SADIS Gateway

Operations Handbook

Eighth Edition

2024

This document describes the functions and procedures associated with the provision of the Gateway function for the SADIS Service.

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1 Introduction

This document describes the functions and procedures associated with the provision of the Gateway function for the SADIS Service.

1.1 Purpose

The SADIS Gateway Working Group has produced this document to define the operational procedures of the SADIS Gateway function. The document is intended to have two roles: -

- To be a guide to those personnel responsible for the management and support of the SADIS Gateway function.
- To provide information to SADIS users so that they understand the SADIS Gateway function and are able to plan their own activities taking the function into account.

1.2 Handbook Organisation

- The document has been organised into the following sections: -
- Section 2 Message Validation. This section defines the validation carried out on alphanumeric OPMET and WAFS messages.
- Section 3 Message Correction. This section defines the automatic correction that the system carries out on alphanumeric OPMET messages. It also describes permissible operator actions for the correction of the alphanumeric OPMET and WAFS messages that have failed validation.
- Section 4 Monitoring. This section describes what the Gateway actually monitors, how the monitoring is carried out and what action is taken in response to alarms generated by the monitoring.
- Section 5 User Notification. This section describes the User Notification messages generated on SADIS and specifically the procedures associated with those User Notification messages generated in response to Gateway activities such as monitoring.
- Section 6 Service Desk Procedures. This section describes the procedures operated by the SADIS Service Desk.
- Section 7 Administrative Procedures. This section describes the various administrative procedures associated with the Gateway such as dealing with unrecognised data and adding new data to the SADIS data feed.
- Appendices. Section 8. This section defines the validations parameters and the monitored Types and aerodromes.

2 Message Validation Procedures

2.1 Basic Principles

This section is divided into 2 subsections, one dealing with WAFS data and the other with alphanumeric OPMET data. Both will describe in detail how alphanumeric OPMET or WAFS messages are validated on SADIS Gateway and exactly what modification operators are authorised to carry out. It should be noted that operators are not authorised to modify actual meteorological data, e.g. visibility, QNHs etc., but only items such as bulletin headers, location indicators and observation times. It should also be noted that bulletins that are required for SADIS but are not Annex 3 compliant may be configured so as to bypass validation.

2.2 Alphanumeric OPMET Validation

2.2.1 WMO Header Validation

The first line of the message text shall be assumed to be the abbreviated bulletin header with the following format. T1T2A1A2 ii[SPACE(S)]CCCC[SPACE(S)]YYGGgg[SPACE(S)](BBB).
Where BBB is an optional group and T1T2 corresponds to one of the data types recognised by SADIS as listed below.

TT	Message Type
SA	METAR
SP	SPECI
FA	GAMETs
FC	Short TAF (less than 12 hours)
FT	Long TAF (up to 30 hours)
WS	SIGMET
WC	Tropical Cyclone SIGMET
WV	Volcanic ASH SIGMET
WA	AIRMETs
UA	Special AIREPs, and Special AIREPs for Volcanic ASH
FV	Volcanic Ash Advisory
FK	Tropical Cyclone Advisory
FN	Space Weather Advisory

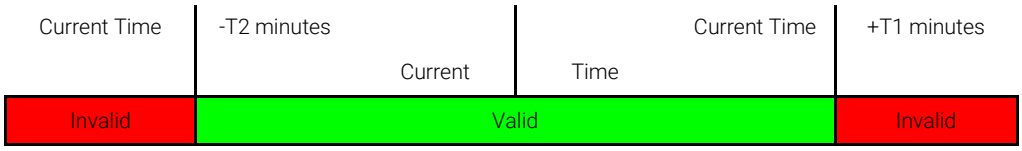
The AA group should comprise two alphabetical characters, coding the State or area of the contained data (OS=Austria, NT=North Atlantic).

The ii group should comprise 2 digits. Should only one digit be present the Gateway shall insert a leading zero. For example FTUK1 becomes FTUK01. Should no ii group be present then the Gateway shall automatically insert a value of 41. For example FTUK becomes FTUK41. This is shown in Appendix A validation Parameters General header Validation.
The CCCC group should comprise 4 alphabetical characters, indicating the compiling centre or originator of the bulletin. The CCCC should be a valid ICAO location indicator. In case a location indicator, not registered in ICAO Doc 7910, is used, no corrective action shall be done and the

bulletin forwarded based on the TTAAii. ROCs should contact the originating States to co-ordinate changes to the CCCC.

The date time group of the bulletin, YYGGgg, shall be considered valid if it lies between two configurable values, T1 minutes and T2 minutes, set after and before the current time.

The BBB group is optional and will be used in case that the bulletin includes corrected (CCx), amended (AAx) or retarded (RRx) messages, where "x" is "A" for the first message, being increased in alphabetical order up to "X". Thereafter the "X" is kept until a bulletin with a new headertime is issued.



Different values of T1 and T2 are configured for METARs, TAFs and SIGMETs. These values are described in Appendix A Validation parameters METAR Validation, TAF Validation and SIGMET Validation.

Bulletins that fail to correspond to the format shall be rejected to an operator position for inspection.

2.2.2 METAR Validation

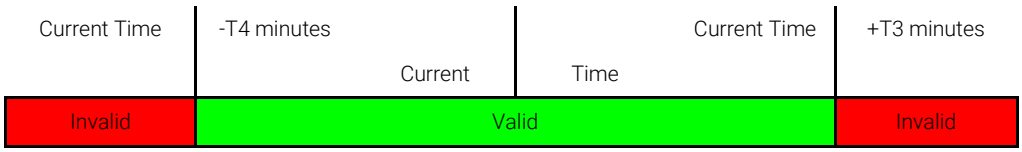
For each individual METAR or SPECI within a bulletin the following items shall be validated:

METAR/SPECI The Identification of the type of report according to the following Prefix examples.

Prefix	Bulletin Type (TT)
METAR	SA
METAR COR	
SPECI	SP
SPECI COR	

CCCC - The report shall contain a valid 4-letter ICAO location indicator. A full list of valid ICAO indicators shall be maintained on the SADIS Gateway against which the indicator can be validated.

YYGGggZ - The report shall have a valid date and time of observation, including the character 'Z'. If this group is not present the observation time shall be taken as the YYGGgg part of the Abbreviated Bulletin Heading. For METARs the observation time is acceptable if it lies between two configurable values, T3 minutes and T4 minutes, set after and before the current time.



Each station report shall be terminated by the "=" character.

METAR bulletins, i.e. those for which TT = 'SA' shall not be accepted if they contain SPECIs.

Bulletins containing any reports that fail the above validation rules shall be rejected to the error queue for inspection and, if appropriate, repair.

The configurable values for METAR validation in current use in the SADIS Gateway are provided in Appendix A. Validation Parameters. METAR Validation.

2.2.3 TAF Validation

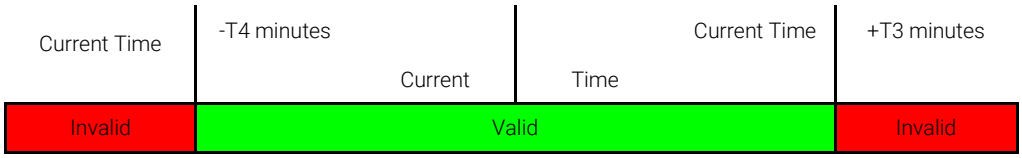
For each individual TAF forecast within a compiled bulletin the following items shall be validated:

TAF Identification of the type of forecast according to the following table.

Prefix	Bulletin Type (TT)
TAF	FC
TAF AMD	
TAF COR	
TAF	FT
TAF AMD	
TAF COR	

CCCC - The Forecast shall contain a valid 4-letter ICAO location indicator. A full list of valid ICAO indicators shall be maintained on the SADIS Gateway against which the indicator can be validated.

YYGGggZ - The forecast shall have a valid forecast report date-time-group in UTC including 'Z'. The forecast time should be accepted if it lies between two configurable values, T3 minutes and T4 minutes, set before and after the current time. These values are independently configurable for short TAFs (FC) and long TAFs (FT).



$Y_1Y_1G_1G_1/Y_2Y_2G_2G_2$ — The forecast shall have a valid TAF validity period This TAF validity period should be considered valid if it meets the following conditions.

The start of validity period shall be no more than a configurable value, T5 minutes, in the future from the current time.

The validity period shall not exceed a configurable value of T6 minutes.

The end of the validity period shall not be earlier than the current time

Each forecast should be terminated by the "=" character.

Bulletins failing the validation rules above should be rejected to the operator position for inspection and, if possible, corrected.

Separate configurable values are provided for long TAFs (FT) and short TAFs (FC).

The configurable values for TAF validation in current use in the SADIS Gateway are provided in Appendix A. Validation parameters. TAF Validation.

2.2.4 SIGMET and AIRMET Validation

For each individual SIGMET or AIRMET the following items shall be validated:

CCCC — The SIGMET or AIRMET must commence with a 4-letter group indicating the ATSU. Validation will ensure that this field comprises 4 alphabetical characters only. A full list of valid ICAO indicators for ATSUs shall be maintained on the SADIS Gateway against which the indicator can be validated.

