



ICAO

International Civil Aviation Organization
North American, Central American and Caribbean Office

WORKING PAPER

NACC/WG/8 — WP/15
25/08/23

Eighth North American, Central American and Caribbean Working Group Meeting (NACC/WG/8)
Mexico City, 29 August - 1 September 2023

Agenda Item 3: Follow-up of NACC/WG 2022-2023 Action Plan
3.4 NACC/WG progress in Aeronautical Information Management (AIM) and Aeronautical Meteorology (MET)

NACC/WG MET TASK FORCE REPORT

(Presented by the MET/TF Coordinator)

EXECUTIVE SUMMARY	
This working paper presents the MET/TF work program progress report as approved during the NACC/WG/7 meeting and the next assistance activities under development in accordance with the MET/TF Terms of Reference.	
Action:	Suggested actions are presented in Section 4.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Environmental Protection
<i>References:</i>	<ul style="list-style-type: none">• Seventh North American, Central American and Caribbean Working Group Meeting (NACC/WG/7), Ciudad de México, 29 August to 1 September 2022.• Second Meeting of Rapporteurs of the North American, Central American and Caribbean Working Group (NACC/WG/RAP/02), Mexico City, 28 to 31 March 2023.• First Meeting of the North American, Central American and Caribbean Working Group (NACC/WG) Meteorology (MET) Task Force (TF) (MET/TF/01) On-line, 16 March 2023 MET/TF/01 (icao.int) and subsequent teleconferences.

1. Introduction

1.1 The Seventh North American, Central American and Caribbean Working Group Meeting NACC/WG/7, held in Mexico City from 30 August to 1 September 2022, approved the MET Task Force to promote MET implementation initiatives in the NAM/CAR Regions and streamline the assistance mechanism at the regional level.

1.2 The First Meeting of the MET/TF was held online on 16 March 2023 with the participation of 19 Representatives from 12 States and 7 Territories ([see meeting report](#)). The Meeting agreed the Terms of Reference and reviewed the Work Programme of the MET/TF. The NACC Regional Office received nominations from States and Territories, pending the nomination of the rapporteur.

1.3 The MET/TF noted the Conclusion eCRPP/4/03 from the Fourth Virtual Meeting of the GREPECAS Programs and Projects Committee (eCRPP/4), to extend the following two projects to the CAR region, the MET/TF is analysing the necessary work:

- a) SIGMET Coordination Project among Meteorological Watch Offices (MWO) covering adjacent Flight Information Regions (FIRs);
- b) Regional implementation of the ICAO Meteorological Information Exchange Model (IWXXM).

2. Analysis

2.1 The MET/TF discussed the expected deliverables, which could be structured under a two-tier approach, as follows:

- a) provide support to States on the establishment and implementation of the necessary safety oversight system;
- b) in support to the States' safety oversight activities, assist by explaining the requirements for the ICAO MET-related Standard and Recommended Practices (SARPs) (expected to be captured by the national regulations) and ensuring that a minimum level of services according to the Caribbean and South American Air Navigation Plan (eANP CAR/SAM) requirements is achieved

2.2 Collaborative work between Civil Aviation Authorities, Meteorological Authorities and entities that provide the meteorological service, displayed a great potential to facilitate the implementation of work programme and gain efficiencies and synergy establishing or enhancing the States' Safety Oversight System (SSO) and MET service provision.

3. Results

3.1 The following table presents the initially proposed work plan and summarizes the most representative activities deployed during the 7 months of operation of the MET/TF. The **Appendix** to this WP, provides details on the activities deployed and to be completed.

