International Civil Aviation Organization

Eight Meeting of the Communications/Navigation/Surveillance and Meteorology Sub-Group (CNS/MET/SG/8) of APANPIRG

Bangkok, Thailand, 12 – 16 July 2004

Agenda Item 9: Exchange of OPMET Information
2) Review of regional guidance documents on OPMET

NEW EDITION OF THE ASIA/PAC OPMET ICD

(Presented by Secretariat)

SUMMARY

This paper presents the draft new edition of the ASIA/PAC regional interface control document (ICD) OPMET data bank access procedures – 2004.

1. INTRODUCTION

1.1 The new edition of ASIA/PAC regional interface control document (ICD) OPMET data bank access procedures have been revised as shown in Attachment A.

2. DISCUSSION

2.1 The ICD has been revised in order to be consistent with the new edition of the ROBEX Handbook.

2.2 It should be noted that some chapters of the ICD are still under preparation. Nevertheless, the OPMET/M TF/2 meeting was of the opinion that the new ICD should be published as soon as possible.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) Review the draft new version of the ASIA/PAC ICD for OPMET data banks and agree on its publishing by ICAO.

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ASIA/PACIFIC REGIONAL INTERFACE CONTROL DOCUMENT OPMET DATA BANK ACCESS PROCEDURES

2004

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1. INTRODUCTION

1.1 Purpose

This document defines the standard access procedures for the designated Regional OPMET Databanks (RODB) in the ASIA/PAC Region. By accessing these databanks, the user implicitly acknowledges the disclaimer in p. ….

1.2 Organisation

This Interface Control Document contains details of:

- The locations and AFTN addresses of the RODBs;
- The request and reply AFTN message formats; and
- The standard available meteorological products.

2 REGIONAL OPMET DATABANKS

2.1 Location

The designated RODBs in the ASIA/PAC Region are located at Bangkok, Brisbane, Nadi, Singapore and Tokyo.

2.2 AFTN Access Addresses

The AFTN addresses that must be used to access the RODBs are the following:

Bangkok	VTBBYZYX
Brisbane	YBBBYZYX
Nadi	NFFNYZYX
Singapore	WSSSYZYX
Tokyo	RJTDYZYX

2.3 Meteorological Data Types

The following meteorological data types, as defined by the WMO data designator indicator, are stored and available on request from the RODBs:

TT	**Message Type**
SA	METAR
SP	SPECI
FC	9/12 HR TAF
FT	18/24 HR TAF
WS	SIGMET
WC	Tropical Cyclone SIGMET
WV	Volcanic Ash SIGMET
UA	Special AIREP (1)

FV	Volcanic Ash Advisory (VAA)
FK	Tropical Cyclone Advisory (TCA)

Note (1): *Not yet available in the ASIA/PAC RODBs.*

Note (2): *Further data types may be added as new requirements emerge. Only data with valid WMO abbreviated headings as defined in the WMO publication N°386 shall be processed.*

3 REQUEST/REPLY MESSAGE FORMAT

3.1 Request Messages

3.1.1 Request messages shall follow the AFTN standard telecommunication procedures as defined in Annex 10, Volume II. The text part of the messages shall be as defined in this document.

Note: *The standard AFTN message start and end characters and alignment characters (SOH, STX and ETX for ITA-5 format or ZCZC and NNNN for ITA-2 format) have been omitted for clarity in the following examples.*

3.1.2 Request messages shall use the AFTN priority GG.

3.1.3 The general format of the request message is as follows:

GG xxxxYZYX
YYGGgg yyyyyyyy
RQM/TTCCCC,(report(s)).../**TTAAii, (bulletin(s))...=**
RQM/TTCCCC,(report(s)).../**TTAAii, (bulletin(s))...=**
….

