



**INTERNATIONAL CIVIL AVIATION ORGANIZATION
ASIA AND PACIFIC OFFICE**

**REPORT OF
THE THIRD REGIONAL OPMET DATA BANKS (RODB)
COORDINATION MEETING**

Melbourne, Australia
29 – 30 January 2009

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I. HISTORY OF THE MEETING

1. Introduction

1.1 The Third RODB Coordination Meeting was held at the Head Office of the Australian Bureau of Meteorology (BoM), Melbourne, Australia from 29 to 30 January 2009.

2. Attendance

2.1 The meeting was attended by experts from RODBs Bangkok, Singapore, Tokyo, Australia and ICAO Regional Office. The meeting was also attended by participants from BoM Australia. The List of Participants is provided in **Attachment 1** to the Report.

3. Opening of the meeting

3.1 The meeting was opened by Mr. Gary Foley, Deputy Director Services of the Australian BoM. In his opening remarks, he emphasized the importance of harmonized information exchange between RODBs for flight safety and regularity. He welcomed the participants to the meeting and expressed his good wishes for a successful meeting.

3.2 Mr. Chris Keohan, Regional Officer MET, ICAO Asia and Pacific Regional Office thanked the BoM for kindly hosting the meeting and provided a brief overview of the objectives and expected outcomes.

4. Officer and the Secretariat

4.1 Mr. Richard J. Houghton, National Manager, Defence Weather Services Bureau of Meteorology was elected Chairman for the meeting. The meeting noted Mr. Houghton's previous contributions to OPMET related meetings and wished him a successful retirement. 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 seven Information Papers were considered by the meeting. 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 as follows:

Agenda Item 1: Review the operation of Second RODB Coordination meeting
Review of OPMET/M TF/6 meeting
Review of CNS/MET SG/12 meeting
(Review of APANPIRG/19 meeting)

Agenda Item 2: Review the operation of RODB

Agenda Item 3: Measures to minimize OPMET data shortfall

Agenda Item 4: Status of mirroring of RODB contents

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

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- Agenda Item 6:** Relaying ASIA/PAC OPMET data to SADIS and ISCS and harmonization of OPMET data on SADIS and ISCS
 - Agenda Item 7:** SIGMET Tests – Future Plans
 - Agenda Item 8:** Harmonization of monitoring and quality control procedures
 - Agenda Item 9:** Review of change to TAF provisions in Amendment 74 to Annex 3
 - Agenda Item 10:** Any other business

II. REPORT ON AGENDA ITEMS

Before dealing with the agenda items, the meeting reviewed the outcome of the second meeting of RODB Coordination Meeting and actions taken by the Sixth Meeting of OPMET/M TF held in March 2008 and the Twelfth Meeting of CNS/MET Sub-group of APANPIRG held in July 2008. The meeting also reviewed the report of APANPIRG/19 on the OPMET exchange. The meeting noted the follow-up actions taken by the Secretariat on the Conclusions adopted by APNPIRG/19.

Agenda Item 1: Review of APANPIRG/19 meeting

The Secretariat presented a review of the OPMET related APANPIRG/19 Conclusions and progress of each..

Agenda Item 2: Review of the operation of RODBs

RODB Australia

2.1 The Brisbane RODB is now using the National Aeronautical Information Processing System (NAIPS) which is an aeronautical information system for pilot briefings and Aeronautical Information System (AIS) function. Meteorological information via Aeronautical Fixed Telecommunications Network (AFTN) generates OPMET bulletins for Australia, Papua New Guinea, Timor Leste (AU, PNG and TM). Examples of the NAIPS request and response text are included in the information paper. SIGMET will be included in the OPMET bulletins in the second quarter of 2009. The NAIPS Disaster Relief (DR) in Melbourne will be the backup system to the Brisbane NAIPS after successful testing which will replace the existing backup system, AIS MET system.

2.1.1 The Brisbane RODB informed the meeting of an analysis of AFTN ICAO International requests. The requests from Brasilia (SBBR) outnumbered all the other requests. The Brisbane RODB has asked the requester why these requests are frequently made. No response was given by the requester. Therefore, the Secretariat has offered to draft a letter to Brazil for the Regional Office in Lima, Peru and Aidan will provide details for input to the draft letter.