SIGMET or AIRMET — Following the CCCC group SIGMET or AIRMET, as appropriate, should be indicated.

VALID — The sequence number should be followed by the word VALID.

DDHHMM/DDHHMM — The SIGMET or AIRMET shall have a valid validity period. This validity period shall be in the format DDHHMM/DDHHMM and shall be considered valid if it meets the following conditions.

- The start of validity period shall be no more than a configurable value, T5 minutes, in the future from the current time.
- The validity period shall not exceed a configurable value of T6 minutes.
- The end of the validity period shall not be earlier than the current time.

Separate configurable values are provided for conventional SIGMETs (WS), Volcanic Ash SIGMETs (WV), Tropical Cyclone SIGMETs (WC) and AIRMETs (WA). The configurable values for SIGMET validation in current use in the SADIS Gateway are provided in Appendix A. Validation parameters SIGMET Validation.

CCCC – Following the validity group should be a 4-letter group, indicating the MWO, immediately followed by a hyphen.

CCCC – The 2nd line after AHL should start with another 4-letter group, this time indicating the FIR or UIR. The first 2 letters must be the same as the first 2 letters of the ATSU to be accepted as being a valid FIR and/or UIR. If the check fails, the ATSU should be regarded as being the correct indicator.

ATSU, MWO, FIR and UIR shall be validated against the ICAO indicators maintained on the SADIS Gateway.

Messages failing the above validation rules should be rejected to the operator position for inspection and, if appropriate repair as per actions in section 3.4.

3 MESSAGE CORRECTION PROCEDURES

3.1 General Corrective Actions

3.1.1 General principles

This section describes the modification operators are authorised to apply to rejected bulletins. It should be noted that operators are not authorised to modify meteorological content, e.g. visibility, QNHs etc., but only items such as bulletin headers, location indicators and observation times.

3.1.2 WMO Header Errors

Various Errors could be observed for WMO Headers. Among these is the substitution of '0' (zero) for 'O' in the alphabetical parts of the header, a missing digit in the YYGGgg group or an illegal optional group. These are often straightforward corrections. The YYGGgg group should only be corrected if the correction is implied by other information within the bulletin e.g. METAR observation time.

In the example below the message was rejected because the date time group of the AHL was received with only 5 digits in it. Adding a single digit, which makes the AHL date time group and the date time of origin of forecast correspond, repairs this error.

FTZW20 FVHA 020400 RRA
TAF FVFA 020400Z 0206/0306 04006KT CAVOK BECMG 0210/0212
FEW040CB SCT080 TEMPO 0211/0216 3000 TSRA SCT040CB BKN080
BECMG 0217/0219 CAVOK=

In the next example the message was rejected because the AA part of the AHL contains the numeric character '0' (Zero). This is simply corrected by replacing '0' with 'O'.

SAG040 FOOL 020700
METAR FOOB 020700Z 26004KT 9999 OVC008 23/22 Q////=
METAR FOGR 020700Z ///// 0400 FG SCT008 OVC100 26/25
Q1011=
METAR FOOY 020700Z ///// 8000 -TSRA SCT008 FEW015CB
OVC023 23/23 Q1011=
METAR FOOG…

In the example below the message was rejected because a "Z" was added at the end of the header time YYGGgg of the AHL. This is simply corrected by deleting the 'Z'.

FTIN32 VOTV 240900Z
TAF VOTV 240900Z 2412/2512 00000KT 3000 HZ FEW015 SCT020
BKN100 BECMG 2500/2501 1500 BR BECMG 2503/2504 4000 HZ
BECMG 2506/2507 23010KT 6000 TEMPO 2412/2512 3000
TSRA/SHRA SCT006 SCT015 FEW025CB OVC080=
TAF VOCI…

3.1.3 Multi-part Messages

Long messages are segmented in the AFTN network. Often the segmentation introduces non-met text elements into messages, e.g. 'PART ONE OF TWO PARTS' that cause them to fail validation. These will be edited out of messages.

In this example of a multi-part message not only the lines commencing with "//END" cause the rejection of the messages. Also, the reason that the METAR for KBHM is split in the middle is causing the messages to be rejected. The first bulletin, because there is an incomplete METAR (missing "=" at the end), the second bulletin because of the absence of a header.

The operator could remove the last part of the first bulletin, starting with the incomplete METAR.

For the second message, there is nothing the operator could do, apart from deleting, as it is normally not traceable to which bulletin those reports originally belong.

SAUS31 KWBC 050000
METAR KABQ 042356Z 18009KT 10SM FEW160 SCT250 11/M16 A2992=
METAR KATL 042353Z 30012KT 10SM FEW250 07/M04 A3000=…
…
METAR KBGR 042353Z 18008KT 1 1/4SM -RA BR OVC003 04/03 A2907=
METAR KBHM 042353Z 33006KT
//END PART 01//

10SM CLR 08/M06 A3009=
METAR KJAX 042356Z 31005KT 10SM FEW040 BKN250 16/09 A2994=
METAR KJFK 042351Z 26024G30KT 10SM SCT060 06/M05 A2955=
METAR KLAS 042356Z 09006KT 10SM FEW250 14/M12 A2992=…
…
METAR KLAX 042350Z 25011KT 10SM BKN200 BKN250 17/11 A2993=
//END PART 02/02//

3.1.4 Multiple Terminators / Multiple Separation Signal (=)

Messages are received which contain multiple termination characters, '='. These characters can cause problems with report based validation that searches for a valid location indicator following the first terminator. Excess termination characters shall be edited out of messages.

FTBN31 OBBI 051100TAF OBBI 050900Z 0512/0612 33015G25KT 9999 SCT025=
TAF OEDF 051100Z 0512/0612 35020KT 8000 SCT030 SCT090 TEMPO 0512/0516 4000 BLDU BECMG 0516/0518 31012KT==
TAF OEDR 051100Z 0512/0612 35020KT 8000 SCT030 SCT090 TEMPO 0512/0516 4000 BLDU BECMG 0516/0518 31012KT=
TAF OTBD 051100Z 0512/0612 21015KT 9999 FEW030 BKN090 TEMPO 0512/0524 33013G25KT TSRA FEW035CB SCT025 BKN080=

3.1.5 Missing Terminators / Missing Separation Signal

If in a METAR or TAF bulletin a separation signal (=) is missing at the end of a report or a forecast, the incomplete report or forecast should be deleted unless the operator feels certain that the report or forecast is complete.

3.1.6 Localised Corruption

In bulletins containing multiple METARs or TAFs it has been observed that some individual reports or forecasts are obviously corrupted. It should be noted that the Gateway shall only reject such messages when validated groups are corrupt, a message that has been validated by the Gateway may still contain corrupted meteorological groups. When such a message is rejected by the Gateway the operator shall remove any forecasts or reports in which the corruption prevents validation.

In this example it can be seen that only the first METAR, for FMMI appears to be free of corruption. All of its groups are complete and reasonable. In this case the remaining METARs, for FMNM, FMMT, FIMP and FMEE, which show obvious signs of corruption, shown as shaded, should be deleted, Note that the final report for FMEE does not have a terminator and as the operator cannot guarantee that it was not truncated it is removed.

FTIO31 FMMI 051100
TAF FMMI 051030Z 0512/0612 27010KT 9999 SCT020 BKN100 TEMPO
DZRA BECMG 0516/0520 SCT020CB BKM100 TEMPO 5000 RATS BECMG
0602/0606 VRB03KT 9999 FEW007 BKN017 BECMG 0606/0609 10010KT
9999 SCT017 BKN100=
??????????FMNM 051030Z 0512/0612 32010KT 9999 SCT020CB SCT040 BKN100
TEM
PO VRB03KT
4000 TSRA BECMG 0515/0518 00000KT=
??????????FMMT 051030Z 0512/0612 16006KT 9999 SCT017CB SCT033 BKN233
TEM
PO 5000
TSRA BECMG 0600/0603 SCT017 BKN033 PROB40 TEMPO 5000 RA=
??????????????????????????????????????
8000 -SHRA FEW020CB BKN020 BKN080 BECMG 0520/0600 10007KT BECMG 0105
VRB03KT BECMG 0607/0610 22012KT SCT023 SCT043=
??????????????????????????????FIMP 050200Z 0506/0606 08013G25KT 9999
SCT
018 SCT050 PROB30 TEMPO 5000 SHRA FEW010 FEW014TCU BKN016 BECMG 0513/0515
09010KT=
TAF FMEE 050924Z 0512/0612 10016KT 9999 FEW026 SCT050 BECMG
0516/0518 14012KT FEW020 BECMG 060?/0606 10020KT FEW026

In the example below the localised corruption for FAKM it could easily be seen that the corrupt time of forecast should be 100300Z in order for it to be consistent with the other TAFs in the bulletin.

