



International Civil Aviation Organization

**FIFTEENTH MEETING OF THE ASIA/PACIFIC METEOROLOGICAL
INFORMATION EXCHANGE WORKING GROUP
(MET/IE WG/15)**

Bangkok, Thailand, 20 – 22 March 2017

Agenda Item 5: Quality control, monitoring and management of meteorological information exchange

AVAILABILITY OF OPMET DATA FROM ASIAPAC

(Presented by IATA)

SUMMARY

This paper summarizes the results of an availability monitoring of OPMET data for the ASIAPAC region with the focus on SADIS and WIFS distribution. Further it provides information about deficiencies.

1. INTRODUCTION

1.1 SADIS and WIFS are the two main data systems for weather data. Primarily SADIS is a satellite broadcasting system but it is also possible to get access to the SADIS Secure FTP Service. WIFS is only using the ftp for data provision.

1.2 Both systems are reliable source of weather data. Beside the distribution of WAFS products it is used for broadcasting OPMET data. Basis for the data distribution via SADIS/WIFS is the FASID Table MET 2A.

2. DISCUSSION

2.1 The requirements for OPMET data were formerly described in the FASID Table MET 2A, but since this table is no longer maintained by ICAO the IATA monitoring is based on the old tables which have been update the last time on 28APR2014.

2.2 The monitoring is based on the issuance time as provided in the METAR and on the validity start time of TAF.

2.3 The tables in the appendix give a brief overview about the current number of available airports providing OPMET data on SADIS/WIFS from the ASIAPAC region on a regular basis. This statistic is based on the result of IATA monitoring of the SADIS/WIFS broadcast over period of 9 weeks (starting at 14th of December 2016).

Definition:

OPMET provision is considered as regular and satisfactory if over a period of 9 weeks OPMET data were received in more than 7 week and the total number of received OPMET data is higher than 80% of the maximum of expected OPMET data.

Maximum OPMET over 9 weeks:

METAR: every 60 min = 216
 every 30 min = 432
 every 20 min = 648

TAF: every 3 hours = 72
 every 6 hours = 36

Example:

MON: VABB FT I 9 0032 6.....8.....9.....9..... MUMBAI India ASI
 TUE: VABB FT I 9 0032 5.....9.....9.....9..... MUMBAI India ASI
 WED: VABB FT I 9 0032 5.....9.....9.....9..... MUMBAI India ASI
 THU: VABB FT I 9 0032 5.....9.....9.....9..... MUMBAI India ASI
 FRI: VABB FT I 9 0032 5.....9.....9.....9..... MUMBAI India ASI
 SAT: VABB FT I 9 0026 4.....7.....9.....6..... MUMBAI India ASI
 SUN: VABB FT I 9 0033 6.....9.....9.....9..... MUMBAI India ASI

VABB is issuing TAFs 4 times per day. Over a period of 9 weeks an average of 32 TAFs have been received per weekday, except on Saturday. This is about 90% of the expected TAF for 6 days of the week.

There are several reasons why not the maximum number couldn't be achieved.

- Interruption of the communication
- System outages on recipients system
- OPMET is rejected due to incorrect format or content and it is not possible to rectify it manually

AOP Aerodromes;

2.4 The table below shows that **90,6%** (2016: 90,6%, 2015: 90,6%, 2014: 90,0%, 2013: 88,0%, 2012: 90,4%, 2011: 81,3%, 2010: 87,3%, 2009: 61,7%) **AOP aerodromes** provide METAR (SA) and **96,3%** (2016: 94,4%, 2015: 93,4, 2014: 92,4%, 2013: 91,2%, 2012: 94,3%, 2011: 75,7%, 2010: 89,3%, 2009: 86,0%) **AOP aerodromes** provide TAF (FT) as requested. All other AOP aerodromes do not meet the user's requirements.