RODB Bangkok

2.2 Thailand informed the meeting that the VTSH (Songkhla) aerodrome was appended to the SATH32 VTBB bulletin and proposed that this change be reflected in the ROBEX Handbook. The meeting agreed to have the Secretariat issue a State letter to update the SA Table in the ROBEX Handbook. The updated table will be presented at the OPMET/M TF/7 meeting. Updated tables SA and TAF bulletins promote the proposal to reference the ROBEX Handbook in the ANP replacing the reference to FASID Tables MET 4A, 4B and 4C.

RODB Nadi

2.3 No reports were received from the RODB Nadi; who were invited to attend.

RODB Singapore

2.4 The meeting noted the status of the Singapore RODB. Specifically, statistics generated on the access, details of requests of the non-regular OPMET data exchange (RQM) over a six month period. Requests were fairly evenly distributed through the 7 month period, with June showing approximately one thousand more requests than the average 5,611 requests. More than half

of the requests were of the SA type, while more than one third was of the FT type. FC bulletin requests substantially dropped in December 2008 after the Amendment 74 to Annex 3 applicability date of 5 November 2008. The meeting noted that the number of FC bulletin exchanges dropped in December 2008 due to the implementation of Amendment 74 to Annex 3. The increase in FT bulletin exchanges increased in November 2008 due to the extra amended and corrected TAF that is believed to be caused by the less familiar new TAF format associated with Amendment 74 to Annex 3.

RODB Japan

Papers were not submitted under this subject by Japan.

Agenda Item 3: Measures to minimize OPMET data shortfall

3.1 The meeting reviewed the results of recent monitoring of OPMET data exchange and the follow-up action taken by States and the Secretariat.

3.2 The meeting was informed of the availability of TAF by the Singapore RODB for the period between 1 October 2008 and 31 December 2008. The average availability was 89% with a distribution from 83 to 99% except for WABB (Biak) which had an availability of 14%. The meeting was informed that this low TAF availability has been addressed to the Indonesian DGCA and Civil Aviation Transformation Team (CATT) during the same week as the RODB meeting. Progress will be monitored by the Secretariat.

3.3 The Brisbane RODB informed the meeting that errors in OPMET bulletins were analyzed to provide useful information in resolving these errors that have to be addressed manually and subsequently increase the workload of the staff. Analysis of the bulletins from 14 to 18 January 2009 showed that 8.8% of the bulletins contained format and/or text errors.

3.3.1 A breakdown of the most common errors included the following:

- text contained non IA5 characters – replaced by “?” symbol;
- bulletin locations not pre-fixed by TAF, METAR, SPECI;
- blank lines in bulletin;
- erroneous information at start and end of bulletin; and
- identifying location code not included in bulletin

3.3.2 A specific location that issues TAF with non-IA5 characters is KWBC (Washington). Brisbane receives these messages through AFTN versus ISCS in Singapore, and thus a problem unique to Brisbane. Brisbane has tried contacting the U.S. about the errors in TAF; however, a reply has not been received. The meeting agreed that the Secretariat contact the State and request that OPMET bulletins issued via AFTN only contain IA5 characters.

3.4 Thailand informed the meeting on RODB Bangkok's Performance Indices. Specifically, performance indices were calculated for incoming OPMET data of METAR and FT TAF for data observed during the period from 1 to 15 January 2009. The generally low, systematic performance indices for METAR reflect the need for updating the ROBEX SA OPMET exchange table (Table A). (Note that the screening by filing times has resulted in some locations appearing not to be available unnecessarily, nevertheless, the meeting agreed that Table A is outdated). The ROBEX Handbook Amended in December 2008 involved changes with TAF exchange, but not SA exchange. Therefore, this table needs to be updated to reflect the current conditions of OPMET exchange.

3.4.1 Reiterating the action to be taken in section 2.2, the meeting agreed that the Secretariat request States to update the information in Table A of the ROBEX Handbook. An edited Table A should be presented at the OPMET/M TF/7 group for inclusion into the next amendment of the ROBEX Handbook, which is proposed to replace the FASID Tables MET 4A, 4B and 4C. The meeting agreed that an update to the ROBEX Handbook once per year is desired and timed to be after the OPMET/M TF meetings.

