



ICAO

*International Civil Aviation Organization***INFORMATION PAPER****Nineteenth Meeting of the Meteorological Information Exchange Working Group (MET/IE WG/19)**

Virtual meeting, 22 to 24 March 2021

Agenda Item 4: Meteorological information exchange in digital form**IMPLEMENTATION OF IWXXM IN AUSTRALIA**

(Presented by Australia)

SUMMARY

This paper provides a brief update on the implementation ICAO Meteorological Information Exchange Model (IWXXM) format information in Australia.

1. INTRODUCTION

1.1 Amendment 79 to Annex 3 requires States to arrange the international exchange of GML IWXXM formatted METAR/SPECI, TAF, AIRMET, SIGMET, Volcanic Ash Advisory (VAA), Tropical Cyclone Advisory (TCA) and Space Weather Advisories (SWXA).

2. DISCUSSION

2.1 As reported previously, to support the introduction of IWXXM, Australia needed to make a range of changes to its systems and processes.

2.2 On 5th November 2020, BoM began transmitting AIRMET, SIGMET, VAA and Space Weather Advisories in IWXXM v3 format from source and converting METAR/SPECI and TAF bulletins from Traditional Alpha-numeric Code (TAC) to IWXXM v3.

2.4 At this time the BoM was also producing TCA reports, however these were in IWXXM v2.1 format. ICAO require that only version 3 of IWXXM be distributed internationally and therefore these products were not sent over the ROBEX system.

2.5 In late February, we updated our operational TCA generation systems and are now generating TCA reports in IWXXM v3.

2.6 The intent was to generate TAFs from source, however, there have been delays in implementing IWXXM capability at defence aerodromes. As a result, IWXXM bulletins are being generated by converting the Australian TAF TAC bulletins. It is expected that defence aerodromes will have IWXXM capability in the third quarter of 2021. For domestic use, civil aerodromes TAF could be made available as individual IWXXM reports, generated from source.

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2.7 The BoM has also extended the IWXXM TAF schema to support the inclusion of four temperature fields (T+3, T+6, T+9 and T+12), four QNH fields (T+3, T+6, T+9 and T+12), support for INTER and a TAF3 boolean field which indicates whether the TAF is routinely generated at 3-hourly or 6-hourly frequency. This capability will be available once BoM starts generating TAF from source.

2.8 IWXXM support at RODB Brisbane has been split into two phases. In phase 1 (completed in November 2020) the Meteorological Information Switch (MIS) at Airservices Australia was upgraded to support receiving IWXXM bulletins from the BoM and the dissemination of these bulletins to international OPMET partners via AMHS/FTBP connections. This phase also included the implementation of real-time virus scanning on all in- and outgoing AMHS connections on the Australian Aeronautical Messaging System.

2.9 The second phase, a full implementation of all RODB responsibilities for IWXXM including storage, retrieval, statistics and request/reply, is yet to be started. Due to impacts of COVID-19 and competing investment priorities at Airservices Australia it is yet undecided when and if this second phase will start.

2.10 In addition to distribution via AMHS, Australia is planning to make IWXXM reports available to users via an Advanced Message Queuing Protocol (AMQP) service in the third quarter of 2021.

3. ACTION BY THE MEETING

3.1 Note the information contained in this paper.