Reference	Description	Status
Annex 3 GANP e-ANP	Regional event on the foundational cores of Meteorological Service for International Air Navigation and its evolution	Ongoing NAM/CAR/SAM Workshop on the proposed PANS-MET and Amendment 81 to Annex 3 (Lima, Peru, 30 October to 1 November 2023)
Annex 3 ICAO Guidance Material	Regional event on provisions related to the implementation of OPMET Data Exchange under IWXXM	Planning Supported by MEVA/TMG: interoperability tests for the exchange on AMHS of OPMET data in accordance with IWXXM
Annex 3 GANP e-ANP ICAO Guidance Material	Regional event on provisions related to meteorological authority, quality assurance, State safety oversight responsibilities and functions, and competency training and qualifications for aeronautical meteorological personnel	Ongoing 1 MET/TF teleconference Supported by WMO RAIV – ET AVI: 1 webinar on QMS and AMP competency framework. Additional activities under planning
Annex 3 e-ANP	Review of current CAR/SAM provisions on SIGMET.	Ongoing In cooperation with WMO RA IV – ET AVI, ICAO SAM RO, and CAR - SAM States.
Annex 3 e-ANP ICAO Guidance Material	CAR Regional SIGMET test analysis and report	- CAR/SAM Regional SIGMET Guide, - SIGMET Workshop Part 1, Mexico NACC RO 29 May to 02 June 2023
Annex 3 ICAO Guidance Material	Dissemination and analysis of the MET-SWIM Plan and the MET-SWIM Roadmap	Not Started
Annex 3 GANP e-ANP BBB / ASBU Frameworks	Event for the review of the national and regional MET systems and essential services	Ongoing BBB verification process ongoing 1 MET/TF teleconference 2 Teleconferences with COCESNA and Costa Rica
GANP e-ANP	Review of the e-ANP Vol I and Vol II MET Tables and draft the corresponding Proposal for Amendment	Ongoing Initial review completed
GANP ASBU Framework	Development of e-ANP Vol III MET component	Not Started
Annex 3 Anne 19 USOAP CMA	Technical assistance to enhance the State's capability for the safety oversight of aeronautical meteorology	Ongoing Coordination on UK ASSI and Mexico request for NACC support on MET safety oversight implementation

4. Suggested actions

4.1 The Meeting is invited to:

- a) note the achievements in preparation for GREPECAS/21, to harmonize the implementation work of the NACC/WG in the MET area;
- b) provide comments to improve the MET Programme and support its compliance;

- c) urge NAM/CAR States to nominate representatives for the MET/TF and the rapporteur; and
- a) designate States experts from CAA and MET Authority to participate in the NAM/CAR/SAM Workshop on the proposed PANS-MET and Amendment 81 to Annex 3 to be held in Lima, Peru, 30 October to 1 November 2023.



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INTERNATIONAL CIVIL AVIATION ORGANIZATION

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Progress report of the NACC/WG MET/Task Force

