in SIGMET test results, backup to RODB Brisbane) be forwarded to ICAO Headquarters for consultation and determine a course of action
Include non-AOP aerodromes from Japan in ROBEX HB Table B	RO/ Japan	RODB 3: RODB 4: Japan provide a list of aerodromes by April for inclusion in June amendment
Update MID info in ROBEX HB	RO	RODB 3: email sent to EUR RO, but due to transition of personnel, response not provided RODB 4: Will include any changes provided by EUR RO in next amendment
ROBEX HB amendment to include results of mean real time reception at the Singapore RODB	RODB Singapore/ RO	OPMET/M TF/7 (3/09): RODB 4: Plan for including results of real time monitoring conducted in Sep 2009 in June 2010 Amendment
Afghanistan – OPMET currency in ROBEX HB – AFTN not used and thus bulletin SAIR32 OIII with regards to Afghanistan is incorrect.	RO	RODB 4: Remove SAIR32 OIII from Table A since Afghanistan does not utilize this bulletin (as confirmed by Singapore RODB)

		Note to be added that bulletins used areSAAH10 (METAR for OAKB) and FTAH10 (TAF for OAKB) and obtained by ISCS and relayed by Singapore IROG to SADIS
Lao – possibly add 4 aerodromes (VLLB, VLLN, VLSK and VLPS) to one of Bangkok TAF bulletins	RODB Bangkok RO	RODB4: RODB Bangkok in progress of optimizing bulletins – possibly reported to the OPMET/M TF/8 meeting Once known, RO to include in June amendment
Japan – add AFTN address in ROBEX HB Table B and D as per RODB/4 WP5 (except for the RODB addresses and the redundant Singapore and Brisbane address)	RO	RODB4: update to be included in June 2010 amendment
Add AFTN routing sketch to ROBEX Handbook which helps serve who and why backups are conducted And verify the OPMET exchange diagram conforms to this sketch	RO	RODB 4: update to be included in the June 2010 amendment
ICD updates		
Update once per year	RODBs RO	RODB 4: Updated Appendices by May 2010 Update doc and post (amendment June 2010)
Other		
Monitoring software to accept AUTO format for METAR in calculating performance indicators	RODB Singapore	RODB 4: to update software
Resolve multiple bulletin counting by requesting the source not to issue multiple bulletins	RODB Tokyo/RO	RODB 4: RODB Tokyo to provide RO example of duplicate bulletins sent from India for consultation with State