



International Civil Aviation Organization

**EIGHTEENTH MEETING OF THE METEOROLOGY
SUB-GROUP (MET SG/18) OF APANPIRG**

ICAO Regional Sub-Office, Beijing, China
18 – 21 August 2014

Agenda Item 6: Air navigation deficiencies in the MET field

OPMET DATA DEFICIENCIES

(Presented by IATA)

SUMMARY

This paper presents deficiencies in OPMET data issued by states in ASIAPAC. In ICAO Annex 3 clear standards and recommended practices are described. Further for all types of OPMET data exact templates are provided and all contracting states are obliged to apply these templates accordingly.

1. Introduction

1.1 The current provisions of OPMET data from ASIAPAC do not meet the airlines expectations completely. Amendment 76 of ICAO Annex 3 applicable November 2013 contains some new formats and standards, which are not fully applied by states.

1.2 Contracting states are obliged to apply the Standards and Recommended Practices.

1.3 A continuous IATA monitoring of the OPMET exchange showed some deficiencies in the application of the Standards and Recommended Practices described in ICAO Annex 3.

1.4 A similar working paper was presented during CNS/MET SG/13. The monitoring showed that no progress could be achieved for this topic and therefore the same problems are described again.

2. Discussion

Deficiencies of TAF

2.1 ICAO Annex 3 contains a TAF template describing how a TAF should be provided.

2.2 The following table list all airports with rejected TAFs received during 7 days.

VEPT REJECTED (BECMG begin time after end)
OPPS REJECTED (BECMG longer than 4 hours)
NFFN REJECTED (BECMG time outside global time)
AYGR REJECTED (BECMG/TEMPO/INTER/FM missing)
OPPS REJECTED (Can not create fromdate - new format)
PGUA REJECTED (Can not create till date for BECMG - '0200')
PGUA REJECTED (Can not create till date for BECMG - '0400')
RODN REJECTED (Can not create till date)
VOCI REJECTED (Cannot create from date for BECMG/FM)
NVSC REJECTED (FT TAF promulgation time more than 6 hours in the future)
VANP REJECTED (Imprecise token format "0110/0114")
OPPS REJECTED (MAIN, BECMG or FM period without valid time token given)
OPKC REJECTED (Message validity period longer than 30 hours)
REJECTED (Old (HHHH) and new (DDHH/DDHH) time formats used in one TAF
OPPS message)
AGGH REJECTED (Period outside global validity dates)
NFTV REJECTED (Validity starts more that 12 hours in the future)
AYGA REJECTED (Wind or clouds are not given for global period)
AYMO REJECTED (Wind value too big)

2.3 The above list does not give an indication how often such errors occur and it also does not mean that only these aerodromes are issuing incorrect formatted TAF. Below one or two example of each reject reason.

REJECTED (BECMG begin time after end)

TAF VANP 310900Z 3112/0118 26006KT 4000 HZ/-RA SCT020 BKN090
BECMG 0100/0102 3000 HZ/-RA FEW015 SCT020 BKN090
BECMG 0108/0810 27006KT 5000 HZ SCT020 BKN090
TEMPO 3112/3116 . 0110/0114 29010G20KT 1500 RA/TSRA SCT015 OVC080
FEW030CB=

REJECTED (BECMG longer than 4 hours)

TAF VABB 301500Z 3018/3124 23007G17KT 0800 TSRA/SHRA SCT010 SCT015
FEW030CB OVC080 BECMG 3022/3024 23008G18KT TEMPO 3101/3103 1500
RA/SHRA SCT008 SCT015 FEW030CB OVC080 BECMG 3104/3106 24007G17KT
2000 RA/DZ FEW012 SCT018 FEW030CB OVC090 BECMG 3112/3118 1000
RA/SHRA SCT010 SCT018 FEW030CB OVC080 BECMG 3122/3124
23008G18KT=

REJECTED (BECMG time outside global time)

TAF VABB 300300Z 3006/3015 24010G20KT 4000 HZ/RA SCT015 SCT020 OVC080
TEMPO 3010/3015 1500 SHRA/RA SCT010 SCT015 FEW025TCU OVC080
BECMG 3012/3014 2000 RA/DZ SCT010 SCT015 FEW025TCU OVC080
BECMG 3014/3016 25010KT =

REJECTED (BECMG/TEMPO/INTER/FM missing)

TAF RPLL 301100Z 3012/3118 24008KT 9999 SCT023 BKN100 TX28/3106Z
TN25/3022Z 22005KT 8000 SHRA FEW022CB SCT023 OVC090 TEMPO
3019/3023 21003KT 9000 -RA SCT023 OVC090 TEMPO 3104/3110 24015KT
8000 TSRA FEW023CB SCT025 OVC100=

REJECTED (Can not create fromdate - new format)

TAF VEPT 290900Z 2912/3018 09008KT 5000 HZ/-RA SCT018 FEW030CB^M
BKN090 BECMG 2918/2920 09003KT 4000 HZ/-TSRA^M
BECMG 3003/3005 09008KT 3500 HZ/-TSRA^M
BECMG 3008/3070 5000 HZ/-RA^M
BECMG 3016/3018 4000 HZ/-RA=

REJECTED (Can not create till date for BECMG - '0200')

TAF PGUA 3102/0108 24012KT 9999 VCSH SCT010 BKN020 QNH2986INS
TEMPO 3102/3103 24015G25KT 6000 -TSRA BKN010 BKN020CB
BECMG 0003/0004 24010G15KT 9999 VCSH SCT010 BKN020
QNH2979INS TX26/0101Z TN22/3116Z=

REJECTED (Can not create till date)

TAF AMD RODN 3123/0123 20025G35KT 4800 -SHRA BR SCT012 BKN020 560007
QNH2910INS
TEMPO 3123/0003 20035G50KT 1600 SHRA VCTS BKN007 OVC015CB
BECMG 0102/0103 20025G40KT 8000 -SHRA SCT010 OVC020 560007
QNH2910INS
BECMG 0111/0112 19015G25KT 9999 NSW OVC020 540007
QNH2915INS TX29/0106Z TN27/0120Z AMD 312226=

REJECTED (Cannot create from date for BECMG/FM)

TAF VOTV 260300Z 2606/2712 30010KT 5000 HZ SCT015 BKN090
TEMPO 2610/2615 2000 TSRA/RA SCT008 FEW025CB OVC080
BECMG 2626/2617 33005KT 4000 HZ TEMPO 2700/2703 2000 RA/DZ
SCT008 FEW025CB OVC080 BECMG 2616/2617 33005KT 4000 HZ
TEMPO 2700/2703 2000 RA/DZ SCT008 FEW025CB OVC080
BECMG 2704/2705 30010KT 6000 TEMPO 2709/2712 2000 TSRA/RA
SCT008 FEW025CB OVC080=

REJECTED (FT TAF promulgation time more than 6 hours in the future)

TAF NVVV 311630Z 3106/0106 08014KT 9999 SCT025 NTER 3106/3112 9000^M
-SHRA BKN018=

REJECTED (Imprecise token format "0110/0114")

TAF VANP 310900Z 3112/0118 26006KT 4000 HZ/-RA SCT020 BKN090
BECMG 0100/0102 3000 HZ/-RA FEW015 SCT020 BKN090
BECMG 0108/0110 27006KT 5000 HZ SCT020 BKN090
TEMPO 3112/3116 . 0110/0114 29010G20KT 1500 RA/TSRA SCT015 OVC080
FEW030CB=

REJECTED (MAIN, BECMG or FM period without valid time token given)

TAF WATT 281100Z 2812/2912 10010KT 8000 SCT019
BECMG 2822/2/23 9999 FEW019=

REJECTED (Message validity period longer than 30 hours)

TAF OPKC 292130Z 3000/0106 24010G20KT 6000 SCT020 BKN030 FM 3006000Z
25012G22KT 7000 BKN020
TEMPO 3022/0102 25010KT 5000 DZ SCT020 BKN030=

REJECTED (Old (HHHH) and new (DDHH/DDHH) time formats used in one TAF message)

TAF OPSS 290449Z 2906/3012 05010KT 3000 HZ FEW010 SCT025 BKN080
BECMB 0810 12010KT 3600 SCT030
OVC080 BECMG 1014 FEW030TCU SCT035 OVC080 FM 291700Z 30010KT 3000
TSRA FEW025CB SCT030 OVC080 BECMG 0104 FEW020TCU SCT025 OVC070
TEMPO
0409 SCT035 BKN070=

REJECTED (Validity starts more than 12 hours in the future)

TAF NFTV 292216Z 3018/3118 13015KT 9999 SCT018 SCT045 PROB30^M
TEMPO 3018/3024 12015G25KT=

REJECTED (Period outside global validity dates)

TAF AGGH 301007Z 3012/3112 00000KT 9999 FEW018 BKN120
FM232000 05007KT 9999 SCT018 BKN120 T 24 23 24 25 Q 1011 1009
1010 1012=

TAF OPRN 311530Z 3118/0124 09015KT 4000 HZ SCT040 BKN100 TEMPO
3112/3115 12010G25KT 4000
VCTS FEW030TCU SCT040 TEMPO 3122/0104 12010G25KT 4000 TSRA
FEW030CB SCT040 BKN100 TEMPO 0112/0115 12010G25KT 4000 VCTS FEW030TCU
SCT040 TEMPO 0122/0204 12010G25KT 4000 TSRA FEW030CB SCT040 BKN100=

REJECTED (Wind or clouds are not given for global period)

TAF AMD YBBN 301159Z 3012/3118 VRB05KT 5000 BR
FM301500 26004KT CAVOK
FM310000 35009KT CAVOK
FM310300 02013KT CAVOK
FM310800 35010KT CAVOK
TEMPO 3015/3017 5000 BR PROB40 3012/3015 0800 FG=

REJECTED (Wind value too big)