FCZA43 FABL 100300
TAF FABL 100300Z 1006/1015 04008KT 9999 SCT040 TX31/12ZTN20/06Z=
TAF FAKM 100??Z 1006/1015 36012KT CAVOK TX34/12ZTN23/06Z=
TAF FAUP 100300Z 1006/10155 35008KT CAVOK TX38/18ZTN26/06Z= TAF FAWM
100300Z 1006/1015 03010KT 9999 SCT040 TX30/12ZTN21/06Z=

3.2 METAR Corrective Actions

3.2.1 SPECIs in METAR Compiled Bulletins

Sometimes a METAR bulletin will be received which contains SPECIs. These can be identified by the prefix SPECI before the location indicator. Such an occurrence will cause a message to be rejected. In the case where the reports are obviously routine, i.e. their observation time is a regular value such as 121200Z, then the SPECI prefix shall be deleted. If however the observation time of the SPECI is irregular then the TT part of the header should be modified from SA to SP.

In the first example the two reports do not appear to be regular METARs as they have different observation times. In this case the operator can assume that they are SPECIs and modify the TT part of the bulletin header, which is highlighted, from SA to SP.

SASA85 EGRR 101023
SPECI SBPV 101010Z 00000KT 9999 BKN008 BKN100 24/24 Q1011=
SPECI SPIM 101015Z 17005KT 5000 BR SCT004 BKN006 21/20 Q1011=

In the second example the report for NZCH is marked as a SPECI however its observation time is the same as the routine METARs so in this case the operator can delete the SPECI prefix which appears to be erroneous.

SANZ31 NZKL 101300
METAR NZAA 101300Z VRB02KT 30KM FEW025 17/15 Q1019 NOSIG=
METAR NZWN 101300Z 02015KT 30KM BKN022 18/14 Q1016 NOSIG RMK KAUKAU 01029KT=
SPECI NZCH 101300Z 05008KT 8000 OVC005 15/14 Q1013 TEMPO 15KM NSW TEMPO BKN004=

3.2.2 Missing Report Type Field

Sometimes a bulletin will be received where the METAR or SPECI report type identification field is missing before the location indicator for one or more reports. Such an occurrence will cause a message to be rejected. In cases where it is obvious what the Report Type string should be, i.e. other reports within the bulletin identify the type, and/or the observation time is a regular value, and the WMO AHL indicates the bulletin type, the appropriate Report Type can be inserted.

In the example below the report is not identifying the type. In this case the operator can assume it to be a METAR and insert the appropriate report type.

SAID31 WIII 210630
METAR WIHH 210630Z 25006KT 6000 SCT020 28/24 Q1010 NOSIG=
METAR WIMM 210630Z 35007KT 9999 SCT018 28/24 Q1010=
METAR WIDD 210630Z 06010KT 9999 FEW015 30/24 Q1011=
METAR WADD 210630Z 11008KT 9999 FEW016CB FEW017 31/25 Q1008 NOSIG RMK CB TO N=
WAAA 210630Z 29005KT 260V330 9999 FEW020 30/26 Q1009 NOSIG=
METAR WARR 210630Z 12005KT 090V150 8000 -RA SCT018CB 27/26 Q1009 NOSIG=
METAR WIII 210630Z 29005KT 8000 SCT020 27/26 Q1010 NOSIG=

3.2.3 Incorrectly placed METAR and SPECI strings

Sometimes the METAR or SPECI prefix is incorrectly positioned within an individual report. This may be corrected by moving the METAR or SPECI string to the correct place. In the example below METAR has been incorrectly placed after the location indicator UHPP.

SARA32 LOWM 101000
METAR UIII 101000Z 13002MPS CAVOK M13/M18 Q1025 NOSIG RMK
QFE726/0968 12410550=
METAR UIBB 101000Z 18002MPS 6000 -SN BKN100 OVC200
M18/M20 Q1018 NOSIG RMK QFE720 30490232=
METAR UIAA 101000Z 25003MPS 9999 SKC M25/M32 Q1025 NOSIG
RMK QFE710 29CLRD70=
METAR UHWW 101000Z 01002MPS 9999 BKN200 M11/M22 Q1028
NOSIG RMK QFE770/1026 75CLRD80 =
METAR UHSS 101000Z 32006MPS 9999 SCT030CB M08/M12 Q1016
NOSIG RMK MT OBSC QFE760 01820345=
METAR UHSH 101000Z NIL=
UHPP METAR 101000Z 000000MPS 9999 BKN030CB M07/M10 Q1021
NOSIG RMK QFE 762 SC 05=
METAR UHMP 101000Z NIL=
METAR UHNN 101000Z 32003MPS 9999 -SN OVC/// M17/M19 Q1022
RMK QFE760 298///37=

3.2.4 Mistyped Observation Times

Observation times are often mistyped. They may be corrected if the error is obvious. Obvious errors include: -

- the addition of an superfluous '0' in the field
- a date inconsistent with the current date and the bulletin header date time group.
- a failure to include a 'Z' at the end of the observation time, or the use of a '+' instead of a 'Z'.

In the following example it can be seen that the METAR for one aerodrome, DAON, has been input with the previous days date. In such a case the operator shall correct the erroneous observation time to 101000Z.

SAAL31 DAAA 101000 RRA
METAR DAAG NIL=
METAR DABB 101000Z 22012KT 9000 -RA FEW013 SCT033 BKN100 10/07
Q1017=
METAR DAON 091000Z 22016KT CAVOK 11/03 Q1021=
METAR DAOO 101000Z 23011KT 9999 FEW033 BKN233 11/07 Q1020=
METAR DABC 101000Z 00000KT 9999 FEW026 BKN100 05/02 Q1017=
METAR DAAT NIL=

In the following example the observation time for UAUU has been mistyped. An additional 0 has been added. The operator can remove the additional 0 to make it consistent with the other METARs in the bulletin.

```
SAKZ31 LOWM 101000
METAR UAUU 1010000Z 02005MPS CAVOK M14/M19 Q1042 RMK 8838//55
 NOSIG=
METAR UATT 101000Z 07013MPS CAVOK M12/M19 Q1033 RMK 130///60
 NOSIG=
METAR UATG NIL=
METAR UATE 101000Z 10005MPS 9999 OVC033 M01/M06 Q1017 RMK
 120///70 NOSIG=
METAR UARR 101000Z 06005G10MPS 9999 DR FEW/// M12/M19 Q1036
 NOSIG RMK047203344545=
METAR UAAA NIL=
METAR UAKK 101000Z 06006MPS CAVOK M17/M23 Q1034 NOSIG 058/1060
 QFE727=
METAR UAII 101000Z 34002MPS CAVOK 09/05 Q1017 NOSIG RMK
 280///65=
METAR UACK 101000Z NIL=
METAR UACC 101000Z NIL=
```

In the following example the observation time for UTAA is followed by an '+'. The operator can replace this with a 'Z'.

```
SATR31 LOWM 071700
METAR UTAK 071700+ 00000MPS P6000 SKC 03/01 Q1020 NOSIG =
METAR UTAA 071701Z AUTO VRB01MPS 9999 SKC 06/05 Q1020 NOSIG=
```

3.2.5 Concatenated Observation Time

A METAR or SPECI will be rejected if its observation time is concatenated with either, the location indicator, the AUTO field or the wind speed and direction group. This can simply be corrected by inserting a space between the different groups.

3.2.6 Late METARs

A METAR or SPECI shall be rejected if its observation time is older than a configurable period. In this case the METAR shall be discarded unless there is evidence in the bulletin that the observation time has been mistyped.

The following example was received at around 0000Z on the 5th of the month. The operator should examine previous METARs for SCIP to obtain assurance that the date is just mistyped and, if this is the case, correct it to 050000Z in order to make it consistent with all of the other reports in the bulletin. If the operator is unsure the METAR shall be deleted.

SACH10 SCSC 050000
METAR SCAR 050000Z VRB03KT CAVOKI 24/17 Q1013=
METAR SCDA 050000Z 19004KT 9999 FEW030 22/17 Q1012 =
METAR SCFA 050000Z 19006KT 9999 BKN040 20/17 Q1013 NOSIG=
METAR SCIP 040000Z 10010KT 9999 FEW020 BKN040 23/17 Q1021 NOSIG=
METAR SCEL 050000Z 15007KT 120V180 CAVOK 23/11 Q1013 NOSIG=
METAR SCIE 050000Z 23010KT CAVOK 18/14 Q1014=
METAR SCTC 050000Z VRB03KT 9999 FEW020 19/13 Q1013=
METAR SCTE 050000Z 25006KT 2500 -SHRA SCT008 OVC018 15/15 Q1010 NOSIG=
METAR SCCI 050000Z 23019KT 9999 SCT016 10/05 Q0992 NOSIG=

3.3 TAF Corrective Actions

3.3.1 Incorrectly placd TAF and AMD strings

If the TAF or AMD strings are incorrectly positioned, e.g. after the location indicator, then they should be repositioned correctly.

In the example below, AMD has been incorrectly positioned in the TAF for KPBF. The keyword AMD should be moved between the keyword TAF and the location indicator KPBF.