3.4.2 Thailand informed the meeting that the TAF exchange has shortcomings such as filing times that do not meet the 1 hour before the start of the period of validity of TAF. Another observation is that many States (Pakistan, India, Indonesia, PNG, China, South Pacific and some States in the Middle East) do not issue TAF that are in the ROBEX TAF Exchange Scheme (ROBEX Handbook Table B). The Singapore RODB, however, does receive TAF from Pakistan and it is believed that the screening of filing times by Thailand in the analysis resulted in no TAFs from Pakistan. Therefore, the meeting agreed that further analysis to determine if a State letter is needed for Pakistan, China, PNG, and the South Pacific. Common errors have been identified for India, Indonesia (who have both received State letters on the TAF issues, but will be reminded) and MID and will be addressed by the Secretariat.

Agenda Item 4: Status of mirroring of RODB contents

4.1 Bangkok and Singapore are almost fully mirrored, but Bangkok needs to disable the filing time. An IROG backup test between Bangkok and Singapore will be conducted before the OPMET/M TF/7 meeting. Brisbane and Singapore are also mirrored and will conduct a backup test. Lastly, Tokyo and Singapore are mirrored and will conduct a backup test after the OPMET/M TF/7.

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

5.1 RODB Data Catalogues are now rolled into one catalogue and proposed to be posted on the ICAO web site.

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

6.1 Singapore informed the meeting of the results of the harmonization of the ISCS broadcast with SADIS. The object of harmonization is to produce identical global OPMET data sets on both ISCS and SADIS broadcasts. The results are based on broadcast unedited OPMET bulletins as received from the originating ICAO aerodromes on 17 September 2008 at 0000 UTC. SA bulletins increased by 18% because the METARs are now sent separately versus being packaged in one regional type bulletin and FT and FC bulletins decreased by 15 and 12%, respectively. The reason for the decrease in FT and FC bulletins were due to the elimination of redundant bulletins via AFTN and ISCS broadcast (same WMO header). Singapore RODB and the meeting noted the efforts by the ISCS Provider State in the harmonization effort.

Agenda Item 7: SIGMET test – future plans

7.1 The meeting was informed by the Secretariat that the Tropical Cyclone Advisory Centre (TCAC) Honolulu will participate in the upcoming ASIA/PAC TC SIGMET test. The meeting was also informed that TCAC Réunion was added to the TC SIGMET test since three MWOs (Malé, Mumbai, and Perth) in the ASIA/PAC region are recipients of tropical cyclone advisories.

7.1.1 The RODB contacts were reminded by Australia to send results of the SIGMET test to the generic email address for Australian Aviation Weather (srav@bom.gov.au).

7.1.2 The Regional Office in Paris has coordinated participation of 11 MWOs from the Russian Federation that receive volcanic ash advisories from the Tokyo Volcanic Ash Advisory Centre (VAAC). Coordination with the Toulouse VAAC to issue volcanic advisories is planned for the VA SIGMET test in 2010 in order to have a more complete test for the western MWOs in the ASIA/PAC region. The Anchorage VAAC was removed from the test procedures because the Anchorage VAAC and the advisory recipients are located outside the ASIA/PAC region. These updates are reflected in the SIGMET test reminder letter sent on 26 January 2009.

7.1.3 The Secretariat informed the meeting that the SIGMET test procedures does not address the situation that involves an active volcanic ash advisory for which case should a test advisory still be issued since the active advisory only influences some of the FIRs. Japan will add a proposal on treating multiple advisories in the WV SIGMET test expansion in the OPMET/M TF/7 meeting.

7.2 Japan informed the meeting of a draft test procedure for regional WV SIGMET test under the ROBEX scheme. A VA simulation exercise would be used to expand on the current test procedure. That is, a NOTAM is issued indicating the start of the exercise, adjacent VAACs transmit test VA advisories, MWOs in adjacent VAAC areas issue test SIGMETs, VAAC issues test VA advisory, and the end of the exercise is marked by issuing a NOTAM.

7.2.1 Other components that should be considered are the backup VAAC procedures. The Tokyo VAAC and Darwin VAACs are considering the back-up operation. Japan proposed to the meeting to add back-up transmission to the expanded WV SIGMET test procedure in the ASIA/PAC region.

