International Civil Aviation Organization

INFORMATION PAPER

Eighteenth Meeting of the Meteorological Information Exchange Working Group (MET/IE WG/18)

Tenth Meeting of the Meteorological Services Working Group (MET/S WG/10)

Web-conference, 27 to 31 July 2020

Agenda Item 3: Monitoring of meteorological information exchange

STATUS AND PLANS FOR 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 ICAO Meteorological Information Exchange Model (IWXXM) in Hong Kong, China.

1. INTRODUCTION

1.1 The requirement of digital exchange of aeronautical meteorological information in IWXXM form would become applicable in November 2020 in accordance with ICAO SARPs and guidelines. This paper provides the updates on the preparation works and implementation plan for OPMET exchange in IWXXM in Hong Kong, China.

2. DISCUSSION

Generation of OPMET in IWXXM

2.1 To perform the function of "IWXXM Producer", the Hong Kong Observatory (HKO) has developed software to generate IWXXM version 3.0 reports from the new METAR and TAF message preparation system with automatic XML schema validation. HKO started generating VHHH METAR/SPECI and TAF in IWXXM version 3.0 from source data since July 2020 for internal reliability test. HKO forecasters has also started generating SIGMET in both Traditional Alpha-numeric Code (TAC) and IWXXM version 3.0 format using operational HKO SIGMET Coordination Platform. Works to interface the above IWXXM generating tools with the AMHS client software for the automatic preparation of AMHS message with File Transfer Body Part (FTBP) were in good progress.

IWXXM translation and aggregation services

2.2 HKO has been working with Hong Kong Civil Aviation Department (HKCAD) to develop a TAC-to-IWXXM OPMET translation software also. The translation software now supports the routine generation of OPMET data in IWXXM version 3.0 from METAR/SPECI and TAF in TAC. Hong Kong Regional OPMET Centre (ROC) stands ready to perform the function of "Data Translation Centre" to convert METAR/SPECI and TAF disseminated by upstream National OPMET Centres (NOC) from TAC to IWXXM version 3.0 on behalf of them as necessary subject to mutual agreement between ROC and NOC. Meanwhile, HKO and HKCAD are developing an IWXXM aggregator to compile IWXXM reports of METAR/SPECI and TAF from the upstream NOCs into a single IWXXM "COLLECT" report for subsequent dissemination by Hong Kong ROC to RODB.

AMHS Implementation for IWXXM

2.3 Operational AMHS connection between Airport Meteorological Office of HKO and Hong Kong ROC of HKCAD has been established. While the AMHS of HKCAD supports FTBP, the AMHS of Hong Kong ROC will be upgraded in October 2020 to support the Interpersonal Message (IPM) Heading Extension (IHE) capability by the User Agent (UA), as IHE is essential to carry the ATS priority, filing time and Optional Heading Information for IWXXM message exchange.

Operational trials with NOC and RODB

2.4 Regarding AMHS connectivity with RODB, AMHS connection over CRV between Fukuoka and Hong Kong was being tested and will be implemented before November 2020. As for the AMHS connectivity with NOC, the AMHS connection between Hong Kong and Taipei had officially put into operation since June 2020. AMHS connections for Manila–Hong Kong and Macao–Hong Kong had also been set up which could support IWXXM exchange. Hong Kong ROC plans to conduct trial on IWXXM exchange over AMHS with the communication (COM) centres of Fukuoka, Manila, Macao and Taipei starting from early September 2020, depending on the readiness of the AMHS of relevant COM centres.

2.5 As one of the members of the ad-hoc group to progress the testing of IWXXM exchange over AMHS in the region, Hong Kong, China will continue to conduct further tests with other ROCs and RODBs to identify possible operational issues associated with international exchange of IWXXM bulletin via AMHS.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper.

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