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Luis Raul Sánchez Vargas

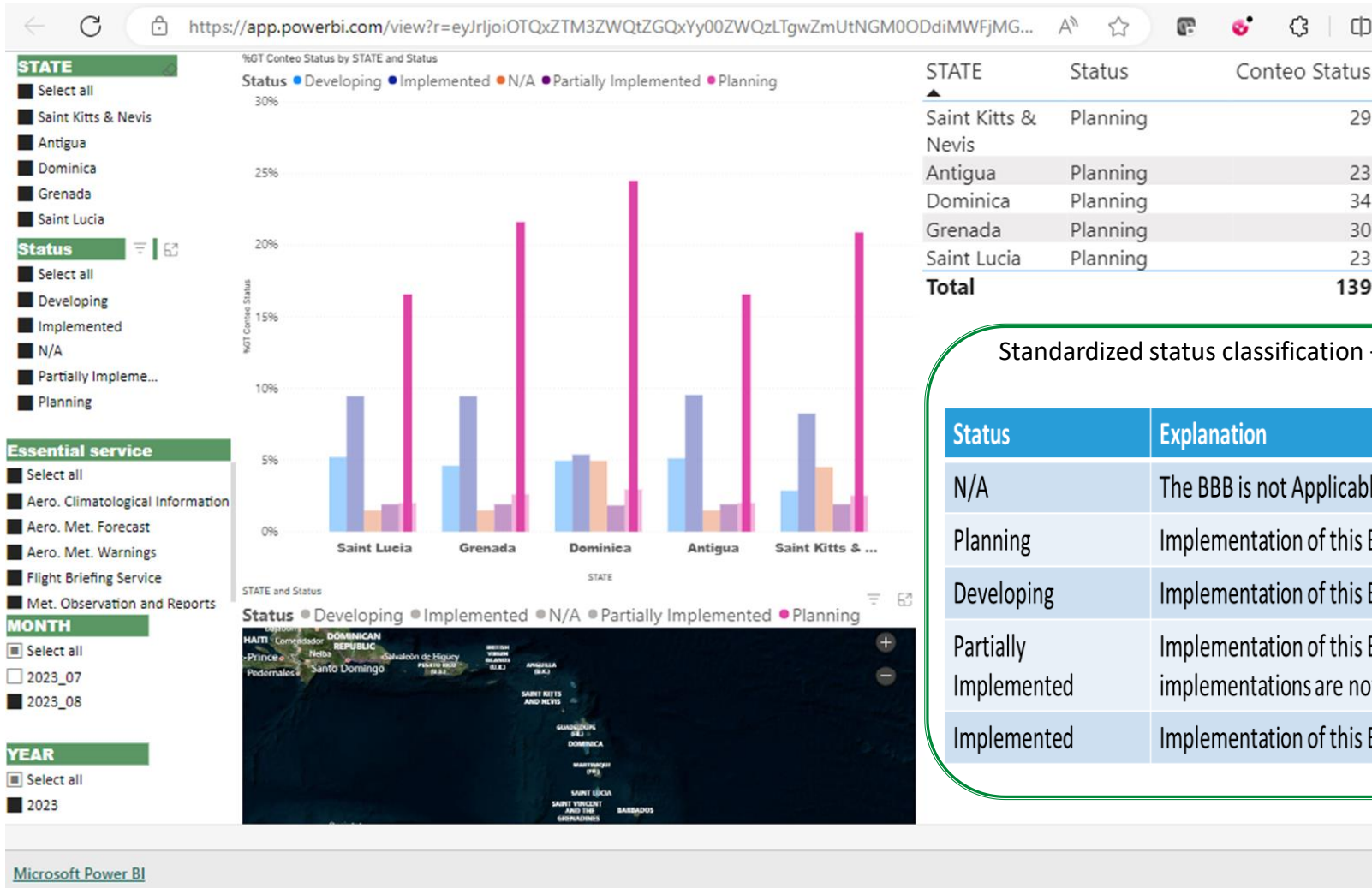
ICAO NACC Regional Officer

Aeronautical Meteorology and Environmental protection

Sep 2023

Preliminary results

BBBs Verification



Standardized status classification – Based on the ASBU process of the NACC ASBU/TF

Status	Explanation
N/A	The BBB is not Applicable
Planning	Implementation of this BBB is planned, but not yet started
Developing	Implementation of this BBB is in the development phase, but not yet operational
Partially Implemented	Implementation of this BBB Element is partially completed and/or operational but all planned implementations are not yet complete
Implemented	Implementation of this BBB Element has been completed and/or is fully operational

The dashboard will provide relevant information for planning, decision-making, and development of assistance activities based on realistic and relevant information,

Preliminary results

Conducted in Mexico NACC RO 29 May to 02 June 2023

In cooperation with the World Meteorological Organization (WMO) Regional Association IV

Dedicated to Aeronautical meteorological personnel (AMP)

Objectives:

- promote the standardization and harmonization of procedures and formats for the preparation and dissemination of SIGMET information, and
- increase its availability and quality in the NAM/CAR/SAM Regions, through the implementation of the provisions of Annex 3 to the Chicago Convention and related guidance material.

Part II is being organized for November 2023 and supported by WMO RAIV

SIGMET Workshop Part 1

Invitation to the Regional Assistance Project for the Significant meteorological information (SIGMET) Information Improvement Workshop, Part 1 – Analysis and forecasting techniques.

