

*International Civil Aviation Organization*

## INFORMATION PAPER (IP/29)



ICAO

**ICAO Asia and Pacific (APAC)**  
**Twenty-Ninth Meeting of the Meteorology Sub-Group**  
**(MET SG/29)**

Bangkok, Thailand, 18 - 22 August 2025

**Agenda Item 5: Planning and monitoring****LATEST DEVELOPMENTS OF IWXXM**

(Presented by Hong Kong China, on behalf of WMO Task Team on Aviation Data)

**SUMMARY**

This paper highlights the latest status on the preparation of a new version of ICAO Meteorological Information Exchange Model (IWXXM) and its publication plan in connection with the changes involved in Amendment 82 to ICAO Annex 3 as well as the introduction of the new ICAO PANS-MET (Doc. 10157).

**1. INTRODUCTION**

1.1 WMO Task Team on Aviation Data (TT-AvData) has been developing a new version of IWXXM to reflect changes involved in Amendment 82 to ICAO Annex 3 and the introduction of the new ICAO PANS-MET (Doc. 10157) since 2024. Subsequent to the publication of a first release candidate, IWXXM 2025-2RC1, in April 2024 and the ending of the public consultation period in October 2024, IWXXM has been further revised. A second release candidate, IWXXM 2025-2RC2, has been published in August 2025 for approval with WMO.

**2. DISCUSSION**

2.1 Major changes involved in IWXXM 2025-2RC2 with respect to the current version IWXXM 2023-1 include:

- First introduction of the Quantitative Volcanic Ash Concentration Information (QVACI) package
- First introduction of the Volcano Observatory Notice for Aviation (VONA) package
- Changes to the METAR/SPECI, Volcanic Ash Advisory, and Space Weather Advisory packages in accordance with the changes of their respective TAC templates
- Changes to the METAR/SPECI package to allow the provision of unlimited RVR and temperature reports in tenths of a degree, in contrast to TAC
- Changes to the WAFS Significant Weather Forecast package with improvements in the modularity of the representation of certain phenomena

2.2 Opportunity is also taken to update documentation in IWXXM and all its packages to reflect the introduction of PANS-MET and the discontinuation of the WMO Technical Regulations (WMO-No. 49), Volume II, Meteorological Service for International Air Navigation<sup>1</sup>.

2.3 Details regarding IWXXM 2025-2RC2, including the draft schemas, examples, UML model, and release notes, are available at <https://schemas.wmo.int/iwxxm/2025-2RC2/>. Table 1 shows the compatibility table of packages across different versions of IWXXM:

Table 1: Compatibility table showing IWXXM versions, associated report packages, and relevant ICAO Annex 3 requirements

IWXXM Version	METAR/SPECI	TAF	SIGMET	AIRMET	TCA	VAA	SWA	WAFS SIGWX F/C	VONA	QVACI	Requirements
<a href="#">1.1</a>	1.1.0	1.1.0	1.1.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Am76
<a href="#">2.1</a>	2.1.1	2.1.1	2.1.1	2.1.1	2.1.1	2.1.1	N/A	N/A	N/A	N/A	Am77
<a href="#">3.0</a>	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	N/A	N/A	N/A	Am78
<a href="#">2021-2</a>	3.1.0	3.0.1	4.0.0	3.1.0	3.1.0	3.1.0	3.0.1	1.0.0	N/A	N/A	Am79 + Am80
<a href="#">2023-1</a>	3.1.0	3.0.1	4.0.1	3.1.1	3.1.0	3.1.0	3.0.1	1.1.0	N/A	N/A	Am79 + Am80
<a href="#">2025-2</a>	3.2.0	3.0.2	4.0.2	3.1.2	3.1.1	3.2.0	3.1.0	1.2.0	1.0.0	1.0.0	Am82 / PANS-MET

2.4 Subject to the outcome of the WMO Fast Track approval procedure, IWXXM 2025-2 will be published by mid-November 2025.

### 3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper.

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<sup>1</sup> See <https://community.wmo.int/en/activity-areas/aviation/resources/tech-regs-v2-discontinuation>