States are obliged to issue METAR and TAF for AOP aerodromes unless the state notifies ICAO that no OPMET data are issued for that certain AOP aerodrome. Further details about unsatisfactory airports are listed in the ppendix 1 to this WP (requires action).A

| | | |
|---------------------------------------|----------|----------|
| Aerodromes listed in in FASID MET 2A | 312 (+6) | 312 (+0) |
| AOP Aerodromes listed in FASID MET 2A | 213 (+2) | 213 (+0) |
| | | |
| SA available | 193 (+3) | 193 (+0) |
| FT available | 199 (+4) | 206 (+7) |

NON-AOP Aerodromes:

2.5 Since more and more Non-AOP aerodromes are used internationally IATA has formulated following general requirement for OPMET data in its IATA METTF/14 meeting:

IATA Position:

All OPMET data currently available should be distributed. This does not mean modifying the airport status in the AOP table

2.6 Non-AOP Aerodromes are widely used as en-route alternates and for ETOPS operation. With regard to a safe flight operation OPMET data for these aerodromes are important and should be available to all airlines.

2.7 The table below shows that **92,9%** (2016: 81,8%, 2015: 81,8, 2014: 83,2%, 2013: 85,0%, 2012: 82,5%, 2011: 74,3%, 2010: 69,2%, 2009: 66,1%) **Non-AOP aerodromes** provide METAR (SA) and **94,9%** (2016: 94,9%, 2015: 94,9, 2014: 96,8%, 2013: 89,5%, 2012: 96,5%, 2011: 72,1%, 2010: 74,1%, 2009: 67,7%) **Non-AOP aerodromes** issue TAF (FT) as requested. All other AOP aerodromes do not meet the user's requirements.

States are requested to issue and distribute METAR and TAF for Non-AOP aerodromes if available. Further details about unsatisfactory airports are listed in Appendix 1 to this WP (requires action).

| | | |
|---|----------|----------|
| Aerodromes listed in FASID MET 2A | 312 (+0) | 312 (+0) |
| Non-AOP Aerodromes listed in FASID MET 2A | 99 (+4) | 99 (+0) |
| | | |
| SA available | 81 (+2) | 92 (+11) |
| FT available | 94 (+2) | 94 (+0) |

2.8 **It can be concluded that since 2009 a significant improvement of OPMET data availability from the ASIAPAC region could be achieved and that I remains on a high level**

2.9 Nevertheless there are still some data not available. In some cases the data are available in SIN DB

2.10 In the attachments to this WP, a list of unsatisfactory AOP/NON AOP aerodromes is provided. These details not only pointing to missing data in the OPMET data exchange, but also indicating problems in the regularity of the OPMET data availability from the ASIAPAC region.

2.11 The columns of the tables in the Appendix 1 can be interpreted as follows:

Example:

| Loc | Ind | SA/day | FC/day | FT/day | FASID | AOP | SA/SP | TAF | Service |
|------|-----|--------|--------|--------|-------|-----|-------|-----|---------|
| ANYN | | ~~~~~ | ~~~~~ | YYYYYY | . Y | Y | . Y | T | F |
| AYVN | | ~~~~~ | ~~~~~Y | ~~~YY~ | . Y | Y | . Y | — | F |

SA/day, FC/day, FT/day

Each of these columns contains a string of 7 characters. Each character represents one weekday, starting from Monday till Sunday from left to right.
“~” – no data received
“Y” – data received according the definition in 2.3

FASID:

Aerodrome is listed in FASID MET 2A

AOP:

Aerodrome is listed (“Y”) or not listed (“N”) in the AOP table

SA/SP:

METAR/SPECI is required for these aerodromes

TAF:

“C” – 9H TAF required

Service:

“T” – 18/24H TAF required
 “X” – 30H TAF required
 “F” – 24H service
 “P” – non 24H service
 “N” – no service (NO OPMET)

Information in **YELLOW** requires special actions by ICAO and the states concerned.

ANYN: no METAR received at all, FT not available on SADIS/WIFS

WALR: no METAR received, TAF received randomly on SADIS/WIFS

SADIS – WIFS comparison:

2.12 SADIS and WIFS are the main distribution systems for OPMET data. Customers are normally only approved for one the systems and therefore it is essential that both systems provides identical content.

2.13 With the introduction of Internet-based services (Secure SADIS FTP and WIFS) it was decided that all users must be approved and registered to either WIFS or Secure SADIS FTP. Users under the footprint of the SADIS satellite should use Secure SADIS FTP while all others should be registered for WIFS. Only for backup reason users can register additionally to the other FTP service.

2.14 This separation requires that SADIS and WIFS content should be identical in order to provide the same data to all

The columns of the tables in Appendix 2 can be interpreted as follows:

| Loc Ind | NON-DWD/day | NON-SADIS/day | NON-WIFS/day | FASID | AOP | SA/SP | FC/FT | Service |
|-------------|-------------|---------------|--------------|-------|-----|-------|-------|---------|
| AGGH | AAAAAAA | AAAAAAA | AAAAAAA | Y | Y | Y | T | F |
| VOCB | WWWWWWW | WWWWWWW | _____ | Y | Y | Y | T | F |
| WAPP | _____ | _____ | XXXXXXX | Y | Y | Y | T | F |

NON-DWD/day NON-SADIS/day NON-WIFS/day

Each of these columns contains a string of 7 characters. Each character represents one weekday, starting from Monday till Sunday from left to right.

“ ” – no data received or data received on SADIS and WIFS

“A” – data not received on SADIS and WIFS, but available via AFTN either from BoM or from SIN DB

“D” – data are only available via DWD

“S” - data are only available via SADIS

“W” - data are only available via WIFS

“X” – data are available on the other two sources

FASID: Aerodrome is listed in FASID MET 2A

AOP: Aerodrome is listed (“Y”) or not listed (“N”) in the AOP table

SA/SP: METAR/SPECI is required for these aerodromes

- TAF:** “C” – 9H TAF required
“T” – 18/24H TAF required
“X” – 30H TAF required
- Service:** “F” – 24H service
“P” – non 24H service
“N” – no service (NO OPMET)

Information in **YELLOW** requires special actions by ICAO and the states concerned.

AGGH: only available via AFTN

VOCB: only available on WIFS, but not on SADIS

WAPP: not available on WIFS, but available on SADIS and DWD

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) to note results of the IATA OPMET data monitoring and information provided
- b) to use the result tables to improve the OPMET data exchange in general especially in coordination with the SADIS and WIFS operators
- c) to ask ICAO Regional Office to contact states in order to reduce the deficiencies in OPMET availability

APPENDIX 1

| Loc Ind | SA/day | FC/day | FT/day | FASID | AOP | SA/SP | TAF | Service | Name | Country |
|---------|---------|--------|---------|-------|-----|-------|-----|---------|----------------------------------|---------------------------------------|
| ANYN | ~~~~~ | ~~~~~ | YYYYYYY | Y | Y | Y | T | F | NAURU_AIRPORT | Nauru |
| AYVN | ~~~~~ | ~~~~~Y | ~~~YY~ | Y | Y | Y | _ | F | VANIMO | Papua New Guinea |
| NLWW | ~~~~~ | ~~~~~ | YYYYYYY | Y | Y | Y | T | F | WALLIS_HIHIFO | Islands (France) |
| OPGD | ~~~~~ | ~~~~~ | YYYYYYY | Y | Y | Y | T | F | GWADAR/INTL. | Pakistan |
| VCCH | ~~~~~ | ~~~~~ | ~~~~~ | Y | Y | Y | _ | F | HINGURAKGODA/MINNERIYA | Sri Lanka |
| VRMG | ~~~~~ | ~~~~~ | YYYYYYY | Y | Y | Y | X | F | GAN/GAN_INTERNATIONAL_AIRPORT | Maldives |
| VRMH | ~~~~~ | ~~~~~ | ~~~~~ | Y | Y | Y | X | F | HANIMAADHOO | Maldives |
| WAJJ | YYYYYYY | ~~~~~ | ~~~~~ | Y | Y | Y | T | F | JAYAPURA/SENTANI | Indonesia |
| WAKK | YYYYYYY | ~~~~~ | ~~~~~ | Y | Y | Y | T | P | MERAUKE/MOPAH | Indonesia |
| WAOO | ~~Y~~Y~ | ~~~~~ | ~~~~~ | Y | Y | Y | T | F | BANJARMASIN/SYAMSUDIN_NOOR | Indonesia |
| WIBB | ~~YY~~ | ~~~~~ | Y~~Y~Y | Y | Y | Y | T | F | PEKANBARU/SULTAN_SYARIF_KASIM_II | Indonesia |
| WIOO | ~~~YYY | ~~~~~ | ~~~~~ | Y | Y | Y | T | F | PONTIANAK/SUPADIO | Indonesia |
| ZKPY | ~~~~~ | ~~~~~ | YYYYYYY | Y | Y | Y | T | F | SUNAN | Democratic People's Republic of Korea |
| ZSJN | YYYYYYY | ~~~~~ | ~~~~~ | Y | Y | Y | T | F | JINAN/YAOQIANG | China |
| ZUXC | ~~~~~ | ~~~~~ | ~~~~~ | Y | Y | Y | _ | F | XICHANG/QUINGSHAN | China |