Where:

3.1.3.1 In the AFTN heading:

xxxxYZYX	is the AFTN address of the databank
YYGGgg	is the message origination date-time group
yyyyyyyy	is the AFTN address of the originator of the request

3.1.3.2 Each data request line is composed of the following elements:

RQM/	indicates the start of a data request line
TT	WMO data type identifier (see paragraph 2.3)
CCCC	4-letter location indicator (ICAO publication 7910)
or	
AAii	bulletin identifier (WMO manual 386, table C1 for AA)
=	indicator of the end of a request line.

3.1.3.3 Delimiters can be used within a request line as follows:

, indicates more requests for reports or bulletins for the same data type

/ indicates a new data type request within the same data request line

3.1.4 The length of the request line shall not exceed 69 characters including 'RQM' and the '=' signal. Up to ten request lines can be included in one AFTN request message, unless otherwise noted by the RODB (see the restrictions paragraph in the Appendices).

3.1.5 **Examples of request types**

3.1.5.1 ***Request for one data type at one location***

The format of the request line to obtain one MET data type for one location is as follows:

RQM/TTCCCC=

Examples:

1. RQM/SAYSSY=
2. RQM/FCWSSS=

3.1.5.2 ***Request for one data type at two or more locations***

The format of the request line to obtain one MET data type for two or more locations is as follows:

RQM/TTCCCC$_1$,CCCC$_2$,.....,CCCC$_n$=

Note: *Up to ten locations can be included in a request line.*

Examples:

1. RQM/SAYSSY,YBBN,YMML=
2. RQM/FTNZAA,NZCH=

3.1.5.3 ***Request for two or more data types at one location***

The format of the request line to obtain two or more MET data types for one location is as follows:

RQM/TT$_1$CCCC,TT$_2$,.....,TT$_n$=

Examples:

1. RQM/SAYMML,FC=
2. RQM/FTNFFN,SA,WC=

3.1.5.4 ***Request for different data types at different locations***

The format of the request line to obtain different MET data types for a number of locations is as follows:

RQM/TT$_1$CCCC,CCCC, …/TT$_2$CCCC,CCCC,…/...../TT$_n$CCCC,CCCC,…=

Examples:

1. RQM/SAYSSY/FCYBBN,YMML/FTYMML=

3.1.5.5 ***Request for a Meteorological Bulletin***

The format of the request line to obtain a Meteorological Bulletin is as follows:

RQM/TTAAii=

Examples:

1. RQM/FTAE31=
2. RQM/SAJP39=

Note: *Only one bulletin can be requested in an RQM request line. Up to six bulletins can be included in a request message*

3.1.5.6 ***Other Request Options***

RODBs may apply other specific request formats and options, such as requesting a number of preceding messages of certain data type, which shall be described in the "specific request formats" section in the Appendices for each RODB.

3.2 **Reply messages**

3.2.1 If the AFTN address of the originator of a request is authorised, the databank shall automatically reply to the AFTN originator address given in the request message.

3.2.2 Valid requests for bulletins and/or messages shall produce an answer, which shall be returned in a standard WMO bulletin format embedded as text in a standard AFTN message. Each bulletin shall be sent as a separate message.

3.2.3 Per valid requested bulletin or message(s) belonging to the same type and concerning valid stored messages, one or more reply bulletins shall be generated. Non valid requested groups shall be replied by an appropriate Information or Error Reply message.

3.2.4 In preparing the reply messages by the RODBs the following shall apply:

3.2.4.1 A reply for a METAR request shall consist of the latest METAR or SPECI reports available for the concerned station.

3.2.4.2 When a query for WS SIGMETs is received, the reply shall contain all valid WS, WV and WC SIGMETs that are available for the FIR.

