



Sixth Meeting of CNS/MET Sub-Group of APANPIRG

Bangkok, Thailand, 15 – 19 July 2002

Agenda Item 11: Exchange of OPMET information

OPMET EXCHANGE – REVIEW OF THE ROBEX SCHEME

(Presented by the Secretariat)

SUMMARY

This paper presents information regarding the necessity of a review of the ROBEX scheme and other OPMET exchanges in the ASIA/PAC Region. It proposes the establishment of a Task Force to deal with the outstanding issues related to the OPMET exchange.

1. Introduction

1.1 A number of changes have taken place in the OPMET exchange during the last few years that would require a comprehensive review of the ROBEX scheme, other OPMET exchanges within the ASIA/PAC Regions and the interregional exchange. The relevant regional documents would have to be amended accordingly. It may be necessary to amend the existing procedures or develop new procedures in order to ensure an efficient OPMET exchange under the new circumstances.

1.2 In order to deal with these tasks it is proposed to establish a task force (TF) under the CNS/MET SG of APANPIRG. This paper gives explanation on the need of such a group and on its terms of reference, composition and tasks.

2. Discussion

Historical background

2.1 The ROBEX scheme has been successfully serving the ASIA/PAC Regions since its establishment that took place exactly 30 years ago (July, 1972). The scheme involved exchange of MET information between the tributary offices (TO), main and secondary collection centres (MCC and SCC) according to agreed schedules and bulletin contents. ROBEX was intended initially only for METAR exchange; AIREP and TAF exchanges were added to the scheme later on.

2.2 The ROBEX scheme has been developing throughout the years to its current stage. In the early years it was very important to regulate the bulletin contents in such a way as to avoid overload on the slow speed limited capacity AFTN lines. Stringent rules had been imposed on the inclusion of additional airports or types of information in the exchange.

2.3 An important step in the development of ROBEX scheme was the establishment of the OPMET data banks. Five centres in the Region have been designated to serve as OPMET data banks supporting ROBEX scheme: Bangkok, Brisbane, Nadi, Singapore and Tokyo. These centres now play the major role in the collection, storing and distribution the required OPMET information. The OPMET data banks serve also as OPMET Data Regional Exchange Points (ODREPs) for exchange of MET information with the other ICAO regions.

2.4 ROBEX Handbook and ASIA/PAC Regional Interface Control Document (ICD) OPMET Data Bank Access Procedures are the two main guidance documents related to the OPMET exchange. The current version of both documents is from 1998 with some amendments thereafter. Another part of the OPMET exchange, which is not catered by the ROBEX scheme, is tabled in the FASID Table MET 2; exchange of SIGMET messages is covered by FASID Table MET 2A.

2.5 For the time being the exchange of SPECI, SIGMET, tropical cyclone and volcanic ash advisories is not covered by the ROBEX scheme, although some of the OPMET data banks do handle these data types.

2.6 With the introduction of the satellite segment of the AFS – the ISCS and SADIS broadcasts, the OPMET exchange has changed. States which are using these services now receive a large volume of global OPMET information through the ISCS and SADIS broadcasts. However, the dissemination of their one messages and bulletins is still and will continue to be mainly via the existing terrestrial AFTN lines.

Outstanding issues

2.7 In the light of the significant developments mentioned above it is felt that a review of the OPMET exchange in the ASIA/PAC region should be conducted. It shall be recalled that recent APANPIRG meetings discussed and formulated conclusions on this matter, as follows:

- 1) APANPIRG Conclusion 10/23 - Revision of the ROBEX Scheme, stating that: "Based on the AFTN configuration, collection areas of the ROBEX Centres be extended to include all international aerodromes listed in Table MET 1A of the ASIA/PAC Air Navigation Plan (ANP)."
- 2) The need for amendment of the ROBEX Handbook (edition 1998) that has been restated by APANPIRG/11 and APANPIRG/12.
- 3) APANPIRG Conclusion 12/25 – Application of EUR OPMET update procedure in the ASIA/PAC regions, stating that: "That, the procedure similar to the EUR OPMET update procedure be developed and introduced in the ASIA/PAC regions."

