



International Civil Aviation Organization

INFORMATION PAPER

**SIXTEENTH MEETING OF THE ASIA/PACIFIC METEOROLOGICAL
INFORMATION EXCHANGE WORKING GROUP (MET/IE WG/16)**

Bangkok, Thailand, 19 – 21 March 2018

Agenda Item 4: Meteorological information exchange in digital form

STATUS AND PLANS FOR IMPLEMENTATION OF IWXXM IN HONG KONG CHINA

(Presented by Hong Kong China)

SUMMARY

This paper presents a brief overview of the status and plans for the implementation of OPMET exchange in IWXXM in Hong Kong China.

1. INTRODUCTION

1.1 The implementation of ICAO Meteorological Information Exchange Model (IWXXM) for OPMET exchange is proposed to become a standard in the draft Amendment 78 to ICAO Annex 3 which will be effective in Nov 2018 and applicable in Nov 2020. This paper provides a brief update on the status and plans for the implementation of IWXXM in Hong Kong China.

2. DISCUSSION

Preparation of IWXXM messages

2.1 The Hong Kong Observatory (HKO) issues VHHH METAR/SPECI, TAF and SIGMET in Traditional Alphanumeric Code (TAC) for the Hong Kong International Airport and Hong Kong Flight Information Region. For IWXXM development, a TAC-to-IWXXM OPMET translation software developed in-house is used to generate the respective IWXXM-2 OPMET message. The translation software will be updated to provide IWXXM-3 OPMET message in 2018/19 upon the formal approval of IWXXM-3. HKO will also take the opportunity to generate OPMET messages in IWXXM format from source data in the next upgrade of airport meteorological message preparation system before 2020.

Exchange of IWXXM bulletins

2.2 The Hong Kong Civil Aviation Department (HKCAD) has started to deploy AMHS for operation since 2009. Upgrading in ROBEX System (COMBX) is also in progress. As a ROC, the translator and aggregator roles will be included in the new upgrade/system to handle IWXXM bulletins before 2020.

2.3 Mindful of the target implementation of IWXXM in 2018-2020, the preparation work/test has been already on-going between HKCAD and HKO for years.

2.4 The AMHS connection between HKCAD and HKO has been established and ready for IWXXM data exchange. The IWXXM messages prepared by HKO will be sent to the ROBEX centre of HKCAD via a Simple Object Access Protocol (SOAP) interface to the AMHS system which supports Extended AMHS services.

2.5 To identify possible issues associated with the international exchange of IWXXM bulletin via AMHS, Hong Kong China had conducted IWXXM exchange tests using a test AMHS system with overseas centres, including Bangkok, Singapore and Beijing since 2017. Hong Kong China will continue to conduct international exchange tests before applicability of the respective Annex 3 mandatory requirements by Nov 2020.

Roles of translator and aggregator

2.6 As a Regional OPMET Centre, Hong Kong China will follow the current arrangement as defined in ROBEX scheme to collect OPMET messages in both TAC and IWXXM formats from upstream centres, compile them into bulletins and relay to downstream centres. If upstream centres can only provide OPMET message in TAC format, Hong Kong China plans to translate them to IWXXM format as necessary and aggregate them into IWXXM bulletins before relaying them to downstream AMHS centres.

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 matters as appropriate.