3.2.5 **Format of the reply message**

3.2.5.1 The WMO abbreviated heading of a reply message will be constructed as:

TTAAii CCCC YYGGgg

where:

NOTE: ***The following format of the WMO heading for the RODB Reply message is proposed for use in the EUR Region. It should be further studied if this format is suitable for ASIA/PAC Region.***

TT	=	is the requested data type (e.g., SA)
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. VTBD, WSSS, etc.)
YYGGgg	=	depending on the original DTG of the Bulletin Header

Note: *for the issuing times of the TAFs and the observation times of the METARs, the user should refer to the DTG in the reports, which might be different from the DTG in the header.*

Example:

SAXX99 VTBD 031200
METAR CCCC 031200Z …
METAR CCCC 031200Z
…

3.2.5.2 The abbreviated heading of an *Information* or *Error Reply* message will be constructed as:

TTAAii CCCC YYGGgg

where :

TT	=	**ZZ**
AA	=	**XX** : fix geographical designator for database reply
ii	=	**99** : fix bulletin number for database reply
CCCC	=	location indicator of the reply database (e.g. VTBD, WSSS, etc.)
YYGGgg	=	DTG corresponding to the issuing time of the Information or Error Reply

3.2.6 Format of the *Information* and *Error* reply messages

TO BE DEVELOPED

4. DATABASE MISUSE AND ABUSE

4.1 The RODBs shall on a continuous basis monitor all the requests received from AFTN-users. In order to determine possible abuse or misuse of the ASIA/PAC Infrastructure (ASIA/PAC RODBs and ROBEX scheme), a detailed investigation may be performed for all frequent users. A frequent user is a user performing 100 requests or more per day, on a regular basis.

4.2 These investigations might lead to the detection of:

4.2.1 **Misuse** of the DB: the DB is not used in the way it is intended to.

A typical example of misuse would be a user requesting on a regular basis (e.g. every hour) the same reports. In case of misuse of a RODB, the ICAO Regional Office should be notified and requested contact the database user , together with its Parent RODB or ROBEX centre (or equivalent for interregional users), in order to find an alternative way to receive the required data. If a suitable solution is found to receive the data using the regular OPMET exchange procedures, but this solution is not accepted by the databank user (i.e. the misuse continues), then the RODB could decide to limit *or block* the access to the ASIA/PAC OPMET Database for this user.

4.2.2 **Abuse** of the DB: users are requesting data they are not entitled to receive or it is suspected that users use the data for commercial purposes.

In case of abuse of the RODB is suspected, the database user might be contacted by the ICAO Regional Office with a request for information on its databank use. After investigation, the RODB could decide to limit *or block* the access to the ASIA/PAC OPMET Database for this user.

5 ASIA/PAC OPMET DATABASE CATALOGUE

5.1 Introduction

5.1.1 The ASIA/PAC OPMET Database Catalogue consists of lists of OPMET products that are required to be available in the ASIA/PAC Regional OPMET Databanks, based on the requirements stated in the ASIA/PAC ANP and additional requirements by airlines, which have been agreed with the provider States.

5.1.2 ROBEX scheme and the RODBs should ensure availability of all ASIA/PAC aerodromes included in the AOP Table of the ASIA/PAC. In addition, requirements for non-AOP aerodromes have been stated by airlines to support the evolving operations, especially the long-haul and ETOP flights. These requirements are included in the SADIS User Guide, Annex 1. The ASIA/PAC OPMET Database Catalogue should include also those non-AOP aerodrome, for which the States concerned have agreed to provide the required OPMET information.

5.1.3 The ASIA/PAC OPMET Database Catalogue consists of:

TO BE DEVELOPED

6. DISCLAIMER

6.1 Usage of the ASIA/PAC RODBs implies that the user has taken notice of the disclaimer below, and accepts the associated consequences.

6.1.1 The Stations and SIGMET lists of the EUR OPMET Database only consist of lists of required data. It does not mean that these data are presently received in the EUR OPMET Database, or have been yet received.

6.1.2 The fact that there is no data found for one location and one type of message in the EUR OPMET Database does not mean that a message has not been generated for such a location, but only means that no valid message concerning such a location and such a type of message has been received or stored by the EUR OPMET Database.

6.1.3 The user assumes the entire risk related to its use of data.