



ICAO

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North American, Central American and Caribbean Office

WORKING PAPER

NACC/WG/10 — WP/09  
05/09/25

**Tenth North American, Central American and Caribbean Working Group Meeting (NACC/WG/10)**  
Tulum, Mexico, from 8 to 12 September 2025

**Agenda Item 4: Presentation of NACC/WG Task Forces**

**Implementation Status of the MET Task Force Action Plan - MET/TF**

(Presented by the Secretariat)

**EXECUTIVE SUMMARY**

This report summarizes the progress of the Meteorology Task Force (MET/TF) in implementing its 2023–2025 work plan and presents the priorities for the 2025–2026 period. It highlights the progress in implementing the exchange of OPMET data using the IWXXM format while acknowledging the remaining challenges for its full adoption.

The document identifies the need to strengthen aviation's resilience to severe weather phenomena and the transition to a data-centric service model. The priorities for the next term focus on the implementation of meteorological quality management systems (MET QMS), the dissemination of information on Amendment 82 to Annex 3 to refine its implementation, and the training of technical personnel to ensure an effective transition and use of the information.

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| <b>Action:</b>               | As presented in numeral 4  |
| <i>Strategic Objectives:</i> | <ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>  |
| <i>References:</i>           | <ul style="list-style-type: none"><li>• Annex 3 – Meteorological Service for International Air Navigation, Twentieth Edition, July 2018.</li><li>• ICAO Document PANS-MET - Procedures for Air Navigation Services - Meteorology (Doc 10157)</li></ul> |

**1. Introduction**

1.1 This report examines the work of the MET Task Force of the North American, Central American and Caribbean Working Group (NACC/WG) and the Regional Planning and Implementation Group (GREPECAS) in optimizing and harmonizing aeronautical meteorology services in their respective regions. It presents a summary of the achievements made during the 2023–2025 work plan and outlines the implementation priorities for the 2025–2026 period.

1.2 The main focus of the MET/TF's work has been the implementation of the Standards and Recommended Practices (SARPs) of ICAO Annex 3, as well as the promotion of greater regional coordination and the adoption of technologies and procedures to mitigate the risks associated with severe weather phenomena, as addressed in NACCWG10-WP/04.

1.3 The formulation of the 2025–2026 plan, as addressed in NACCWG10-WP /05 and NACC/WG/RAP/03-WP/21, has been influenced by the need for an effective transition from a static product model to a digital, information-centric environment driven by System-Wide Information Management (SWIM).

## **2. Analysis and Discussion**

### **2.1 Progress of the 2023–2025 Action Plan:**

The MET/TF has made significant progress in its work plan. Based on NACC/WG/RAP/03-WP/21, which evaluated the progress and challenges of implementing essential meteorological services, regional events have been completed on the implementation of OPMET data exchange with the IWXXM format. In this regard, reference is made to NACC/WG/09/05 Conclusion, which urged states to accelerate the implementation of this format, although it has been identified that more technical assistance is required for its full adoption. The revision of the CAR/SAM provisions on SIGMET information has also been completed, strengthening procedures in the region. Progress has also been made in disseminating information on System-Wide Information Management (SWIM). However, some activities, such as the review of national and regional MET systems and the development of the tables of Volume III of the e-ANP, have been postponed to the next work plan. Attention has focused on the Basic Building Blocks (BBB) to ensure the quality and accuracy of meteorological services, highlighting the importance of Meteorological Quality Management Systems (MET QMS).

### **2.2 Implementation of the MCAAP Project:**

In addition to the webinars and technical assistance activities, a relevant achievement in the 2023–2025 period was the formulation of the project proposal "Harmonized and Integrated Framework for Safety Oversight and Quality Management, with Verification of the Basic Building Blocks for ICAO Annex 3 Meteorological Services in the NAM/CAR Region" (MCAAP). The initiative, which seeks to strengthen the verification of the BBBs and safety oversight in the MET area, was shared with the SAM Regional Office. Upon approval of resources from both projects, the project will be developed jointly, consolidating a NAM CAR SAM activity. The expected results include a harmonized framework that improves safety oversight, quality management, and BBB verification, thus ensuring the provision of high-quality meteorological services.

### 2.3 Severe weather phenomena and their impact:

Aviation faces growing challenges due to severe weather phenomena, exacerbated by climate change. This topic was addressed in NACCWG10/WP/04, which analyzed the impact of such phenomena in the context of GREPECAS/22/9 Conclusion. The NAM CAR SAM Workshop on Severe Weather Phenomena and Aviation, held in Lima, Peru, in June 2025, underscored the urgency of strengthening states' capacity to mitigate their impacts. The workshop highlighted the need to improve early warnings, apply risk management methodologies, and foster regional coordination. Concrete actions were proposed, such as the collection and dissemination of impact data and continuous training. These points align with the recommended actions in NACCWG10/WP/04, which urges the standardization of alert procedures and the incorporation of climate resilience into civil aviation strategic plans.