7.2.2 Japan informed the meeting that the ATS units need to be involved in the expanded WV SIGMET tests and with the aforementioned proposed a revision to the ASIA/PAC WV SIGMET test procedures.

7.2.3 The meeting endorsed the concept of the expanded WV SIGMET test and requested more detail (i.e. list specific NOTAM offices, MWOs, airlines, indicate VAAC that issues advisories to make clear when the backup procedures are being conducted) and present at OPMET/M TF/7 and CNS/MET SG/13. The gap in time from 0220 to 0600 in the proposed test can be reduced by 2 hours. In addition, the meeting agreed that the method of feedback from the airlines needs to be coordinated. To help facilitate these details, the Secretariat will obtain and send the expanded test procedures conducted by the EUR region.

7.3 Australia proposed to utilize the coordinated SIGMET tests for testing the dissemination of SIGMET to ATS and airlines. The traditional SIGMET tests that validate the issuance of SIGMET by MWOs and the format of SIGMET would be replaced by a monitoring period involving more thorough analysis of real time SIGMET. Specifically, SIGMET format validation through monitoring for a period of 12-24 hours is proposed. In addition, the SIGMET content validation through monitoring for a period of 1 day to 1 week is proposed. This type of work may need to be performed by an ICAO SIP project. These proposals were agreed upon by the meeting and will be presented at the OPMET/M TF/7 meeting.

7.3.1 The Secretariat endorsed the proposal by Australia in that real time monitoring reflects the MET services for ATS and airlines. In addition, systematic deficiencies of the issuance of SIGMET are a serious deficiency which would be conveyed to States. The current SIGMET test does not allow the Regional Office to deem lack of participation in SIGMET tests as a deficiency since it

does not have direct impact on ATS. Therefore, there is more leverage for the Regional Office to claim deficiencies if the proposed SIGMET test is endorsed by the current meeting and subsequent subgroups to APANPIRG. The Secretariat also encouraged the identification of systematic SIGMET errors and such information can be sent to the Regional Office at any time of the year for appropriate action.

Agenda Item 8: Harmonization of monitoring and quality control procedures

8.1 Japan informed the meeting on the results of monitoring FK and FV SIGMETS in December 2008. As proposed by Australia in section 7.3, the meeting agreed to provide monitoring SIGMET services.

8.2 The meeting agreed to collect and analyze incoming SA and FT bulletins at the RODBs for the period from 00 UTC on 9 February 2009 to 24 UTC 22 February 2009 and 00 UTC on 9 March 2009 to 24 UTC on 22 March 2009 for a comparison. RODB Brisbane will contact Fiji to participate in the monitoring of SA and FT bulletins. The analysis will be conducted at the RODB Bangkok. The filing times will not be screened. The format will have the ICAO location indicator against the availability, regularity, and compliance as in Attachment B to WP/9 for each RODB and possibly in a graphic type format for CNS/MET SG/13.

8.3 RODB monitoring of SIGMET should be in the format such as Table 2 of IP4. All RODBs are encouraged to use this format in order to realize who is issuing SIGMET before the SIGMET tests.

Agenda Item 9: Review of change to TAF provisions in Amendment 74 to Annex 3

9.1 Australia informed the meeting that Australia implemented 30-hour TAF for all requested IATA locations. The NAIPS had difficulty with storing the new TAF format and with the new validity period before a software patch corrected the problem one week after the applicability date of Amendment 74 to Annex 3. After the fix, FTAU, FTTM and FTNG bulletins contained the new TAF validity period format.

9.2 Thailand informed the meeting of an analysis on the implementation of the new TAF provisions under the responsibility of the Bangkok ROBEX Centre. Data collected were from 9 December 2008. The results showed which aerodromes complied and which did not comply with the new TAF provisions.

9.3 The meeting was informed of the monitoring of the new TAF provisions by the Singapore RODB. The monitoring was conducted between 5 and 7 January 2009 and revealed errors in format (sometimes mixed with the correct format), continued issuance of 9-hour TAF, and the incorrect position of the temperature group.

