



International Civil Aviation Organization

**EIGHTH MEETING OF THE ASIA/PACIFIC OPMET MANAGEMENT
TASK FORCE (OPMET/M TF/8)**

Bangkok, Thailand, 23 – 25 March 2010

Agenda Item 2c: Status report of Regional OPMET Data Bank

AN UPDATE ON OPMET DATABANK OPERATIONS

(Presented by Singapore)

SUMMARY

This paper presents the recent development of OPMET Data Bank, include new features on emailing OPMET messages.

1. INTRODUCTION

1.1 Singapore Messages Switching System had undergone a major upgrade in December 2009.

1.2 Some key functions are highlighted as follows:

- a) The new OPMET software validates OPMET queries and responses in accordance with the ICD.
- b) The System is able to receive and distribute OPMET messages and DB queries via SMTP (OPMET information enclosed in an email or as an attachment according to POP3 (Post Office Protocol version 3) standards)
- c) The System is able to support AFTN Gateway and AMHS connectivity.
- d) The System could automatically convert messages from the Traditional Alphanumeric Code form (TAC) to BUFR and vice versa.
- e) The System could handle message switching in XML, Extensible Markup Language for OPMET, such as TAF, METAR and SPECI.
- f) The System is able to handle both the existing GRIB format (GRIB1) as well as the new GRIB2 format to be implemented by WMO and WAFCs in the near future.

2. GENERAL INFORMATION

2.1 Receive OPMET messages through emailing

E-mail address: mss@weather.gov.sg

E-mail subject: METEO

The Message Switch will accept mail reception and automatic process the bulletin contained in the mails. Although HTML tags are removed, it is recommended that the message is in raw format to avoid the message going to correction due to extra text in the mail.

The OPMET messages received from emails could be routed to other users through AFTN.

From: Chua Guat Mui <cguatmui@gmail.com>
To: mss@weather.gov.sg
Cc:
Bcc:
Add Cc Add Bcc
Subject: METEO

Message Content

SABD31 WBSB 220400
METAR WBSB 220400Z 03009KT 9999 SCT017 BKN300 30/24 Q1013 NOSIG=

2.2 Distribute OPMET messages through emailing

OPMET message sent to one or more E-mail addresses

from MESSIR-COMM <mss@weather.gov.sg>
to EMAILOUT <...>

date Wed, Feb 17, 2010 at 3:00 PM
subject **SASR31**

SASR31 WSSL 170700
METAR WSSL 170700Z 03014KT 9999 SCT020 FEW022TCU BKN300 33/23 Q1009 RMK
0630Z Q1009

2nd message sent to the same Inbox

from MESSIR-COMM <mss@weather.gov.sg>
to EMAILOUT <...>

date Wed, Feb 17, 2010 at 4:00 PM
subject SASR31

SASR31 WSSL 170800
METAR WSSL 170800Z 05009KT 9999 FEW018TCU SCT020 BKN300 32/23 Q1008 RMK
0730Z Q1008 =

2.3 Data Bank Query through emailing

E-mail address: mss@weather.gov.sg
E-mail subject: METEO

RQM Message

From: Chua Guat Mui <cguatmui@gmail.com>
To: mss@weather.gov.sg
Cc:
Bcc:
Add Cc Add Bcc
Subject: METEO

RQM/FTWMKK,ZSSS=

Reply mail - attaching files to a document

(no subject)
InboxX

msg00000067
1K Download

msg00000068
1K Download

msg00000067
1K Download

FTXX99 WSSS 092144
TAF ZSSS 092144Z 1000/1024 04006MPS 3500 -RA BR BKN006
OVC033 TEMPO 1018/1024 1500 BKN004 OVC033=

msg00000068
1K Download

FTXX99 WSSS 092100
TAF WMKK 092100Z 1000/1024 05008KT 9999 FEW017CB SCT140
BKN280=

Reply mail - opening the mail and reading the messages

SAXX99 WSSS 030300
METAR VTBS 030300Z 18011KT 150V220 9999 SCT017 BKN300 31/23 Q1012
NOSIG=
METAR VTCC 030300Z 11002KT 6000 NSC 26/13 Q1014 A2996=

SAXX99 WSSS 030230
METAR VYYY 030230Z 04002KT 6000 HZ SCT280 23/21 Q1012=

An Email-Out channel is setup in the Messages Switch to transmit a textual bulletin by email to a computer on the Internet.

This channel can be used for transmitting binary messages or flight document (sent as an attachment) to external users through emails.

2.4 Standardization of Databank Response Format

In compliance with the DB ICD, Singapore RODB implemented “XX” geographical designator in the WMO abbreviated heading of a reply message as of 2 December 2009.

The abbreviated heading of a reply message is constructed as TTAAii CCCC YYGGgg where:

TT	=	the requested data type
AA	=	XX : fixed geographical designator for database reply
ii	=	99 : fixed bulletin number for database reply
CCCC	=	location indicator of the reply database (e.g. WSSS)
YYGGgg	=	date/time group of the original bulletin

Examples:

SAXX99 WSSS 270800

METAR ZLLL 270800Z 10004MPS 080V140 CAVOK 02/M13 Q1013 NOSIG=
METAR ZHHH 270800Z 21002MPS 1600 BR SCT015 09/09 Q1016 TEMPO 1400 BR=

FTXX99 WSSS 022200

TAF WADD 022200Z 0300/0406 28010KT 9999 FEW018CB SCT018
TEMPO 0319/0323 7000 TSRA FEW017CB BKN017=
TAF WIHH 022200Z 0300/0324 27007KT 6000 HZ SCT018
TEMPO 0307/0310 18012KT 3000 TSRA FEW017CB BKN018
BECMG 0315/0318 00000KT 5000 HZ SCT020=

3 Action by the Meeting

3.1 The meeting is invited to note the information presented.

3.2 Singapore RODB is ready to accept OPMET messages through emailing and forward to WAFCs via AFTN.
