



*International Civil Aviation Organization*

**INFORMATION PAPER**

**TWENTY-FIRST MEETING OF THE METEOROLOGY SUB-GROUP  
(MET SG/21) OF THE ASIA/PACIFIC AIR NAVIGATION PLANNING  
AND IMPLEMENTATION REGIONAL GROUP (APANPIRG)**

*Bangkok, Thailand, 29 May to 1 June 2017*

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**Agenda Item 6: Research, development and implementation issues in the MET field**

**6.2) Data exchange (including MET/IE WG Report)**

**WMO VCP / ICAO APAC WORKSHOP  
ON THE IMPLEMENTATION OF IWXXM FOR THE EXCHANGE OF OPMET DATA  
TO BE HELD IN HONG KONG, CHINA**

*(Presented by Hong Kong, China)*

**SUMMARY**

This paper presents the initiative of Hong Kong, China to organize and host a workshop on the implementation of IWXXM for the exchange of OPMET data to raise the capability of stakeholders of Asia and Pacific to kick-start their own implementation project for digital MET information to be exchanged and integrated in a SWIM environment.

**1. INTRODUCTION**

1.1 In APANPIRG MET SG/20 held on 6-9 June 2016, the meeting confirmed the need of capacity building and awareness raising activities on IWXXM implementation for different stakeholders in APAC. APAC MET/IE WG/15 held on 20-22 March 2017 concurred that experience sharing through the exchange of lessons learned in IWXXM implementation initiatives of States should help building capacity among States. To facilitate States to develop relevant capabilities to kick-start IWXXM implementation in the Asia and Pacific region, Hong Kong, China will organize a Workshop on Implementation of IWXXM for the Exchange of OPMET Data during 10-12 October 2017 in Hong Kong.

**2. DISCUSSION**

2.1 The proposed 3-day workshop will be held under the joint banner of WMO Voluntary Cooperation Programme (VCP) and ICAO APAC Office and will be composed of lectures and sharing sessions. It will focus on practical implementation of IWXXM like basic infrastructural requirements, encoding, decoding and exchanging of OPMET data, roles and responsibilities of stakeholders with respect to their functions in the regional plan and gap identification. The workshop would also take into account the outcomes from the "ICAO Workshop on Implementing IWXXM for the exchange of OPMET data" held in Paris, France on 17-18 May 2017 and the third meeting of WG-MIE to be held on 10-14 July 2017.

- 2.2 Tentative topics to be covered in the workshop include the following.
1. IWXXM and its importance to the Global Air Navigation Plan (GANP) and Aviation System Block Upgrade (ASBU);
  2. Collaboration of WMO and ICAO in the development and governance of IWXXM;
  3. Regional considerations with respect to the *Guidelines for the implementation of OPMET Data Exchange using IWXXM*;
  4. Technical aspects related to IWXXM with emphasis on assisting participants to kick start their own implementation project, such as:
    - (a) Introduction of IWXXM and the use of it for message encoding;
    - (b) Translation of TAC to IWXXM bulletins;
    - (c) Validation of IWXXM bulletins and available resources; and
    - (d) Infrastructural and operational requirements for IWXXM bulletin exchange (e.g. Extended AMHS);
  5. Experience sharing on IWXXM implementation and gap identification; and
  6. Discussion on preparation for local and regional implementation.

2.3 Targeted participants include personnel of aeronautical meteorological service providers involved in the preparation and exchange of aviation meteorological information, especially those who will be involved in the migration from the use of Traditional Alphanumeric Code (TAC) to IWXXM for OPMET data exchange, and personnel responsible for the exchange and dissemination of meteorological information for international civil aviation (e.g. Air Navigation Service Providers (ANSPs), National OPMET Centres (NOCs), Regional OPMET Centres (ROCs) and Regional OPMET Data Bank (RODBs).

2.4 Invitation to attend the workshop has been sent via WMO (see Attachment 1). Invitation for other non-MET participants to attend the workshop will be sent via ICAO closer in time.

### **3. ACTION BY THE MEETING**

- 3.1 The meeting is invited to:
- a) note the information contained in this paper; and
  - b) discuss any relevant matter as appropriate

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## WMO OMM

WEATHER CLIMATE WATER  
TEMPS CLIMAT EAU

World Meteorological Organization  
Organisation météorologique mondiale  
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Всемирная метеорологическая организация  
المنظمة العالمية للأرصاد الجوية  
世界气象组织

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Ref.: 16146/2017-12 DRA/ETR

Our ref.: 16146/2017/ETR/CRS-917

8 May 2017

Annexes: 2 (available in English only)

Subject: Workshop on Implementation of ICAO Meteorological Information  
Exchange Model (IWXXM) for the Exchange of Operational  
Meteorological(OPMET) Data, Hong Kong, China, 10-12 October 2017

Action required: For information and appropriate action, as necessary

Dear Sir/Madam,

I have pleasure to inform you that Hong Kong, China will organize a workshop as a VCP contribution on Implementation of ICAO Meteorological Information Exchange Model (IWXXM) for the Exchange of OPMET Data from 10 to 12 October 2017.

The workshop will introduce the latest approved version of the WMO governed IWXXM for provision of aviation meteorological services. The technical details in using IWXXM to encode and decode OPMET data, roles and responsibilities of meteorological services in the implementation and gap identification will also be covered with a view to enhancing the participants' capability in kick-starting their own implementation project.

The workshop is aimed at personnel involved in supporting the preparation and exchange of aviation meteorological information, especially those involved in the migration from the use of Traditional Alphanumeric Code (TAC) to IWXXM for OPMET data exchange. HKO are prepared to offer up to 20 fellowships covering tuition and per diem expenses, where the preference will be given to RA II Members. The workshop will be conducted in English. A brief description of the workshop is given in Annex I.

