

International Civil Aviation Organization

ICAO

INFORMATION PAPER

ASIA AND PACIFIC (APAC) TWENTY-FOURTH
MEETING OF THE METEOROLOGICAL
INFORMATION EXCHANGE WORKING
GROUP (MET/IE WG/24)

Nadi, Fiji, 21 to 24 April 2026

Agenda Item 6: Meteorological Information Exchange in IWXXM Form**STATUS AND PLANS FOR THE IMPLEMENTATION OF OPMET DATA EXCHANGE
USING IWXXM IN THE REPUBLIC OF KOREA**

(Presented by the Republic of Korea)

SUMMARY

This paper presents the current status and future plans for the implementation of OPMET (Operational Meteorological Information) data exchange using the ICAO Meteorological Information Exchange Model (IWXXM) in the Republic of Korea.

1. INTRODUCTION

1.1 This paper presents the current implementation status and future plans for OPMET (Operational Meteorological Information) data exchange using the ICAO Meteorological Information Exchange Model (IWXXM) in the Republic of Korea. Acting as both the national OPMET Centre (NOC) and the Regional OPMET Centre (ROC), the Aviation Meteorological Office (AMO) of the Korea Meteorological Administration (KMA) is responsible for collecting, producing, and disseminating meteorological reports in cooperation with the Ministry of Land, Infrastructure and Transport (MOLIT), which operates the aeronautical telecommunication network in the Republic of Korea.

1.2 The World Meteorological Organization (WMO) released IWXXM version 2023-1 in May 2023 and released the finalized IWXXM version 2025-2 in November 2025.

2. DISCUSSIONStatus of IWXXM Generation in the Republic of Korea

2.1 The AMO developed IWXXM version 2023-1 on 20 December 2023. Subsequently, integrity checks, including verification of data errors and inconsistencies with the Aeronautical Information Exchange Model (AIXM), were conducted continuously until February 2025. During this process, the Hong Kong Observatory (HKO) provided valuable support by allowing access to its validation tool for data verification.

2.2 The AMO has been providing IWXXM data through an open API service on the Internet since April 2016. Users can easily access IWXXM-formatted METAR/SPECI, TAF, SIGMET, and AIRMET through this service. The AMO officially began providing IWXXM version 2023-1 through the open API in August 2025 ([KMA API Hub](#)).

Status of IWXXM Data Exchange through AMHS

2.3 The Republic of Korea completed international Automated Message Handling System (AMHS) line connections with China and Japan via the Common Aeronautical Virtual Private Network (CRV) in the fourth quarter of 2022 and the AMHS supports the File Transfer Body Part (FTBP).

2.4 Since 2024, the Government of the Republic of Korea has been implementing a mid-to-long-term plan to migrate domestic users from the Aeronautical Fixed Telecommunication Network (AFTN) to AMHS. Terminal users — those using the Flight Information Exchange Model (FIXM), Aeronautical Information Exchange Model (AIXM), and IWXXM — were planned to be migrated by 2025, while organizations operating message exchange systems, such as the AMO, were targeted for migration by 2028.

2.5 In accordance with the national AMHS implementation plan, the AMO established a pilot AMHS system in September 2025. IWXXM exchange tests with the Japan Meteorological Agency (JMA) and the Aviation Meteorological Center (AMC) of the Civil Aviation Administration of China (CAAC) were conducted in October 2025 in cooperation with MOLIT.

2.6 During the OPMET monitoring period conducted in November 2025, the AMO successfully transmitted real-time IWXXM-formatted OPMET data via AMHS to RODB Bangkok, RODB Singapore, RODB Brisbane, and WAFC London.

Future Plans

2.7 The AMO plans to upgrade the IWXXM version from 2023-1 to 2025-2 in 2026. The AMO will also continue to monitor IWXXM version releases and update the IWXXM software accordingly.

2.8 The AMO plans to further enhance its pilot AMHS system in September 2026. This upgrade will include the capability to transmit real-time TAC-formatted OPMET data and parsing of OPMET data into individual meteorological elements. In addition, the AMO plans to expand IWXXM data exchange via AMHS to additional States in 2026, including not only RODB States but also ROC States. The pilot AMHS system is planned to be transitioned into an operational system in November 2026. After a trial operation period, real-time OPMET data transmission via the AMHS operational system is planned to be fully implemented by 2028.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper
