

International Civil Aviation Organization

ICAO

WORKING PAPER (WP/19)

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**CESSATION OF THE USE OF LEGACY TEXT-BASED FORMAT - TRADITIONAL
ALPHANUMERIC CODE (TAC)**

(Presented by Hong Kong, China)

SUMMARY

This paper highlights the planned cessation of Traditional Alphanumeric Code (TAC) for meteorological information exchange and its potential impact on existing services and systems. The meeting is invited to consider necessary coordination and implementation aspects to ensure orderly transition of affected services.

1. INTRODUCTION

1.1 The Traditional Alphanumeric Code (TAC) has long been the standard format for exchanging operational meteorological (OPMET) information, including METAR, SPECI, TAF, and SIGMET products essential to international air navigation.

1.2 Aeronautical broadcasting services, particularly VOLMET and D-VOLMET, have been built entirely on TAC-formatted OPMET data. These services provide critical weather information to aircraft in flight via HF/VHF voice broadcasts and datalink respectively. Other potentially affected systems include flight planning systems and various ATM support applications that process TAC data.

1.3 With the adoption of the ICAO Meteorological Information Exchange Model (IWXXM) as the standard exchange format and the planned cessation of international TAC distribution in November 2030, States and service providers need to assess the impact on these broadcasting services and determine necessary adaptations to maintain service continuity.

2. DISCUSSION

2.1 The Sixth meeting of the Meteorology Panel (METP/6). METP/6 recommended amendments to Annex 3 and PANS-MET for the cessation of the use of legacy text-based format in November 2030 (METP/6 Recommendation 5/1 refers). The intended applicability date is proposed to be embedded in Amendment 83 to Annex 3 and Amendment 1 to PANS-MET in November 2027.

2.2 The transition toward IWXXM aligns with the broader implementation of System Wide Information Management (SWIM) and supports digital, machine readable exchange of meteorological information across the ATM environment.

Influence on Systems and Services relying on TAC

2.3 VOLMET and D-VOLMET services broadcast meteorological information to aircraft through voice and datalink respectively. These services rely entirely on TAC-formatted OPMET data as their input source, with their systems designed specifically to process TAC-formatted OPMET.

2.4 The cessation of TAC exchange will eliminate the primary data source for these broadcasting systems. Since current VOLMET/D-VOLMET infrastructure cannot process IWXXM format, States/Administrations must either upgrade/replace these systems or implement conversion mechanisms to transform IWXXM data into formats suitable for broadcast services.

2.5 The transition period from 2027 to 2030 presents additional challenges. Some States/Administrations may provide only IWXXM while others maintain dual format dissemination, creating a complicated operational environment. This could result in service gaps where VOLMET/D-VOLMET systems in certain regions cannot access or process the required meteorological data, potentially disrupting service to international flights.

2.6 Currently, Annex 3 and PANS-MET does not provide specific guidance on adapting VOLMET/D-VOLMET services for TAC cessation. Clear direction is needed to ensure these critical broadcasting services maintain continuity throughout the transition and beyond.

Policy Considerations for Transition

2.7 Converting IWXXM data for use by VOLMET/D-VOLMET services presents technical challenges, as there are no established ICAO guidelines for such conversions. The complexity of determining appropriate conversion methodologies requires careful consideration.

2.8 States/Administrations may wish to explore various transitional arrangements that ensure continuity of broadcasting services while adapting to the new data exchange environment. Different approaches may be appropriate depending on regional needs and existing infrastructure.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the impacts to be brought by cessation of TAC on existing aeronautical broadcasting services that could not support IWXXM data;
- b) note the lack of ICAO guidance document for assisting States/Administrations on the transitional arrangements to ensure continuity of aeronautical broadcasting services while adapting to the new data exchange environment; and
- c) consider to urge the ICAO to develop relevant guidance document in conjunction with stakeholders to facilitate a smooth transition from TAC to IWXXM without affecting existing aeronautical broadcasting services.
