



International Civil Aviation Organization

**FIFTEENTH MEETING OF THE ASIA/PACIFIC METEOROLOGICAL
INFORMATION EXCHANGE WORKING GROUP
(MET/IE WG/15)**

Bangkok, Thailand, 20 – 22 March 2017

Agenda Item 4: Meteorological information exchange in digital form

STATUS AND PLANS FOR IWXXM IN SINGAPORE
(Presented by Singapore)

SUMMARY

This paper presents an update on Singapore's status and plans in the implementation of the ICAO Meteorological Information Exchange Model (IWXXM).

1. INTRODUCTION

1.1 In accordance with Amendment 77 to ICAO Annex 3 (Meteorological Service for International Air Navigation), exchanging METAR and SPECI, TAF, SIGMET, AIRMET, volcanic ash advisories (VAA) and tropical cyclone advisories (TCA) in IWXXM was adopted as a recommended practice in November 2016. States are encouraged to exchange their OPMET data not only in TAC (Traditional Alphanumeric Code) but also in XML (Extensible Mark-up Language). This is a step necessary for the transition to a digital environment to support SWIM (System Wide Information Management).

1.2 It is envisaged that IWXXM would be introduced as a standard in Annex 3 in 2018 as part of Amendment 78 but that the applicability date be delayed until 2020.

1.3 This paper provides an update on Singapore's progress on IWXXM implementation and plans to operationalize by 2018.

2. DISCUSSION

Generation of IWXXM version 2.0 messages

2.1 Singapore successfully generated METAR and SPECI, TAF, SIGMET, AIRMET, VAA and TCA in IWXXM version 2.0 in March 2017. Additionally, Singapore is ready to generate IWXXM version 2.0 bulletins in parallel to TAC.

Test Efforts

2.2 Singapore and Bangkok successfully tested the exchange of IWXXM messages using File Transfer Body Part (FTBP) XML file format through VPN in November 2016. The test demonstrated the feasibility to exchange IWXXM messages through VPN and also allowed States to validate the generation and receiving of IWXXM messages. Although the exchange of IWXXM

messages through VPN provided a testing platform for States in the interim when extended AMHS services are not ready, the test may not identify all issues in an operational AMHS environment.

2.3 There was a series of tests conducted to isolate technical issues in the exchange of IWXXM messages in FTBP file format between AMHS client and AMHS server in Singapore. A test in December 2016 using a third party software showed that there were issues with existing vendor client software. Singapore is continuing its efforts in resolving the issues.

Future Plans

2.4 Singapore is in the process of replacing and upgrading its Message Switching System, which when ready by 2018 will be capable of data exchange in IWXXM.

3. ACTION REQUIRED BY THE MEETING

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