FTUS23 KWBC 042300 AAA
TAF AMD KDRT 050008Z 0500/0524 11008KT P6SM FEW015 BKN040
BKN100
TEMPO 0500/0502 06015G30KT SHRA
FM051000 10010KT 5SM -SHRA VCTS BKN015 OVC040CB
FM051800 12010KT P6SM SCT050 BKN250=
TAF KPBF AMD 050008Z 0500/0524 10003KT P6SM SCT250
FM051500 04005KT P6SM SCT050 BKN250=

In the next example the keyword TAF has been incorrectly positioned after the location indicator SBUL. This can easily be corrected by moving the keyword TAF in front.

FTBZ46 SBBR 042300 RRA
TAF SBTT 042300Z 0500/0524 00000KT
CAVOK TN23/0511Z TX30/0517Z
BECMG 0509/0511 36005KT
BECMG 0515/0517 06005KT SCT020
BECMG 0521/0523 09003KT
CAVOK RMK PEH=
SBUL TAF 042310Z 0500/0512 05005KT
CAVOK TX21/0500Z TN16/0510Z
BECMG 0504/0506 09005KT RMK PGG=
TAF SBUR 042310Z 0500/0512 05005KT
CAVOK TX23/0500Z TN17/0510Z RMK PGG=
TAF SBYS 042300Z 0500/0512 18005KT
CAVOK TN09/0506Z TX18/0511Z
BECMG 0506/0508 36005KT 7000 FEW020 RMK PDE=

3.3.2 Missing report Type Field

Sometimes a bulletin will be received where the TAF report type identification field is missing before the location indicator for one or more reports. Such an occurrence will cause a message to be rejected. In cases where it is obvious what the Report Type string should be, i.e. other reports within the bulletin identify the type, and/or the validity period matches the other reports, and the WMO AHL indicates the bulletin type, the appropriate Report Type can be inserted.

In the example below the report is not identifying the type. In this case the operator can assume it to be a TAF and insert the appropriate report type.

FTMX52 MMMX 210413
TAF MMGL 210413Z 2106/2212 25005KT P6SM SKC TX25/2121Z TN06/2112Z
FM211800 08012KT P6SM SCT030 SCT250
FM220600 08005KT P6SM SKC=
TAF MMMM 210413Z 2106/2212 00000KT P6SM SKC
FM211800 12010KT P6SM SCT030 SCT250
FM220600 00000KT P6SM SKC=
MMPR 210413Z 2106/2212 34005KT P6SM SCT030 TX26/2120Z TN19/2112Z
FM211800 23010KT P6SM SCT020 BKN080 BKN250
FM220600 34005KT P6SM SCT020=
TAF MMSP 210413Z 2106/2212 02006KT P6SM SKC TX23/2121Z TN09/2112Z
TEMPO 2111/2115 BKN020 FM211800 03012KT P6SM SCT030 BKN080
FM220600 04006KT P6SM SKC=
TAF MMZC 210413Z 2106/2212 03005KT P6SM SKC TX20/2120Z TN03/2112Z
FM211800 03016KT P6SM SCT030 SCT250 FM220600 04005KT P6SM SKC=
TAF MMZO 210413Z 2106/2212 00000KT P6SM SKC FM211800 23018KT P6SM SCT020
BKN100 BKN250 FM220500 00000KT P6SM SKC=

3.3.3 Mistyped Time of Forecast

If the time of forecast has been obviously mistyped then it may be corrected. Obvious mistypes can be detected when other TAFs within the bulletin show a consistent time.

In the example below the time of forecast, which has been highlighted, has been mistyped. The time of forecast for UHNN should be either 101145Z or 101150Z to make it consistent with UHPP or UHSS. Either value will make little material difference to the meaning of the message.

FCRA34 LOWM 101100
TAF UHMM 101150Z 1013/1022NIL=
TAF UHMP 101150Z 1013/1022 NIL=
TAF UHNN 1011450Z 1013/1022 36005G12MPS 9999 –SHSN
BKN020CB OVC070 550007 TEMPO 1322 2500 SHSN=
TAF UHPP 101150Z 1013/1022 02005MPS 9999 OVC015CB OVC070 640150
FM1900 16005G10MPS 5000 SHSN OVC010CB OVC070
650100 550009 TEMPO 1922 0800 SHSN DRSN OVC002=
UHSH 101150Z 1013/1022 NIL=
UHSS 101150Z 1013/1022 32008MPS 9999 BKN020CB 530009 TEMPO 1015/1017
4000 SHSN VV006=
UHWW 101150Z 1013/1022 36009MPS 4000 HZ FU SCT030CB BKN070 530007
TEMPO 1015/1017 -SHSN HZ BKN005=

3.3.4 Mistyped Validity Period

TAF validity errors should be handled with care. If it looks as though a TAF could be corrected to make its validity period consistent with other in the bulletin the operator should examine previous TAFs to obtain assurance that such consistency is valid and that the TAF has not been previously issued. If this assurance cannot be obtained, then the TAF should be deleted.

If the validity period has been obviously mistyped then it may be corrected. Obvious mistypes can be detected when other TAFs within the bulletin show a consistent time.
It has been observed that some states include minutes for the start of validity period when an amendment is issued. In this case the minutes should be deleted.

In the example below it can be seen that the TAF validity period for LCPH has been mistyped because the start of validity is later than the end of validity and it is inconsistent with the TAF for LCLK. The 1 should be replaced by a 0 to make it consistent with the period for LCLK.

FCCY31 LCLK 100300
TAF LCLK 100300Z 1004/1013 28006KT 9999 FEW030 SCT050 BECMG
1004/1006 22015KT PROB30 TEMPO 1006/1009 5000 SHRA=
TAF LCPH 100300Z 1014/1013 27-15KT 9999 FEW020 SCT050 PROB40
TEMPO 0413 5000 SHRA=

In the example below the wrong format for the start of validity is used. This can be changed by the operator to "0300". This has been done in this example for the last TAF and highlighted.

FTME31 OLBA 022300
TAF OLBA 022324Z 0300/0324 18016KT 8000 RA BKN026 BKN070
BECMG 0305/0307 22025G50KT PROB40 TEMPO 0306/0324 4000
TSSHRA SCT020CB BKN023=
TAF OSDI 022324Z 0300/0324 20010KT 7000 FEW030 SCT200
BECMG 1214G25KT 4000 SCT030 BKN090 TEMPO 0315/0324 SHRA
SCT022CB BKN025 OVC090=
TAF OSAP 022318Z 0300/0324 VRB03KT 3000 BR SCT020 BKN100
TEMPO 0300/0318 27012KT 4000 SHRA SCT015CB BKN020 BKN080=
TAF OJAM 022300Z 0224/0324 22014KT 2000 DU BECMG
0306/0308 23012G22KT 5000 HZ SCT030 FEW100 PROB30 TEMPO
0312/0324 4000 SHRA BKN025 SCT100 SCTCB030=
TAF OJAI 022300Z 0224/0324 22014KT 2000 DU BECMG
0306/0308 23012G22KT 5000 HZ SCT030 FEW100 ROB30 TEMPO
0312/0324 4000 SHRA BKN025 SCT100 SCTCB030=
TAF OJAQ 022300Z 0300/0324 18014KT 2000 DU BECMG
0306/0308 18014G24KT 5000 BLDU SCT030 FEW100=

3.3.5 Missing Validity Period

Some TAFs are received with no validity period. These will be rejected by the Gateway. Operators shall discard each individual TAF within a bulletin for which a validity period has not been provided. If a single TAF is received without a validity period it shall be discarded.

In this example the validity period of the TAF for URWA has been omitted. In such a case the TAF, shown as highlighted, must be deleted.

FCRS32 LOWM 310300
TAF URRR 310440Z 3106/3115 25008G13MPS 1200 SHRASN BR OVC003
BKN010CB 530005 TEMPO 3106/3112 27015G20MPS 0300 SHSNRA
FG OVC002 BKN010CB 640000 TEMPO 3112/3115 VRB02MPS 0300
FG OVC002 BKN010CB=
TAF URSS 31455Z 3106/3115 09005G08MPS 9999 BKN020CB OVC100
530002 TEMPO 3106/3108 18009G14MPS 5000 - SHRA PROB40 TS=
TAF URWA 310455Z 18006MPS 0300 DZ FG OVC003 TEMPO 0709 1000
FM0900 18006MPS 2100 -RA BR OVC007=
TAF URWI 310440Z 3106/3115 NIL=
TAF URWW 310440Z 3106/3115 16007G13MPS 0400 +SHSNRA BKN002
BKN020CB 530002 TEMPO 3106/3109 1200 -FZRA BR 640000
BECMG 3109/3111 21011G16MPS 1200 SHRA BR BKN004 BKN020CB=
TAF UUBP 310440Z 3106/3115 NIL=

3.3.6 Concatenated Time of Forecast or Validity Periods

A TAF will be rejected if its time of forecast or validity period is concatenated with an adjacent group. This can simply be corrected by inserting a space between the time of forecast or validity period and the offending group.