### 2.4 Transition to a Data-Centric Model:

The evolution of aeronautical meteorological services is heading toward a data-centric digital environment. The NACCWG10/WP/05 describes this transition, moving away from the static product model to adopt web services and information in IWXXM format, within the framework of SWIM. This change is crucial for improving global interoperability and automation in decision-making. ICAO's Global Air Navigation Plan (GANP) (2025–2030) supports this vision, emphasizing high-resolution data and the provision of automated services. The implementation of these requirements is a priority to ensure a more efficient and safer aviation ecosystem.

### 2.5 Workshop on Amendment 82 to Annex 3:

In August 2025, the Workshop on Amendment 82 to Annex 3 was held in Lima, Peru. The workshop addressed the significant changes in Annex 3, which has been restructured for greater clarity and consistency. A key outcome of the workshop was the introduction of the new ICAO Document PANS-MET - Procedures for Air Navigation Services - Meteorology (Doc 10157). This document has become a fundamental technical reference that complements Annex 3, which now focuses on high-level requirements. Additionally, the clear differentiation between the concepts of "Meteorological Authority" and "Meteorological Service Provider," was discussed, which optimizes functions and responsibilities in the provision of services, as reflected in the changes to Annex 3 and other ICAO documents, including Annexes 6, 10, 11, and 15.

### 2.6 Aircraft-Based Observations (ABO):

The need to study the promotion of aircraft-based meteorological observation programs has been identified. ABO information complements terrestrial and satellite observation networks and is a vital source for improving forecasts and situational awareness. The activity will focus on formulating a project for integrating ABO data into the hazard identification processes of air traffic service providers. This integration will enable a more accurate assessment of meteorological risks in real-time, contributing to operational safety and efficiency in decision-making.

### 3. Conclusions

3.1 The MET/TF has demonstrated a sustained commitment to implementing its work plan. Although significant progress has been made, challenges persist in the full adoption of key technologies such as the IWXXM format, as addressed in NACC/WG/09/05 Conclusion.

3.2 The recurrence of severe weather phenomena demands a proactive and coordinated approach focused on risk management and adaptation. The transition to a data-based service model, in line with the vision of ICAO and the GANP, is an imperative for the future of aviation. In this context, key initiatives such as Regional Cooperation (SENEAM) and the execution of the project for the Harmonized and Integrated Framework for Safety Oversight (MCAAP) are priorities and are integrated into the work program for the next biennium. The main priorities of the MET/TF for the next period focus on:

- Regional Cooperation (SENEAM): Analyze and formalize possible regional agreements derived from the declaration of intent proposed by SENEAM.
- Harmonized and Integrated Framework for Safety Oversight and Quality Management (MCAAP): Execute this project, which already has approved resources, for the verification of the Basic Building Blocks (BBB).
- Addressing Postponed Activities: Address the postponed activities from the previous period, such as the review of national and regional MET systems and the development of the tables of Volume III of the e-ANP.
- Implementation of MET QMS: Accelerate the implementation and certification of Quality Management Systems (MET QMS), with an emphasis on evaluating operational accuracy and personnel competence.
- Adoption of IWXXM: Drive the full implementation of the IWXXM format for information exchange, seeking collaboration with the COMM/TF and considering the difficulties in format conversion.
- Strengthening Severe Weather Management: Continue with coordination mechanisms and standardization of alert procedures, and advance in the formulation of a project on the integration of MET data into the hazard identification process of air traffic service providers.
- Promoting Training: Organize dissemination events on the changes and requirements of Amendment 82 to Annex 3 and the PANS-MET Document, ensuring that technical personnel are fully trained for the transition.
- Promoting the ABO Program: Study the promotion of the Aircraft-Based Observations (ABO) program in the NAM and CAR regions as an essential data source for improving meteorological surveillance and forecasts.

#### **4. Suggested Actions**

4.1 The meeting is invited to consider the following action plan of the MET Task Force for the next period, which will focus on these key priorities:

- a) Regional Cooperation with SENEAM for collaboration agreements.
- b) Execution of the MCAAP project.
- c) Resume the review of national/regional MET systems and the development of the e-ANP Vol. III tables.
- d) Implementation and certification of Quality Management Systems (MET QMS).
- e) Promotion of the adoption of the IWXXM format.
- f) Integration of MET data into the risk management of air traffic service providers.
- g) Training on Amendment 82 to Annex 3 and the PANS-MET Doc.
- h) Promotion of the Aircraft-Based Observations (ABO) program.

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