International Civil Aviation Organization

WORKING PAPER

Eighteenth Meeting of the Meteorological Information Exchange Working Group (MET/IE WG/18)
and
Tenth Meeting of the Meteorological Services Working Group (MET/S WG/10)

Web-conference, 27 to 31 July 2020

Agenda Item 3: Monitoring of meteorological information exchange

GLOBAL REPOSITORY FOR IWXXM STATE EXTENSIONS

(Presented by Gilles Ratté on behalf of the METP WG-MIE)

SUMMARY

This Working Paper (WP) seeks the opinion of the members of the APAC MET/IE group regarding the collection of IWXXM State extensions.

1. INTRODUCTION

1.1 Following the meeting of the ICAO Meteorology Panel (METP) Working Group on Meteorological Information Exchange (WG-MIE) of 29 October to 1 November 2019 (MIE/6), the work plan was updated to reflect the latest evolution of the group, namely Activity 1.7: **IWXXM Extensions**; includes the following task:

a) **Develop a WP for EUR DMG & APAC MET/IE to investigate the feasibility & process to collate current extension parameters in use.**
b) In conjunction with WG-MISD & PIRGs, identify which extensions could become part of the core MET information.
c) **Identify where/if there could be a website collecting the IWXXM State extensions.**
d) Propose any changes to ICAO documentation relating to IWXXM extensions, in particular to ensure that the validation can pass when an extension schema is not available.

2. DISCUSSION

2.1 In order to support the transition to a system wide information management (SWIM) enabled environment, the World Meteorological Organization (WMO), at the request of ICAO, developed the ICAO Meteorological Information Exchange Model (IWXXM) schemas for the following operational meteorological (OPMET) products: METAR/SPECI, TAF, SIGMET, AIRMET, VAA and TCA. Theses schemas are reflective of the core Annex 3 standards for traditional alphanumeric code (TAC) bulletins.

2.2 In the past, in response to national requirements, many States were, and are still to this day, providing complementary information attached to the mandated core information in TAC format.

2.3 While it is recognized that this complementary information is of value for a given State and its operators, it is not readily supported by the IWXXM schemas.

2.4 In a desire to not impose the TAC restrictions to IWXXM, and to benefit from the extensibility of GML, States are permitted to provide complementary information to the content of an IWXXM document with the addition of an extension. Obviously, the use of such an extension shall not prevent the proper validation and exchange of the IWXXM document. As well, a State using an extension to provide complementary information will need to make the extension schema definitions (i.e. xsd) available for other States understand the content.

2.5 The METP WG- MIE is currently investigating a process to collate the extension parameters (i.e. the complementary information provided by a State). Following a discussion with the EUR Data Management Group (DMG) on May 25th 2020, the WG-MIE group is proposing the creation of a global repository hosted by ICAO. In a fashion similar to the filing of State differences against Annex 3, each State would have the responsibility to provide the following information to the global repository:

- URL to the State's schema extension definitions
- High level description of the extension
- Contact details of the national focal point

2.6 With the more technical information (i.e. extension schema definitions) residing with the States, the information to be provided to the Global repository remains higher level. This is a deliberate choice in order to keep global repository as stable as possible, and thus not requiring very frequent updates.

3. ACTION BY THE MEETING

3.1 The members of the APAC MET/IE group are invited to:

a) Note the information provided in this Working Paper;
b) Provide comments on the proposed Global repository and the requirement for States to provide basic information on their use of extensions.

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