FCMP31 LMMM 310500 RRA
TAF HLLT 310500Z 3106/3115 27010G20KT 9999 SCT025 TEMPO
CAVOK=
TAF HLLB 310500Z3106/3115 24015G25KT 9999 SCT025=

3.3.7 Late TAFs

A TAF shall be rejected if its time of forecast is older than a configurable period. In this case the TAF shall be discarded unless there is evidence in the bulletin that the observation time has been mistyped.

3.3.8 Provisional TAFs

TAFs indicated as 'Provisional' shall be discarded from the bulletin in which they are contained.

In the example below the provisional TAFs for MBGT and MBPV shall be deleted from the TAF before resubmitting it.

FTBA31 MYNN 071630
TAF MYNN 071645Z 0718/0818 21010KT 9999 SCT020 TEMPO 0718/0722 8000
SHRA BKN018 FM080800 32015KT 9999 SCT020 BKN045 PROB30
0808/0812 8000 -SHRA BKN018=
PROVISIONAL TAF MBGT/MBPV 071645Z 0718/0818 13012KT 9999 SCT025=

3.3.9 Dual TAFs

Sometimes a TAF is issued with two location indicators. A fictitious example is presented below. In such a case the TAF should be edited so that two distinct TAFs with the same content are created. The modified version is presented below the original.

FTBA31 MYNN 071700
TAF MYNN 071745Z 0718/0818 21010KT 9999 SCT020 TEMPO
0718/0722 8000 SHRA BKN018 FM080 32015KT 9999 SCT020
BKN045 PROB30 0708/0712 8000 -SHRA BKN018=
TAF MBGT/MBPV 071745Z 0718/0818 13012KT 9999 SCT025=

FTBA31 MYNN 071700
TAF MYNN 071745Z 0718/0818 21010KT 9999 SCT020 TEMPO
0718/0722 8000 SHRA BKN018 FM080 32015KT 9999 SCT020
BKN045 PROB30 0708/0712 8000 -SHRA BKN018=
TAF MBGT 071745Z 0718/0818 13012KT 9999 SCT025=
TAF MBPV 071745Z 0718/0818 13012KT 9999 SCT025=

3.3.10 Mixed Short and Long TAFs

If a Compiled Bulletin is received with mixed Long and Short TAFS compiled within the Bulletin Delete the Compiled bulletin

]

3.3.11 Invalid end time of forecast g2g2

The time of an ending period of a forecast must end in whole hours UTC, this means when the period of forecast ends at midnight g2g2 (YYGG(gg))shall be encoded 24. 00 will be rejected.

This is also true for change groups in TAFs.

The start of the valid time may start 00.

In the example below the TAF has been received with 00 instead of 24. This can be validated by replacing 00 with 24.

In the example below the end time ends 1500 which has been rejected when the message was validated.

FCSV30 FDMS 142000
TAF FDSK 141800Z 1420/1500 07005KT 9999 SCT025 BKN035=
TAF FMDS 141800Z 1420/1424 08010KT 9999 SCT025=

The fix for this rejected message is to replace the 1500 with 1424 as shown below

FCSV30 FDMS 142000
TAF FDSK 141800Z 1420/1424 07005KT 9999 SCT025 BKN035=
TAF FMDS 141800Z 1420/1424 08010KT 9999 SCT025=

3.4 SIGMET / AIRMET Corrective Actions

3.4.1 Invalid FIRs/UIRs

Where an SIGMET or AIRMET is rejected due to an invalid FIR ATSU indicator this may be due to one of two reasons.

The first is that the location indicator has not been included in the Gateway Database. This can be due to the use of a FIR indicator different from that defined in Doc. 7910, for example Tel Aviv FIR is defined as LLLL but Tel Aviv SIGMETs use LLBG as the FIR ATSU indicator. Where situations like this are found the database would be updated to accept those indicators customarily used.

Should the location indicator be incorrect the operator shall attempt to identify from the body of the message what the FIR is and correct the FIR indicator with one from the Gateway database that corresponds to the FIR. All such errors should be logged for action. At the same time a service message should be sent to the originator stating the error and the correction applied.

3.4.2 Incorrectly formatted SIGMET Number

SIGMET and AIRMET sequence numbers are checked for format but not in regard to the value of the sequence number.

Sequence numbers can cause messages to be accepted if they are preceded immediately by an alphanumeric qualifier, for example B or BRAVO, but rejected if followed by a qualifier. In this case the operator may correct the message by moving the qualifier to its correct position.

In the following example the number 1A is causing the SIGMET to be rejected, as it does not comply with the message format described in ANNEX 3 as well as the EUR Doc. 014. This can be corrected by moving the A in front of 1, changing 1A into A1.

WVCA31 MMEX 230330
MMEX SIGMET 1A VALID 230330/230930 MMMXMMEX MEXICO CTA VA CLD
POPOCATEPETL 1901N9837W OBS AT
222037
EXTD 400NM NE BTN SFC FL300 MVNG NE 70KT NC.
OTLK VA 230930 800NM SFC FL300 E FM SUMMIT=

If the sequence number follows the SIGMET string without a space, this will also fail validation. The operator may correct this by simply inserting a space after the SIGMET string.

In the next example the number 3 has been concatenated with the SIGMET group causing the message to be rejected. This can be corrected by inserting a space in between.

WVCA31 TTPP 231730
TTZP SIGMET3 VALID 231730/232330 TTPPTTZP PIARCO FIR SOUFRIERE HILLS
MONTSERRAT 16.7N 62.2W
VA CLD 10NM WIDE OBS BLO FL060 MOV W AT 20-25KTS
OTLK VALID 232330/240530...LTL CHNG=

3.4.3 Missing SIGMET Number

If a SIGMET number is missing entirely the operator, in the interests of promulgating the SIGMET without delay, shall insert a dummy SIGMET number of value 99. This value was selected in order to indicate that it is was inserted at the Gateway.

In this case the SIGMET has been rejected because it has no SIGMET number. It is corrected by the insertion of '99' between the SIGMET and VALID fields as shown in highlights.

WSUK31 EGRR 240600
EGTT SIGMET 99 VALID 240600/241200
EGTT LONDON FIR LOC SEV TURB ...

3.4.4 Incorrectly formatted Validity Period

The validity period is tightly validated in the Gateway so there are a number of errors which may cause rejection most of which can be rectified by a simple correction.

- Incorrectly spelt or missing VALID string
  If VALID has been mis-spelt or is missing altogether it should be corrected or inserted as appropriate.
- Wrongly formatted validity period
  There is an enormous variation in error here but all must be corrected to the DDHHMM/DDHHMM format.

In the example below the SIGMET has been rejected because it contains VALIED rather than VALID. It can be corrected by deleted the 'E', shown as highlighted.

WSEG31 HECA 241415
HECC SIGMET SST2 VALIED 241415/241815 HECA
HECC CAIRO FIR ISOL EMBD CB FCST HECA TOP FL 300
MOV NE 08KT NC=

In the example below the SIGMET has been rejected because the validity dates have been appended with 'Z'. It can be corrected by deleted the 'Z's, shown as highlighted.

WSRA31 UAFM 241600
UAFM SIGMET N1 VALID 241600Z/242000Z UAFMUAFM BISHKEK FIR FCST MOD ICE 0500-7000M
MOD TURB 1000-8000M INTST NC=
In the example below the SIGMET has been rejected because the validity dates are separated by a space rather than a '/'. It can be corrected by inserting a '/', shown as highlighted.

WSBZ24 SBCW 212141
SBCW SIGMET 10 VALID 242200/242359 SBCT –
SBCW CURITIBA FIR EMBD TS OBS AT 2140UTC IN SBFI/SBCA/RITAT
PSN/SBDN/SBPP/ KALAD PSN/SSGY/SBFI AREA TOP FL390 STNR NC =

In the example below the SIGMET has been rejected because the end of validity date is incorrect. It is obvious from the bulletin date time group, the current date and the start of validity time that the date, shown as highlighted, should be modified to 23.

WSCU31 MUHA 230225
MUFH SIGMET 01 VALID 230230/130630 MUHAMUFH HABANA FIR AREA TS OBS BY SATELLITE AND RADAR ASOCIATED TO COLD
FRONT
AT 24.N84.4W 24.0N82.1W 23.6N82.6W 22.5N84.3W 21.5N84.7W TO
24.4N84.4W TOP 400 MOV SE 15KT INCR=

3.4.5 Invalid Validity Period

Validity periods may be rejected if

- The period of validity is too long
- The start of validity is too far in the future
- The end of validity is earlier than the current time

Messages rejected in this way should be examined for simple mistypes, e.g. an obviously incorrect date, which may be corrected. If the error is not correctable then a query shall be transmitted to the originator of the SIGMET.

In the case of SIGMETs where the period of validity exceeds the maximum permissible period of validity then the validity period shall be modified to the maximum permitted amount and transmitted to SADIS. At the same time a message should be sent to the originator stating the error and the correction applied.

