

*International Civil Aviation Organization***INFORMATION PAPER**

ICAO

**ICAO Asia and Pacific (APAC)**Twenty-Sixth Meeting of the Meteorology Sub-Group  
(MET SG/26)

Online, 1 to 5 August 2022

**Agenda Item 6: Research, development and other initiatives****LATEST DEVELOPMENT OF IWXXM**

(Presented by Hong Kong, China)

**SUMMARY**

This paper presents the latest development of the ICAO Meteorological Information Exchange Model (IWXXM) since 2021.

**1. INTRODUCTION**

1.1 This paper presents the publication of the latest version of IWXXM and the further development of IWXXM since 2021.

**2. DISCUSSION**Publication of IWXXM Version 2021-2

2.1 Approved via the WMO Fast Track Process, IWXXM Version 2021-2 was published on 15 November 2021. One of the major changes is the adoption of a new versioning scheme where IWXXM and individual report packages no longer share the same version number. The version number of IWXXM now reflects the WMO approval process involved (2021-2 signifies the second Fast Track Process in 2021), whereas the version number of a report package now strictly follows Semantic Versioning 2.0.0 in accordance to state of change of the package.

2.2 IWXXM Version 2021-2 supports the information and reporting requirements in Amendments 79 and 80 to ICAO Annex 3. A compatibility table<sup>1</sup> showing the versions of IWXXM and the associated report packages (e.g. METAR/SPECI), and their relationship to ICAO Annex 3 requirements is available below.

IWXXM Version	METAR/SPECI	TAF	SIGMET	AIRMET	TCA	VAA	SWA	WAFS SIGWX F/C	Requirements
1.1.0	1.1.0	1.1.0	1.1.0	N/A	N/A	N/A	N/A	N/A	Am76
2.1.0	2.1.0	2.1.0	2.1.0	2.1.0	2.1.0	2.1.0	N/A	N/A	Am77
3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	N/A	Am78
2021-2	3.1.0	3.0.1	4.0.0	3.1.0	3.1.0	3.1.0	3.0.1	1.0.0	Am79 + Am80

<sup>1</sup> See <https://github.com/wmo-im/iwxxm/wiki/Package-Compatibility>

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2.3 IWXXM Version 2021-2 uses a new approach (Weather Object or WxObject) in development of the IWXXM World Area Forecast System (WAFS) Significant Weather Forecast to describe meteorological phenomena that can better support the exchange of meteorological information over SWIM.

Further development of IWXXM

2.4 After the publication of IWXXM Version 2021-2, WMO Task Team on Aviation Data (TT-AvData) had adopted a more proactive approach to start the development of IWXXM schemas based on the requirements in proposed amendment to ICAO Annex 3 endorsed by ICAO MET Panel but yet to be approved by ICAO ANC. The intention is to launch public consultation of a Release Candidate of the IWXXM schemas based on the requirements at roughly the same time as the State consultation phase of the proposed amendment to Annex 3.

2.5 The team realized and the WMO Secretariat understood that there will be a risk of last-minute change of the requirements but opted that early exposure of the new schemas may help the States to have a better understanding of the proposed changes, especially without the assistance of TAC tables for IWXXM-only reports. Development work for changes to IWXXM in relation to the proposed Amendment 81 has already been started.

**3. ACTION BY THE MEETING**

3.1 Note the information contained in this paper.

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