2.8 As a follow up action on the above conclusions, ICAO Regional Office has been preparing a draft for the new edition of the ROBEX Handbook. Initially it seemed as simply updating the ROBEX tables, but going into detail it was found that there was a need for extensive changes in all parts of the Handbook and of the ROBEX scheme itself, since many of the provisions have been outdated. In this regard, there are a number of issues to be addressed, like:

- 1) Review of the ROBEX scheme in the light of the new situation in the (global) OPMET data exchange:
 - Increased capacity of AFTN in the regions concerned;
 - Availability of SADIS and ISCS reception in most of the States in the MID/ASIA/PAC regions;
 - Requirements for interregional exchange and transmission of the OPMET data to the SADIS and ICSC provider States.
- 2) Content and availability of OPMET data:
 - Unifying of format and content of ROBEX Handbook tables with FASID Table MET 1A (ASIA/PAC and MID ANP); account should also be taken on the SADIS User Guide Annexes;
 - Review and update of the bulletins content.

- 3) Inclusion of other OPMET information in the ROBEX scheme:
 - Currently, only METAR, AIREP and TAF are included in the ROBEX scheme;
 - Procedures for the exchange of the other OPMET information - SPECI, SIGMET (WS, WV and WC), Volcanic Ash advisories (FV) and Tropical Cyclone advisories (FC) should be properly reflected in the relevant guidance material, e.g., could be included the ROBEX Handbook.
- 4) Development of proper bulletin management and monitoring procedures for the OPMET exchange in the ASIA/PAC regions.

3. Proposal for establishment of OPMET Exchange Task Force

3.1 Based on the above discussion, it is proposed that a Task Force be established under the CNS/MET SG to deal with the tasks related to the OPMET exchange in the ASIA/PAC Region. It is intended that this group coordinate the activities mainly through correspondence but it is felt that at least one meeting will be necessary in order to review and finalize the material prepared by the TF members. It is proposed that this group will have the following terms of reference:

- to examine the existing requirements and any new requirements for the OPMET exchange in ASIA/PAC regions and to assess the feasibility of satisfying these requirements, taking into account the availability of the data;
- to review the ROBEX scheme and other OPMET exchange schemes and based on this review to prepare proposal for updating and optimizing of the schemes;
- to review and update the procedures for interregional exchange and for transmission of the regional OPMET data to the satellite broadcasts providers (ISCS and SADIS);
- to review and amend the regional guidance materials on the OPMET exchange and to include procedures for the exchange of all required OPMET message types: SA, SP, FC, FT, WS, WC, WV, FK, FV, UA.
- if necessary, to re-organize bulletins through the change of existing bulletins or addition of new bulletins, based on the validated requirements;
- to develop procedures for monitoring and management of the OPMET information, based on the procedures used at the OPMET data banks; EUR OPMET update procedure to be used as the bases for development of similar procedure for the ASIA/PAC Regions;
- the Task Force shall report its activities to the CNS/MET SG.

Composition

3.2 It is proposed that the group shall consist of core members - those from States that host OPMET data banks: Australia, Fiji, Japan, Singapore, Thailand; satellite distribution providers – UK and USA; 2 more States from the regions. IATA and WMO participation should also be encouraged.

3.3 States in the core membership shall each have an area of responsibility. The experts from these states shall act as focal points for any OPMET/ROBEX related issues within their area of responsibility.

3.4 Close working relationship with the similar groups from other ICAO Regions should be established in order to plan and implement a seamless OPMET exchange between the Regions according to the stated requirements.

4. Action by the Meeting

4.1 The meeting is invited to :

- a) note the information regarding the OPMET exchange in the ASIA/PAC regions;
- b) review the proposal for establishment of a TF and if agreed to adopt the following decision:

Draft Decision 6/x – ASIA/PAC OPMET Exchange Task Force (OPMET/E TF)

That,

- a) an OPMET Exchange Task Force (OPMET/E TF) be established with the terms of reference as given in the Appendix xx to the Report;
- b) the Task Force consists of members designated by Australia, Fiji, Japan, Singapore, Thailand, UK, USA, ... with the member from ... acting as Rapporteur of the TF;
- c) the Task Force is expected to report on the results of its work at the CNS/MET SG/7 Meeting in 2003.