In the example below the validity period is too long as the date for the end of validity has been mistyped.

WSPO31 LPMG 161051
LPPC SIGMET 1 VALID 161055/141524 LPPT -
LPCC LISBON FIR EMBD TS OBS MAINLY OVER TMA MADEIRA TOP
FL300 MOV SE 5 KT NC=

In the fictitious example below the start of the validity period is too far in the future. As the message was received at 01:03 on the 15th and the bulletin header date time group is 150059.

WSUZ31 UTTT 150059
UTTT SIGMET 1 VALID 160200/160924 UTTTUTTT TASHKENT FIR SEV TURB 0600/7000M
SEV ICE 0500/7000M
FCST INTST NC=

In the next fictitious example, the message was received at 0300Z on the 17th.

WSEW33 LEMM 162215
GCCC SIGMET 1 VALID 162215/160215 GCGCGCCC CANARIAS FIR EMBD TS OBS AT 2215 IN N2917 W01723
TOPS FL390 MOV S
NC=

3.4.6 AIRMET / SIGMET Header Mismatch

If an AIRMET, i.e. the string AIRMET is included in the line following the AHL, is received with a TT value of 'WS' then it will be rejected. Similarly if a SIGMET, i.e. the string SIGMET is included in the line following the AHL, is received with a TT value of 'WA' then it will be rejected. In such a case the TT value in the AHL shall be modified to match the SIGMET or AIRMET stream.

In the example below the AIRMET has been rejected because the AHL is WA..... In this case the TT value WS, highlighted. shall be replaced by WA.

229
WSEG31 HECA 191350
HECC AIRMET 7 VALID 191350/191750 HECAHECC CAIRO FIR SFC VIS2000M SA OBS AT 1300Z AND FCST HEGN AND HESH
STNR NC=

3.5 Automatic Corrective Actions

3.5.1 AHL Date Time Group 'Z' Error

If a bulletin is received with YYGGggZ in the AHL, then the system shall automatically correct it by removing the 'Z'.

For example

If a METAR bulletin is received as follows :

SAUK02 EGGW 201650Z METAR
EGLL 201650Z etc.

Then it shall be modified to

SAUK02 EGGW 201650 METAR
EGLL 201650Z etc.

3.5.2 AHL Spurious Character Error

If an AHL is received with a single character following the YYGGgg, then it shall be corrected by deleting that character and any spaces between YYGGgg and the alignment function.

For example:

WSAZ31 LPMG 221749<SP>7<CR><LF>

shall be modified to:

WSAZ31 LPMG 221749<CR><LF>

3.5.3 White Space Error

If any blank lines consisting of superfluous spaces and/or alignment functions are found between the AFTN Origin line and the AHL, then they shall be automatically deleted.

For example:

a) 230611 OLLLYPYX<CR><LF>
<STX><CR><LF> SAIR31 OIII 230600 etc.

shall be output as:

230611 OLLLYPYX<CR><LF>
<STX>SAIR31 OIII 230600 etc.

b) 112356 LIIBYPYX<CR><LF>
<STX><CR><LF>
<CR><LF>
SAIY32 LIIB 112350

shall be output as

112356 LIIBYPYX<CR><LF>
<STX>SAIY32 LIIB 112350

3.5.4 Pre AHL Error

It shall be possible to configure a list of text strings, that if found between AFTN Origin line and the AHL, shall be automatically deleted from the message.

For example Assuming that 'FOR MOTNE' is one of the configured strings then

221802 LCLKYMYX<CR><LF>
<STX>FOR MOTNE<CR><LF>
SACY31 LCLK 221800 etc.

shall be output as:

221802 LCLKYMYX<CR><LF> <STX>SACY31
LCLK 221800 etc.

3.5.5 End of Message Errors

It shall be possible to configure a list of text strings, that if found between the last '=' and the <VT><ETX>, shall be automatically deleted from the message.

For example, assuming that 'DUPE' is one of the configured strings

.....06/05 Q1020=<CR><LF>
DUPE<CR><LF>
<VT>
<ETX>

the string 'DUPE', along with any alignment functions, shall be deleted and the message shall be output as:

.....06/05 Q1020=<CR><LF>
<VT>
<ETX>

4 Data Monitoring Procedures

4.1 Off-line Monitoring

Off-line monitoring shall involve the recording and analysis of data provided by SADIS for the EANPG METG Data Management Group (DMG) and shall be carried out as per their procedures, and the production of Performance Indicators for availability on SADIS.

Data shall be monitored according to the procedures defined in the EUR OPMET Data Monitoring Procedures as produced by the EANPG METG DMG.

4.2 On-line Monitoring

On-line monitoring involves the automatic checking for the presence of particular data. It is expected that the Gateway will monitor around 100 individual aerodromes to ensure that METARs and TAFs are regularly received. Should no TAF or METAR for a monitored aerodrome be received within a configurable period then a notification message is issued and an alarm is raised and operators shall follow a procedure to investigate the problem. A list of aerodromes to be monitored is published on the UK Met Office web site, and is a subset of the list in Appendix B of this document.

The procedure for aerodrome alarms is to locally check the reception of the source bulletin and based on the results of that check carry out further communications checks to eventually contact the aerodrome to ascertain if there is a local problem.
The Gateway shall also monitor a smaller list of around 30 bulletins to ensure that the bulletins are received. Should a monitored bulletin not be received within a configurable period then a notification message is issued and an alarm is raised and operators shall follow a procedure to investigate the problem. A list of bulletins to be monitored is provided in Appendix B 8.2.1 of this document.

The procedure for bulletin alarms is to locally check the reception of the bulletin and based on the results of that check, carry out further communications checks and eventually contact the compiling centre to ascertain if there is a local problem. This may involve the transmission of an NOUK33 EGGY bulletin to gather information on the nature of the problem (see section 4.6 for an example).

The results of the investigations will be promulgated in an NOUK34 EGGY bulletin (see section 4.6 for an example).

The selection criteria for aerodromes and bulletins for monitoring are described in section 7.

5 User Notification Procedures

5.1 General

This section shall also be divided into 2 sub-sections. The first dealing with routine information such as updates to data catalogues etc. shall describe how messages notifying users of routine system information shall be formatted and transmitted. It should also describe under what conditions such messages shall be transmitted.

The second section, dealing with the response to faults, shall describe how messages notifying users of system faults shall be formatted and transmitted. It should also describe under what conditions such messages shall be transmitted and what follow up information should be provided to users when faults are cleared and when they persist.

5.2 Routine Notifications

Routine information is generally disseminated by means of Admin messages. The approved ADMIN message headers automatically routed to SADIS include:

NOUK10 EGRR	– generally used to advise on model or product difficulties, engineering outages, and product changes. This is the preferred bulletin header for general messages
NOUK11 EGRR	– other advice messages.
NOUK12 EGRR	- this provides a text message directing users how to decode GRIB values. It is mainly used by Workstation Suppliers.
NOUK13 EGRR	- SADIS user Guide Updates (ICAO can only authorise these messages).
NOUK31 EGGY	NATS advisory messages
NOBX99 EBBR	DMG METNOs describing changes to bulletins promulgated in the EUR Region
PLUK30 EGRR PLUK31 EGRR PLUK32 EGRR PLUK33 EGRR PLUK34 EGRR	The PL series have been reserved for any graphical ADMIN messages but users would be alerted and directed from a NOUK10 EGRR message

Met Office originated messages (EGRR) are produced by the SADIS Manager or by the Operations Centre. All messages produced outside of normal working hours originate from the Operations Centre. 24-hour, 365 day-a-year cover is provided by the Operations Centre.

All NOUK10 EGRR and NOUK11 EGRR messages are also available for viewing via the SADIS web page at URL:

http://www.metoffice.gov.uk/sadis/news/index.html

Messages are placed on this web page in an operational, real-time basis.

An example of an NOUK10 message is provided below: -

NOUK10 EGRR 131100
ATTENTION ALL SADIS USERS

INCIDENT NUMBER: N/A
SERVICES AFFECTED:
SADIS FTP
DATASTREAMS AFFECTED:
OPMET
PNG/BUFR
DETAILS: VOLCANIC ASH FORECAST EXERCISE, TUESDAY, 14 FEBRUARY 2017
BETWEEN APPROXIMATELY 1400 UTC AND 1730 UTC TOMORROW, TUESDAY
14 FEBRUARY 2017, VAAC LONDON WILL BE TAKING PART IN A VOLCANIC
ASH EXERCISE.
VOLCANIC ASH ADVISORY (VAA), VOLCANIC ASH GRAPHIC (VAG) AND VOLCANIC ASH
CONCENTRATION FORECAST INFORMATION, WILL BE
ISSUED.
THESE PRODUCTS WILL ALL BE CLEARLY IDENTIFIED AS TEST OR EXERCISE MESSAGES.
NO ACTION SHOULD BE TAKEN.

DATE/TIME OF NEXT UPDATE: N/A.