9.3.1 As mentioned in section 3.4.2, the Secretariat informed the meeting that India and Indonesia have been sent State letters addressing the issuance of 9-hour TAF and the correct format in December 2008. This issue will be raised to the Indonesian delegation at a meeting held in Bangkok during the week of the RODB/3 meeting. The issue will have to be addressed to India once more. The temperature group location error is not identified in the ASIA/PAC Region, however, the information will be passed the Regional Officer MET in Paris for appropriate action. In addition, more than one occurrence of the min and/or max temperature has occurred in Switzerland which causes data ingestion problems at the RODBs. Therefore, this occurrence will also be forwarded to the RO MET in Paris.

9.3.2 The meeting acknowledged the need for ICAO guidance on the provision of multiple occurrences of the temperature group, reaffirming APANPIRG/19 C19/50 part (c), establishment of provision for multiple occurrences of operationally significant maximum or minimum temperatures in a 30-hour TAF.

9.3.3 The RO MET also informed the meeting that Pakistan recently transferred to the ASIA/PAC Region and that a State letter will be sent indicating the TAF format errors, but would like to have an example of the error in order to indicate the exact error to the State of Pakistan. The same method of informing the State of non compliance to Annex 3 can be applied to Mongolia.

9.3.4 The RO MET informed the meeting that the many locations have not complied with the IATA requirements of 30 or 24-hour TAF. Displaying the discrepancy between operational TAF and required TAF will be incorporated in the ROBEX Handbook Table B by adding a parenthesis of the required TAF for those aerodromes that do not meet the requirements. This information will be reflected in the next ROBEX Handbook amendment after the OPMET/M TF/7 meeting.

9.3.5 The Secretariat will address the non compliance to the IATA TAF requirements at a meeting with IATA in Bangkok on 4 February 2009.

Agenda Item 10: Any other business

10.1 The meeting agreed that the ASIA/PACIFIC OPMET Data Banks Interface Control Document should be updated to reflect the non issuance of FC in the Asia/Pacific Region and to change the definition of FT TAF to be with a period of validity of at least 12 hours. The meeting agreed that the update should be circulated to the RODB group members for a peer review of 2 weeks. There will be an attempt to provide the edited version before the OPMET/M TF/7 meeting.

10.2 The Secretariat agreed to update the future changes to the ROBEX Handbook by including non-AOP aerodromes from Japan in Table B. The non-AOP aerodromes need to be in italics in Table B for consistency with other tables (reference older version). Further clarification is needed by the Secretariat of classifying the difference between AOP and non-AOP aerodromes.

10.3 The Secretariat agreed that the MID region data needs to be updated and coordination with the Secretariat in the EUR region may be needed. The Secretariat needs to find out why the MID region OPMET information is included in the ROBEX Tables.

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

10.5 The meeting included a visit to the Bureau's National Meteorological Oceanographic Centre and to the Control Computing Facility.

10.6 The meeting agreed that the RODB/4 meeting should be the day after the OPMET/M TF/8 meeting, whose schedule won't be determined until the OPMET/M TF/7 meeting. The meeting suggested the OPMET and RODB meetings occur in February. In addition, the meeting suggested that future SIGMET tests be conducted in November. Both issues will be addressed in the OPMET/M TF/7 meeting.

10.7 A summary of RODB/3 meeting action items with corresponding assignments and progress concludes this report.

SUMMARY OF ACTION ITEMS

	Action	Assigned	Progress
2.1.1	inquiry on AFTN ICAO Int'l requests from Brasilia (SBBR) to Brisbane RODB (e-mail first, then SL)	RO APAC/SAM	
2.2	add VTSH (Songkhla) to SATH32 (& 3.4.1) SL request update to SA Table in ROBEX HB	RO RO	
	- present new SA Table at OPMET/M TF/7	RO	
	- propose change of reference in ANP from FASID Tables 4A, 4B and 4C to ROBEX HB at OPMET/M TF/7	RO	
3.2	monitor WABB TAF availability via Civil Aviation Transformation Team (CATT)	RO	
3.3.2	request US to issue OPMET Bulletins that contain only IA5 characters from KWBC (Washington)	RO	
3.4.1	update ROBEX HB once per year after OPMET/M TF meeting	RO	
3.4.2	analyze TAF exchange for Bangkok RODB w/o screening to determine if TAF is received from China, Pakistan, Papua New Guinea and South Pacific	RODB Bangkok	
	- errors in TAF format in India, Indonesia, MID need to be re-addressed	RO APAC/EUR	
4.1	IROG back-up tests	RODBs (Bang/Sin, Brisb/Sin, Tokyo/Sin)	
5.1	post RODB data catalogue on ICAO APAC website	RO	
7.1.1	send SIGMET test results to srav@bom.gov.au	RODBs	
7.1.3	SIGMET test procedures to include advisory centre guidance on issuing test advisory if real advisory is active (for OPMET/M TF/)	RODB Tokyo	
7.2.3	propose expanded WV SIGMET test with added details to the OPMET/M TF/7	RODB Tokyo	
	Obtain EUR expanded WV test and dissemination to RODBs	RO APAC/EUR	
7.3	Propose SIGMET format/monitoring to reserve test for expanded WS SIGMET to ATS and airlines	Australia	