| Loc Ind | SA/day | FC/day | FT/day | FASID | AOP | SA/SP | TAF | Service | Name | Country |
|---------|---------|---------|---------|-------|-----|-------|-----|---------|---|-------------------------------------|
| AYMH | ~~~~~ | YYYY~~Y | ~~~~~ | Y | N | Y | C | F | MOUNT HAGEN | Papua New Guinea |
| AYMO | YYYYYYY | ~~~~~ | Y~~YYY | Y | N | Y | C | F | MOMOTE | Papua New Guinea |
| AYNZ | YYYYYYY | ~~~~~ | ~~Y~Y~ | Y | N | Y | C | F | NADZAB | Papua New Guinea |
| AYWK | ~~~~Y~ | ~~~~~ | ~~YY~~Y | Y | N | Y | | F | WEWAK | Papua New Guinea |
| OPDG | ~~~~~ | ~~~~~ | YYYYYYY | Y | N | Y | T | | D.G. KHAN INT'L | Pakistan |
| OPST | ~~~~~ | ~~~~~ | ~~~Y~~ | Y | N | Y | T | F | SIALKOT INTERNATIONAL AIRPORT | Pakistan |
| PTSA | ~~~~~ | ~~~~~ | ~~~~~Y | Y | N | Y | T | F | KOSRAE,KOSRAE ISLAND CAGAYAN DE ORO, MIZAMIS | Micronesia (Federated States of) |
| RPML | ~~~~~ | ~~~~~ | ~~~~~ | Y | N | Y | T | P | ORIENTAL | Philippines |
| VOHY | YYYYYYY | YYYYYYY | ~~~~~ | Y | N | Y | X | P | HYDERABAD | India |
| VTPT | ~~~~~ | ~~~~~ | YYYYYYY | Y | N | Y | T | P | TAK | Thailand |
| VTSR | ~~~YY~ | ~~~~~ | ~~~~~ | Y | N | Y | T | P | RANONG | Thailand |
| VTUQ | ~Y~~~~ | ~~~~~ | ~~~~~ | Y | N | Y | T | P | NAKHON RATCHASIMA | Thailand |
| WAHH | ~~~~~ | ~~~~~ | YYY~YYY | Y | N | Y | T | P | YOGYAKARTA/ADI SUTJIPTO | Indonesia |
| WAHQ | Y~~Y~~ | ~~~~~ | ~Y~~~~ | Y | N | Y | T | P | SOLO/ADI SUMARMO | Indonesia |
| WASS | ~~~~~ | ~~~~~ | ~~~~~ | Y | N | N | T | P | SORONG/DOMINE EDUARD OSOK | Indonesia |