ISSUED BY: SADIS MANAGER
LOCATION: WAFC LONDON

A COPY OF THIS MESSAGE WILL APPEAR AT (USE LOWER CASE):
HTTP://WWW.METOFFICE.GOV.UK/SADIS/NEWS/

WAFC LONDON SERVICE DESK CONTACT DETAILS:
EMAIL: SERVICEDESK@METOFFICE.GOV.UK
TELEPHONE: +44 (0)1392 886666

5.3 Fault Notifications

5.3.1 Non-Routine Fault Notification

The following SADIS Administration messages may contain information on problems with the SADIS Service

NOUK10 EGRR	– generally used to advise on model or product difficulties, engineering outages, and product changes. This is the preferred bulletin header for general messages.
NOUK32 EGGY	NATS advisory messages, Automatic SADIS Monitor Messages (see below).
NOUK33 EGGY	NATS advisory messages, Manually generated by SADIS Gateway Operators for data providers and communications centres requesting information on missing data.
NOUK34 EGGY	NATS advisory messages, Manually generated by SADIS Gateway Operators for SADIS users informing them of the nature of a problem.

In order to make it easier for SADIS users to identify if a particular aerodrome or bulletin is missing the bulletins and aerodromes shall be ordered alphabetically.

A LAST RECEIVED AT time shall be provided for each aerodrome or bulletin that is the subject of an alarm.

Examples are shown below.

Example 1 Bulletin Message

```
NOUK32 EGGY 231233
SADIS GATEWAY MONITOR BULLETINS
NOT RECEIVED

FCHJ20 FAPR LAST RECEIVED AT 231000Z
FCJH32 ESSA LAST RECEIVED AT 231000Z

FTHJ20 FAPR LAST RECEIVED AT 231000Z
FTJH32 ESSA LAST RECEIVED AT 231000Z

SAKL23 EGLL LAST RECEIVED AT 231050Z
SAOS31 EGLL LAST RECEIVED AT 231110Z
END OF MESSAGE
```

Example 2 Aerodrome Message

```
NOUK32 EGGY 231233
SADIS GATEWAY MONITOR
AERODROME DATA NOT RECEIVED

EGNT SA LAST RECEIVED AT 231950Z
FAPR SA LAST RECEIVED AT 231000Z
FAPR FC LAST RECEIVED AT 231000Z
KJFK FT LAST RECEIVED AT 230930Z
END OF MESSAGE
```

Example 3 Advisory Messages for SADIS Users

```
NOUK34 EGGY 231233
SADIS GATEWAY MONITOR
FOLLOWING AN INVESTIGATION THE STATION/S BELOW IS/ARE
UNAVAILABLE DUE TO PROBLEMS AT THE REPORTING STATION/S KJFK
END OF MESSAGE


NOUK34 EGGY 231233
SADIS GATEWAY MONITOR
FOLLOWING AN INVESTIGATION THE STATION/BULLETIN BELOW IS UNAVAILABLE
DUE TO PROBLEMS AT THE BULLETIN COMPILING CENTRE. LIMM
END OF MESSAGE


NOUK34 EGGY 231233
SADIS GATEWAY MONITOR
FOLLOWING AN INVESTIGATION, THE IS A COMMS FAILURE BETWEEN
EGGY AND WSSS
THIS WILL AFFECT ALL BULLETINS FROM ASIA/PAC REGION.
END OF MESSAGE
```

Example 4 Advisory Message for Data Providers/Comms Centres

```
NOUK33 EGGY 231233
SADIS GATEWAY MONITOR
WE HAVE NOTICED THE FOLLOWING STATIONS ARE NOT AVAILABLE PLEASE
INVESTIGATE AND REPORT BACK TO EGGY (Address to be confirmed). RKSS
END OF MESSAGE
```

6 Service Desk Procedures

6.1 General

This will describe how faults received over the service desk shall be dealt with. It shall include details of how faults should be logged and tracked and how the user who raised the fault shall be kept aware of the fault status. Note that it may not be possible to personally follow up every problem raised with the fault desk with an individual response.

This will describe how the service desk should deal with non-fault related queries, such as requests for connection etc. It will include a list of contacts to which calls can be appropriately delegated and what sort of queries should be rejected.

6.2 Call Logging

Information to be logged:

- Caller details – name, location and telephone contact number or email address
- Incident details – two field categorisation plus free text information
- Date and time of logging
- Incident reference number (INC)

Method of call logging:

- Telephone +44(0) 330 135 4444
- E-mail servicedesk@metoffice.gov.uk

6.3 Call Logging Targets

Telephone
80% of all calls to be answered within 20 seconds
95% of all calls to be answered within 5 minutes

e-mail requests
80% logged within 15 minutes of receipt
95% logged within 4 hours of receipt

All incidents logged will have a unique reference assigned to them (an IDC number) – this reference number should be quoted if any follow up action is required.

6.4 Level One Support

The first phase of level one support is immediate telephone support and shall be undertaken following the call logging process using information that is readily available and quickly deliverable. Requests for repeat data will, at this stage, be routed through to the IT Operations (IT Ops) team. It should be noted however, that data re-sends are not normally initiated unless a product has failed to be distributed to ALL recipients. The IT Operations operators have access to a bulletin monitoring program that clearly indicates whether a product has been successfully transmitted and received (in Exeter) via SADIS. This approach is taken to prevent confusion to users when multiple distribution of the same product occurs.

Targets:

- provide the first phase of support in less than 5 minutes
- to log all actions taken

The second phase of level one support shall be undertaken to cover any issues that are contained in the user guide or deal with data supply problems.

Targets:

- to be completed within 30 minutes
- to log all actions taken

System Monitoring:
Provide system monitoring and action specific events as agreed with the SADIS support team.

7 Administrative Procedures

7.1 On-Line Monitoring Administration

Routinely the Gateway will monitor a subset of Aerodromes and bulletins defined in Appendix B of this document. The SADIS provider shall modify the subset so that irregular and permanently missing aerodromes are not included. This is intended to ensure that alarm messages are not ignored because they always include such aerodromes or bulletins. The lists in Appendix B may be modified by the agreement of WG-MOG or a group authorised by the WG-MOG.
The aerodromes monitored are based on the busiest aerodromes in terms of passenger traffic. . Other aerodromes from regions not well represented according to these criteria have also been added. This monitoring is designed to provide an early indication of when meteorological data for an important regional aerodrome ceases to be regularly promulgated. Bulletin monitoring is concentrated on major compilation centres, especially those that support inter-regional communications and major regional databanks. The loss of bulletin for these centres may signal significant communications failures with respect to meteorological data.
The Gateway may also monitor other aerodromes and bulletins on a tactical basis in order to track emerging problems but this monitoring will not be promulgated on the SADIS FTP.

7.2 Requestsfor new data

Appropriate routing will be added to the Gateway when new data requirements are defined by WG-MOG. Implementation of the requests will be carried according to the procedures defined in the EUR OPMET Data Update Procedures as produced by the EANPG METG Data Management Group.

7.3 Unrecognised Data

If unrecognised non-scheduled data, e.g. SIGMETs, are received by the Gateway the following actions shall be taken.

- The data shall be included in the SADIS data feed.
- Details of the information shall be promulgated in the next DMG METNO (NOBX99 EBBR) according to the standard procedures.

If unrecognised scheduled data, e.g. METARs or TAFs, are received by the Gateway the following actions shall be taken.
If the data is defined in the eANP MET Tables as required data then

- The data shall be included in the SADIS data feed.
- Details of the information shall be promulgated in the next BMG METNO (NOBX99 EBBR) according to the standard procedures.

If the data is not defined in the eANP MET Tables as required data then
the data will not be routed on the SADIS data feed.

8 Appendicies

8.1 Appendix A Validation Parameters

8.1.1 General header Validation

Parameter	Value	Description
Default ii	41	ii value used if none present
SA T1	15	Limit of permitted SA AHL YYGGgg after current time
SA T2	90	Limit of permitted SA AHL YYGGgg before current time
FC T1	240	Limit of permitted FC AHL YYGGgg after current time
FC T2	360	Limit of permitted FC AHL YYGGgg before current time
FT T1	480	Limit of permitted FT AHL YYGGgg after current time
FT T2	720	Limit of permitted FT AHL YYGGgg before current time
WS T1	360	Limit of permitted WS AHL YYGGgg after current time
WS T2	720	Limit of permitted WS AHL YYGGgg before current time
WC T1	720	Limit of permitted WC AHL YYGGgg after current time
WC T2	1440	Limit of permitted WC AHL YYGGgg before current time
WV T1	720	Limit of permitted WV AHL YYGGgg after current time
WV T2	1440	Limit of permitted WV AHL YYGGgg before current time
WA T1	360	Limit of permitted WA AHL YYGGgg after current time
WA T2	720	Limit of permitted WA AHL YYGGgg before current time

8.1.2 METAR Validation

Parameter	Value	Description
SA T3	15	Limit of permitted Observation Time after current time
SA T4	90	Limit of permitted Observation Time before current time