	Action	Assigned	Progress
8.2	Collect, analyze incoming SA/FT bulletins (9 Feb 00 UTC – 22 Feb 2009 24 UTC and 9 Mar 00 UTC – 22 Mar 2009 24 UTC for comparison		
	- coordinate data collection with Fiji	RODB Brisbane	
	- analyze data	RODB Bangkok	
	- present analysis in form of AH2 WP/9 at OPMET/M TF/7	RODB Bangkok	
	- possibly present analysis in graphic form at CNS/MET SG/13	RODB Bangkok	
	RODB monitoring in format of Table 2 IP4	RODBs	
9.3.1	address temperature group location error and multiple min/max temperatures from Switzerland	RO APAC/EUR	
9.3.3	obtain TAF format errors for Pakistan and Mongolia to provide SL with examples	RO	
9.3.5	address non compliance of the period of validity of TAF to IATA	RO	
10.1	update ICD text (with regards to FC and FT)	RO	
	- update ICD Tables	RODBs	
	- make edits	RO	
	- review	RODBs	
	- present at OPMET/M TF/7	RO	
10.2	include non-AOP aerodromes from Japan in ROBEX HB Table B	RO	
	- make non-AOP aerodromes italics in ROBEX HB Table B	RO	
	- disseminate clear definition between AOP and non-AOP aerodromes	RO	
10.3	determine why MID is in ROBEX HB	RO APAC/EUR	
	- update MID info in ROBEX HB	RO APAC/EUR	
10.4	determine OPMET/M TF/8 dates (Feb is proposed)	OPMET Meeting	
	determine date of RODB/4 (extra day after TF/8)		
	change SIGMET test dates (to Nov 2008?)		

**The Third Regional OPMET Data Banks (RODB)
Coordination Meeting in Asia and Pacific Regions
Melbourne, Australia
29 - 30 January 2009**

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International Civil Aviation Organization

**THE THIRD REGIONAL OPMET DATA BANKS (RODB)
COORDINATION MEETING**

Melbourne, Australia, 29 – 30 January 2009

LIST OF WORKING PAPERS

WP/No. IP/No.	Agenda Item	Title	Presented by
1	-	Provisional Agenda	Secretariat
2	2	An update on Data Bank Operations	Singapore
3	9	Review Report on Implementation of TAF Provisions in Amendment 74 to Annex 3	Singapore
4	7	Review of the SIGMET Test Procedure –WV SIGMET	Japan
5	2	RODB Brisbane - Observations	Australia
6	9	Report of New TAF Provisions by Bangkok RODB	Thailand
7	1	Review Outcome of APANPIRG/19 on OPMET Exchange	Secretariat
8	7	Suggested Plans for Future Test	Australia
9	3	RODB Bangkok's Performance Indices	Thailand

LIST OF INFORMATION PAPERS

1	-	Meeting Bulletin	Secretariat
2	3	Current Status of OPMET Data Shortfall	Singapore
3	6	Review of Harmonization of OPMET Data on SADIS and ISDS	Singapore
4	8	Monitoring of None-scheduled OPMET Data	Japan
5	2	Current Status of Regional OPMET Data Bank (RODB) Brisbane	Australia
6	9	RODB Brisbane – Implementation Report	Australia
7	2	SAVTSH Availability	Thailand