TAF VTSP 251100Z 2512/2618 29010KT 7000 SCT018 BKN120 BKN300
TEMPO 2512/2516 VBR20G35KT 4000 TSRA FEW016CB SCT020 BKN100
BECMG 2518/2520 250155KT
TEMPO 2520/2524 VRB20G35KT 4000 TSRA FEW016CB SCT020 BKN100
TEMPO 2522/2602 VRB20G35KT 4000 TSRA FEW016CB SCT020 BKN100=

Deficiencies of SIGMET

2.4 ICAO Annex 3 contains a TAF template describing how a SIGMET should be provided.

2.5 The following table list all airports with rejected TAFs received during 7 days.

VABF WS REJECTED (Can't determine FIR/UIR data from message body)
VECF WS REJECTED (Can't determine FIR/UIR data from message body)
VIDF WS REJECTED (Can't determine FIR/UIR data from message body)
VVNB WS REJECTED (Can't determine FIR/UIR data from message body)
VYYY WS REJECTED (Can't determine FIR/UIR data from message body)
WIIF WS REJECTED (Can't determine FIR/UIR data from message body)
WIII WS REJECTED (Can't determine FIR/UIR data from message body)

2.6 The above list does not give an indication how often such error occur and it also does not mean that only these UIR/FIR are issuing incorrect formatted SIGMET or use unknown FIR/UIR codes. Below one or two example of each reject reason.

REJECTED (Can't determine FIR/UIR data from message body)

No ‘-‘ at the end of first line and ‘-‘ between location indicator and name of UIR/FIR.

VABF SIGMET 01 VALID 301530/301930 UTC VABB
VABF-MUMBAI FIR EMBD TS OBS AT 301515 UTC S OF N2500 W OF E08000
N OF N2000 E OF E07000 TOP FL 390 STNR NC =^

Double ‘-‘ at the end of first line and ‘-‘ between location indicator and name of UIR/FIR.

VECC SIGMET 01 VALID 280200/280600 **VECC---VECF** KOLKATA FIR EMBD TS
FCST N OF N2100 AND E OF E08815 TOP FL360 NC=

Typo

VIDF SIGMET 01 VALID 311500/311900

VIDF FELHI FIR FRQ TS OBS AT 1415Z W.I.N3311 E07610-N2825 E08145
N2500 E08100-N2500 E07000 TOP FL 320 MOV NE 05KT NC=

VVNB SIGMET

1 VALID 310235/310635 VVGL-

VVNB HA NOI FIR EMBD TS OBS

BTN N21 AND

N19 E OF E10630 TOP FL400 STNR NC=

SIGMET VALID 251700/252100

WIIF SIGMET 04 VALID 251700/252100 WIII-

WIIF JAKARTA FIR AREA OF ISOL CB/TS OBS BOUNDED BY N05 E097 N05 E095
AND N06 E095 NC=

WIIF SIGMET 01 VALID **250500/250900**

EMBD CB/TS OBS WITHIN 10NM RAD OF WIII WKN=

Unknown FIR

VYYY SIGMET 01 VALID 311000/311400 VYYY-^M

VYYY YANGON FIR EMBD TS OBS AND FCST WI N2000 E09200-N2000 E10000-^M
N1500 E10000-N1500 E09200-N2000 E09200 TOP FL300 MOV ENE SLOWLY NC=

2.7 During the IATA monitoring it was noted that not all SIGMET have been available on SADIS and on WIFS. Also the DWD source couldn't provide all SIGMET from ASIAPAC.

SIGMET only on WIFS: **VABF** and **VIDF**

SIGMET not on WIFS: **VYYY** (VYYF) and **WIIF**

3. Conclusion

3.1 Since the introduction of Amendment 76 of ICAO Annex 3 in November 2013 the number of incorrect OPMET data messages has increased. In order to enable automated system to process all OPMET data, the incorrect message must be corrected manually or the user system must be upgraded in order to perform automated corrections. Both action are very costly and could be avoided if all states would make quality control and a verification of all outgoing OPMET data.

3.2 A similar working paper was presented during CNSMET SG/16. The monitoring showed that some progress could be achieved for this topic.

3.3 The group may wish to formulate the following conclusion:

Draft Conclusion 18/.... — Improvement of OPMET data format

That ICAO urges States to:

- a) ensure full implementation of the applicable Standards and Recommended Practices in Annex 3 with respect to the format of OPMET information; and

- b) establish and implement necessary systems to provide for the quality management of the OPMET information, which should include verification, validation and monitoring to assure that the OPMET information complies with the stated requirements.

Notes:

1) IATA requested States to ensure the percentage of OPMET issued with formatting errors should be limited to less than 3%; and

2) all OPMET provided should be made available to the SADIS and WIFS gateways in accordance with provisions in FASID Table MET 2A and the Regional SIGMET Guide.

4. Action by the Meeting

3.1 The meeting is invited to:

- a) to note the content of this working paper; and
- b) to decide on the draft conclusion proposed for the group's consideration