8.1.3 TAF Validation

Parameter	Value	Description
FC T3	240	Limit of permitted Time of Forecast after current time (FC)
FC T4	360	Limit of permitted Time of Forecast before current time (FC)
FC T5	360	Limit between current time and start of validity (FC)
FC T6	720	Limit of validity period (FC)
FT T3	720	Limit of permitted Time of Forecast after current time (FT)
FT T4	840	Limit of permitted Time of Forecast before current time (FT)
FT T5	720	Limit between current time and start of validity (FT)
FT T6	1800	Limit of validity period (FT)

8.1.4 SIGMET Validtion

Parameter	Value	Description
WS T5	360	Limit between current time and start of validity (WS)
WS T6	720	Limit of validity period (WS)
WC T5	720	Limit between current time and start of validity (WC)
WC T6	1440	Limit of validity period (WC)
WV T5	720	Limit between current time and start of validity (WV)
WV T6	1440	Limit of validity period (WV)
WA T5	360	Limit between current time and start of validity (WA)
WA T6	720	Limit of validity period (WA)

8.2 Appendix B Online Monitoring Lists

8.2.1 Routine Aerodrome routine Monitoring

Location Indicator	Aerodrome Name	SA	FC	FT
CYVR	VANCOUVER INTL, BC	X		X
CYYZ	TORONTO/LESTER B. PEARSON INTL, ON	X		X
DAAG	ALGER/HOUARI BOUMEDIENE	X		X
DNAA	ABUJA/NNAMDI AZIKIWE	X		X
EBBR	BRUSSELS/BRUSSELS-NATIONAL	X		X
EDDF	FRANKFURT/MAIN	X		X
EDDL	DUESSELDORF	X		X
EDDM	MUENCHEN	X		X
EDDT	BERLIN-TEGEL	X		X
EGCC	MANCHESTER	X		X
EGKK	LONDON GATWICK	X		X
EGLL	LONDON HEATHROW	X		X
EHAM	AMSTERDAM/SCHIPHOL	X		X
EIDW	DUBLIN	X		X
EKCH	KOBENHAVN/KASTRUP	X		X
ENGM	OSLO/GARDERMOEN	X		X
ESSA	STOCKHOLM/ARLANDA	X		X
FACT	CAPE TOWN (CAPE TOWN INTERNATIONAL AIRPORT)	X		X
FAOR	JOHANNESBURG INTERNATIONAL AIRPORT	X		X
FLKK	KENNETH KAUNDA	X		X
GOOY	DAKAR/YOFF	X		X
HKJK	NAIROBI/JOMO KENYATTA INTL. TWR/APP/NOF/MET/CIVIL AIRLINES	X		X
KATL	HARTSFIELD - JACKSON ATLANTA INTERNATIONAL, GA.	X		X
KBOS	BOSTON/GENERAL EDWARD LAWRENCE LOGAN INTERNATIONAL, MA.	X		X
KDEN	DENVER INTERNATIONAL	X		X
KDFW	DALLAS-FORT WORTH INTERNATIONAL, TX.	X		X
KDTW	DETROIT METROPOLITAN WAYNE COUNTY, MI.	X		X
KEWR	NEWARK LIBERTY INTERNATIONAL, NJ.	X		X
KFLL	FORT LAUDERDALE/HOLLYWOOD INTERNATIONAL, FL.	X		X
KIAD	WASHINGTON DULLES INTERNATIONAL, DC.	X		X
KIAH	GEORGE BUSH INTERCONTINENTAL/HOUSTON, TX.	X		X
KJFK	NEW YORK/JOHN F. KENNEDY INTERNATIONAL, NY.	X		X
KLAS	LAS VEGAS/MCCARRAN INTERNATIONAL, NV.	X		X
KLAX	LOS ANGELES INTERNATIONAL, CA.	X		X

KLGA	NEW YORK/LA GUARDIA, NY.	X		X
KMCO	ORLANDO INTERNATIONAL, FL.	X		X
KMDW	CHICAGO/CHICAGO MIDWAY,IL.	X		X
KMIA	MIAMI INTERNATIONAL, FL.	X		X
KMSP	MINNEAPOLIS-ST. PAUL INTERNATIONAL (WOLD CHAMBERLAIN), MN.	X		X
KORD	CHICAGO - O'HARE INTERNATIONAL, IL.	X		X
KPHL	PHILADELPHIA INTERNATIONAL, PA.	X		X
KPHX	PHOENIX SKY HARBOR INTERNATIONAL, AZ.	X		X
KSAN	SAN DIEGO INTERNATIONAL, CA.	X		X
KSEA	SEATTLE/SEATTLE-TACOMA INTERNATIONAL, WA.	X		X
KSFO	SAN FRANCISCO/INTL,CA.	X		X
KSLC	SALT LAKE CITY INTERNATIONAL, UT.	X		X
KTPA	TAMPA INTERNATIONAL, FL.	X		X
LEBL	BARCELONA/EL PRAT	X		X
LEMD	MADRID/BARAJAS	X		X
LEPA	PALMA DE MALLORCA	X		X
LFPG	PARIS-CHARLES DE GAULLE	X		X
LFPO	PARIS-ORLY	X		X
LGAV	ATHINAI/ELEFTHERIOS VENIZELOS	X		X
LIMC	MILANO/MALPENSA	X		X
LIRF	ROMA/FIUMICINO	X		X
LOWW	WIEN-SCHWECHAT	X		X
LPPT	LISBOA	X		X
LSZH	ZURICH	X		X
LTAI	ANTALYA (MIL-CIV)	X		X
LTBA	ISTANBUL/ATATURK	X		X
MKJP	KINGSTON/NORMAN MANLEY	X		X
MMMX	MEXICO CITY	X		X
MPTO	PANAMA/TOCUMEN	X		X
NZAA	AUCKLAND INTL	X		X
OEJN	JEDDAH/KING ABDULAZIZ INTERNATIONAL	X		X
OIII	TEHRAN/MEHRABAD INTL	X		X
OMDB	DUBAI INTERNATIONAL	X		X
OTHH	HAMAD INTERNATIONAL/DOHA	X		X
PHNL	HONOLULU INTERNATIONAL, OAHU, HI.	X		X
RCTP	TAIBEI CITY/TAIBEI INTL AP	X		X
RJAA	NARITA INTL/TOKYO	X		X
RJCC	SAPPORO/NEW CHITOSE	X		X
RJFF	FUKUOKA	X		X
RJTT	TOKYO INTL	X		X
RKSI	INCHEON INTL/SEOUL	X		X
RPLL	MANILA/NINOY AQUINO INTL	X		X

SAEZ	EZEIZA MINISTRO PISTARINI, INTL. (BA)	X		X
SBGL	RIO DE JANEIRO/GALEAO-ANTONIO CARLOS JOBIM, RJ	X		X
SBGR	SAO PAULO/GUARULHOS, GOVERNADOR ANDRE FRANCO MONTORO, SP	X		X
SKBO	BOGOTA INTL/CUNDINAMARCA	X		X
SPIM	LIMA-CALLAO/INTL JORGE CHAVEZ	X		X
TBPB	GRANTLEY ADAMS,BARBADOS	X		X
UUDD	MOSCOW/DOMODEDOVO	X		X
UUEE	MOSCOW/SHEREMETYEVO	X		X
VABB	MUMBAI	X		X
VHHH	HONG KONG/INTERNATIONAL	X		X
VIDP	DELHI (IGI)	X		X
VTBS	BANGKOK/SUVARNABHUMI INTL AIRPORT	X		X
WIII	JAKARTA INTL/SOEKARNO-HATTA	X		X
WMKK	SEPANG/KL INTERNATIONAL AIRPORT	X		X
WSSS	SINGAPORE/CHANGI	X		X
YBBN	BRISBANE/BRISBANE INTL	X		X
YMML	MELBOURNE/MELBOURNE INTL	X		X
YSSY	SYDNEY/SYDNEY (KINGSFORD SMITH) INTL	X		X
ZBAA	BEIJING/CAPITAL	X		X
ZGGG	GUANGZHOU/BAIYUN	X		X
ZGSZ	SHENZHEN/BAOAN	X		X
ZSPD	SHANGHAI/PUDONG	X		X
ZUUU	CHENGDU/SHUANGLIU	X		X

8.2.2 Routine Bulletin Monitoring

TT	AAii	CCCC
FC	BX31	EBBR
FC	FR31	LFPW
FT	IY31	LIIB
FT	JP31	RJTD
FC	OS32	LOWM
FT	RA37	RUMS
FC	UK31	EGGY
FT	AO20	DRRN
FT	AE31	VTBB
FT	BZ22	SBBR
FT	SR31	WSSS
FT	US21	KWBC
FT	ZA31	FAPR
SA	AO31	GOOY
SA	AE31	VTBB
SA	BX31	EBBR
SA	BZ22	SBBR
SA	JP31	RJTD
SA	FR31	LFPW
SA	IY31	LIIB
SA	OS31	LOWM
SA	RA35	RUMS
SA	UK31	EGGY
SA	US21	KWBC
SA	ZA31	FAPR

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