

International Civil Aviation Organization

INFORMATION PAPER

Asia and Pacific (APAC)
Twenty-second Meeting of the Meteorological
Information Exchange Working Group (MET/IE WG/22)

Bangkok, Thailand, 18 to 21 March 2024

Agenda Item 4: Meteorological information exchange in IWXXM form

STATUS AND PLANS FOR IMPLEMENTATION OF IWXXM IN THAILAND

(Presented by Thailand)

SUMMARY

This paper presents a brief overview of the status and plans for the implementation of IWXXM in Thailand.

1. INTRODUCTION

1.1 The implementation of ICAO Meteorological Information Exchange Model (IWXXM) for OPMET exchange is proposed to become a standard in the Amendment 78 to ICAO Annex 3 which became 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 Thailand.

2. DISCUSSION

Thailand NOC

- 2.1 Playing a role as the National OPMET Centre of Thailand (Thailand NOC), Thai Meteorological Department (TMD) has been collecting and distributing national METAR/SPECI, TAF and SIGMET reports in IWXXM V 3.0 by translation since the beginning of 2020. In addition, the current system is able to generate IWXXM V 2021-2 by translation.
- 2.2 The exchange of IWXXM reports from the Thailand NOC to Bangkok ROC (AEROTHAI) conducts through the ATS Message Handling System (AMHS) with File Transfer Body Part (FTBP).
- 2.3 Corresponding to the medium-term Strategic Initiative Implementation Plan for Meteorological Services of National Air Navigation Plan (2029-2034), the project of AMSs, AMOs and MWO to generate their reports in IWXXM format by source has been started. This implementation is expected to be completed within this period accordingly.

Bangkok ROC

- 2.4 Bangkok ROC has been collecting all OPMET data from its Area of Responsibility (AoR) in both TAC and IWXXM formats through AFTN/AMHS.
- 2.5 Bangkok ROC has been disseminating IWXXM reports, in addition to delivering the international IWXXM reports to Thailand NOC, that received from its area of responsibility to other ROCs/RODBs. At the moment, Bangkok ROC disseminates IWXXM OPMET to Hong Kong ROC, Beijing ROC, Singapore RODB, Brisbane RODB and Tokyo RODB.
- 2.6 Bangkok ROC provides the translation service, especially for its AoR, by bilateral agreement. Currently, the translation of OPMET data (METAR/SPECI and TAF) from TAC to IWXXM V 3.0 is operating for Vietnam NOC until the communication between Bangkok COM Centre and Vietnam COM Centre are fully implemented in AMHS with FTBP.
- 2.7 Some of the communication networks of Bangkok ROC were upgraded to Common aeRonuatical Virtual Private Network (CRV). Those CRVs are Hong Kong, Paro, Kuala Lumpur, Mumbai, and Singapore with the bandwidth of 512 kbps. This provides the flexibility of increasing bandwidth in the future if required.

Bangkok RODB

- 2.8 The request/reply function is available for both TAC and IWXXM at Bangkok RODB.
- 2.9 Analyse and report on Performance Indices (PI) of five RODBs for both TAC and IWXXM.
- 2.10 The report of IWXXM specific statistics has been produced annually.
- 2.11 Include the IWXXM-specific statistics for IWXXM SIGMET Test messages received by Bangkok RODB such as IWXXM Version, Validation Success, Incomplete Translation and Extension in the latest SIGMET Test results (NOV 2023) and report to the SIGMET Test focal points (Japan and Singapore).
- 2.12 The preliminary report of timeliness index has been generated at Bangkok RODB for future OPMET monitoring improvement.

Future Plans

- 2.13 To establish the bilateral agreements for translation services with partners, particularly under the AoR of Bangkok ROC.
- 2.14 To expand the exchange of IWXXM reports with other AMSs, AMOs, NOCs under the AoR of Bangkok ROC and ROCs/RODBs.
- 2.15 To test the exchange of IWXXM with IROG from other regions, given that the network from both ends is capable of supporting the exchange of IWXXM. The IROG Pretoria and IROG Jeddah will be the target of this implementation.
- 2.16 To upgrade the system and the translation service to support IWXXM version 2021-2 at Bangkok ROC to collect and disseminate Thailand's bulletins. The aforementioned upgrading plan is scheduled in May 2024.

3	ACTION	RV THE	MEETING
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3.1 The meeting is invited to note the information contained in this paper
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