Interested candidates are requested to complete the attached Application Form (Annex II), which should be endorsed by the Permanent Representative of the respective country with WMO, and sent directly to the Director of the Hong Kong Observatory, Mr Terence Kung (e-mail: [tkung@hko.gov.hk](mailto:tkung@hko.gov.hk); fax: +852 2375 2645; telephone: +852 2926 8319) as soon as possible but not later than **15 July 2017**.

Yours faithfully,

(W. Zhang)  
for the Secretary-General

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO

cc: Hydrological Advisers to Permanent Representatives

**WMO VCP Workshop on  
Implementation of ICAO Meteorological Information Exchange Model  
(IWXXM) for the Exchange of Operational Meteorological (OPMET) Data  
10-12 October 2017  
Hong Kong, China**

**Objective**

To address the training and capacity building needs in the Asia and Pacific region in relation to the implementation of IWXXM for the exchange of OPMET data.

**Contents**

1. IWXXM and its importance to the Global Air Navigation Plan (GANP) and Aviation System Block Upgrade (ASBU);
2. Collaboration of WMO and ICAO in the development and governance of IWXXM;
3. Regional considerations with respect to the *Guidelines for the implementation of OPMET Data Exchange using IWXXM*;
4. Technical aspects related to IWXXM with emphasis on assisting participants to kick start their own implementation project, such as:
  - (a) Introduction of IWXXM and its use for message encoding;
  - (b) Translation of TAC to IWXXM bulletins;
  - (c) Validation of IWXXM bulletins and available resources; and
  - (d) Infrastructural and operational requirements for IWXXM bulletin exchange;
5. Experience sharing on IWXXM implementation and gap identification; and
6. Discussion on preparation for local and regional implementation.

**Medium of instruction**

English

**Course Date**

10-12 October 2017

**Deadline for application**

The completed WMO Fellowship Nomination Form should be returned to the Hong Kong Observatory with a copy to the WMO Secretariat by **15 July 2017**.

**Places offered**

A maximum of 20 participants. Preference will be given to qualified applicants from RA II Members.

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**Qualification of participants**

- Participants are required to be proficient in English.
- Participants should have experience in handling of aviation meteorological data including preparation and exchange of OPMET data.
- Participants are expected to have a hands-on role in leading/carrying out the associated actions in the implementation of IWXXM.
- All participants are required to provide the course organizer with feedback on the usefulness of the knowledge and skills acquired within 6 months after receiving the training, especially on how these knowledge and skills would be applied in their NMHSs.
- All participants are encouraged to actively maintain technical exchange and communication with the organizer and among themselves after the training.

**Fellowship**

- Tuition fee will be waived. Lodging will be provided, supplemented by a per diem allowance of HK\$180 per day.
- The costs of air passage and related insurance costs between Hong Kong, China and the home town of participants will have to be borne by the recipient WMO Members. In the event any Member is unable to meet the air passage costs, the Hong Kong Observatory is prepared to offer a limited number of air passages for those in need, on a case-by-case basis.

**Insurance**

The course organizer does not hold any responsibility for compensation in the event of death, illness, injury or loss of property during the course period. The same applies to the duration of passage in the event the Hong Kong Observatory provides the air passages. Participants are therefore fully responsible for arranging life, health, and other forms of insurance as appropriate and necessary.

**Enquiries**

Mr. Terence Kung, Scientific Officer, Hong Kong Observatory, Hong Kong, China.  
E-mail: [tkung@hko.gov.hk](mailto:tkung@hko.gov.hk), fax: (852) 2375 2645, tel: (852) 2926 8319.

**WORLD METEOROLOGICAL ORGANIZATION**

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**PARTICIPANTS NOMINATION FORM**

**VCP Workshop on  
Implementation of ICAO Meteorological Information Exchange Model (IWXXM)  
for the Exchange of Operational Meteorological (OPMET) Data  
Hong Kong, China, 10-12 October 2017**

The Government of \_\_\_\_\_  
nominates the following candidate as a participant of the above workshop.

1. Family name (in capitals): \_\_\_\_\_
2. First name (in capitals): \_\_\_\_\_
3. Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Tel: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_
4. Date of birth: \_\_\_\_\_ Male ☐ Female ☐  
Nationality: \_\_\_\_\_  
Passport no.: \_\_\_\_\_  
Date of issue: \_\_\_\_\_ Expiry date: \_\_\_\_\_
5. Qualifications (certificates, diplomas or degrees):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. Present position and brief description of duties:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Annex II – p.2 of 2

7. What roles or tasks will your participant be required to undertake after this workshop to enable your service to make the most of the opportunity to develop new knowledge and skills?

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8. Working language: \_\_\_\_\_  
(Note: For applicants whose working language is not ENGLISH, this nomination form must be accompanied by English proficiency certification.)

9. Contact person in emergency:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

10. Financial assistance for travel required: Yes ☐ No ☐

11. I fully understand that the organizer does not hold any responsibility for compensation in the event of death, illness, injury or loss of property during the period of the workshop.

Permanent Representative: \_\_\_\_\_ (Signature)

\_\_\_\_\_  
(Block letters)

Date: \_\_\_\_\_

To be completed and sent to reach the following address on or before **15 July 2017**:

Director of the Hong Kong Observatory  
(Attn: Mr Terence Kung, Scientific Officer)  
134A, Nathan Road  
Hong Kong, China  
Tel: +852 2926 8319 Fax: +852 2375 2645  
E-mail: tkung@hko.gov.hk