APPENDIX 2

| Loc Ind | NON-DWD/day | NON-SADIS/day | NON-WIFS/day | FASID | AOP | SA/SP | FC/FT | Service | Name | Country |
|---------|-------------|---------------|--------------|-------|-----|-------|-------|---------|---|--------------------------------|
| NFTV | WWWWWWW | WWWWWWW | _____ | Y | Y | Y | T | F | VAVA'U | Tonga |
| OAKN | WWWWWWW | WWWWWWW | _____ | Y | Y | Y | T | F | KANDAHAR | Afghanistan |
| WAKK | _____ | _____ | XXXXXXX | Y | Y | Y | T | P | MERAUKE/MOPAH BANJARMASIN/SYAMSUDIN | Indonesia |
| WAOO | _____ | __D__ | __D__ | Y | Y | Y | T | F | NOOR | Indonesia |
| WAQQ | __A__ | __A__ | __A__ | Y | Y | Y | T | P | TARAKAN/JUWATA TANJUNG PINANG/RAJA | Indonesia |
| WIDN | _____ | _____ | XXXXXXX | Y | Y | Y | T | P | HAJI FISABILILLAH | Indonesia |
| ZSJN | _____ | _____ | XXXXXXX | Y | Y | Y | T | F | JINAN/YAOQIANG | China |
| Loc Ind | NON-DWD/day | NON-SADIS/day | NON-WIFS/day | FASID | AOP | SA/SP | FC/FT | Service | Name | Country |
| OAKN | WWWWWWW | WWWWWWW | _____ | Y | Y | Y | T | F | KANDAHAR MATTALA/MATTALA RAJAPAKSA INTERNATIONAL | Afghanistan |
| VCRI | SSSSSSS | _____ | SSSSSSS | Y | Y | Y | X | F | AIRPORT | Sri_Lanka |
| VEGT | _____ | DDDDDDD | DDDDDDD | Y | Y | Y | T | F | GUWAHATI | India |
| VEGY | _____ | DDDDDDD | DDDDDDD | Y | Y | Y | T | F | GAYA TANJUNG PINANG/RAJA | India |
| WIDN | _____ | _____ | XXXXXXX | Y | Y | Y | T | P | HAJI FISABILILLAH | Indonesia |
| Loc Ind | NON-DWD/day | NON-SADIS/day | NON-WIFS/day | FASID | AOP | SA/SP | FC/FT | Service | Name | Country |
| AYMO | __X__ | _____ | _____ | Y | N | Y | C | F | MOMOTE | Papua New Guinea |
| AYNZ | _____ | _____ | __X__ | Y | N | Y | C | F | NADZAB WAKE ISLAND | Papua New Guinea |
| PWAK | __X__ | __X__ | _____ | Y | N | Y | X | P | AIRFIELD,WAKE I. PAMPANGA/DIOSDADO MACAPAGAL INTERNATIONAL MABALACAT, | Wake Island (United States) |
| RPLC | WWWWWWW | WWWWWWW | _____ | Y | N | Y | T | F | PAMPANGA TAMBLER,GEN. SANTOS,SOUTH | Philippines |
| RPMR | WWWWWWW | WWWWWWW | _____ | Y | N | Y | T | P | COTABATO DUMAGUETE/SIBULAN, | Philippines |
| RPVD | WWWWWWW | WWWWWWW | _____ | Y | N | Y | T | P | NEGROS ORIENTAL PUERTO PRINCESA, | Philippines |
| RPVP | WWWWWWW | WWWWWWW | _____ | Y | N | Y | T | P | PALAWAN TIMIKA/MOSES | Philippines |
| WAYY | AAAAAAA | AAAAAAA | AAAAAAA | Y | N | Y | T | P | KILANGIN | Indonesia |

| Loc Ind | NON-DWD/day | NON-SADIS/day | NON-WIFS/day | FASID | AOP | SA/SP | FC/FT | Service | Name | Country |
|---------|-------------|---------------|--------------|-------|-----|-------|-------|---------|--|--------------------------|
| AYMO | __SX__ | | __S__ | Y | N | Y | C | F | MOMOTE | Papua New Guinea |
| AYNZ | WW__W_ | WW_D_W_ | __D__ | Y | N | Y | C | F | NADZAB | Papua New Guinea |
| AYWK | __W__ | __W__ | | Y | N | Y | _ | F | WEWAK SIALKOT INTERNATIONAL | Papua New Guinea |
| OPST | AAAAAAA | AAAAAAA | AAAAAAA | Y | N | Y | T | F | AIRPORT PAMPANGA/DIOSDADO MACAPAGAL INTERNATIONAL | Pakistan |
| RPLC | | XXXXXXXX | | Y | N | Y | T | F | MABALACAT, PAMPANGA TAMBLER,GEN. SANTOS,SOUTH | Philippines |
| RPMR | | XXXXXXXX | | Y | N | Y | T | P | COTABATO DUMAGUETE/SIBULAN, | Philippines |
| RPVD | | XXXXXXXX | | Y | N | Y | T | P | NEGROS ORIENTAL PUERTO PRINCESA, | Philippines |
| RPVP | | XXXXXXXX | | Y | N | Y | T | P | PALAWAN YOGYAKARTA/ADI | Philippines |
| WAHH | | | XXX_XXX | Y | N | Y | T | P | SUTJIPTO | Indonesia |
| WAHQ | | | X_X_XX_ | Y | N | Y | T | P | SOLO/ADI SUMARMO | Indonesia |
| WAYY | | | XXXXXXXX | Y | N | Y | T | P | TIMIKA/MOSES | Indonesia |
| WMKD | | | XXXXXXXX | Y | N | Y | _ | F | KILANGIN | Malaysia (Peninsular) |
| | | | | | | | | | KUANTAN | (Malaysia) |