Proyecto RLA09801 – Programa de Asistencia Multi-Regional para la Aviación Civil (MCAAP)

Invitación al Proyecto de Asistencia Regional para el Taller de Mejora de la Información Meteorológica Significativa (SIGMET), Parte 1 – Técnicas de análisis y pronóstico

ICAO NACC Regional Office, 29 May to 2 June 2023 / Oficina Regional NACC, del 29 de mayo al 2 de junio 2023

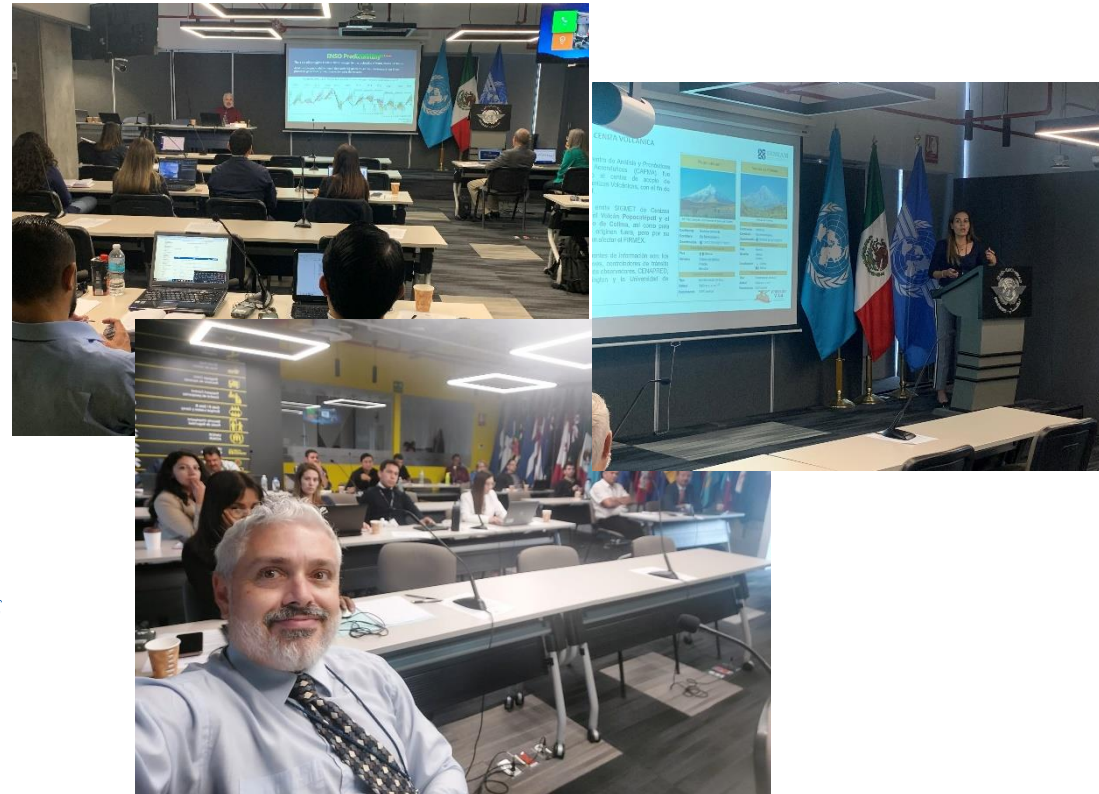
Documents / Documentación

Invitation Letter / Carta Invitación	EN	SP
Group Photo / Foto de Grupo		
Recording Day 1 / Grabación Día 1		
Recording Day 2 / Grabación Día 2		
Recording Day 3 / Grabación Día 3		
Recording Day 4 / Grabación Día 4		
Recording Day 5 / Grabación Día 5		

Preliminary results

SIGMET Workshop Part 1

Part 1 of the SIGMET Workshop AMP from the MWO and AMO, with the necessary knowledge and skills to improve the diagnose and forecast of en-route weather phenomena and other local phenomena, that may affect the safety, regularity and efficiency of international air navigation,



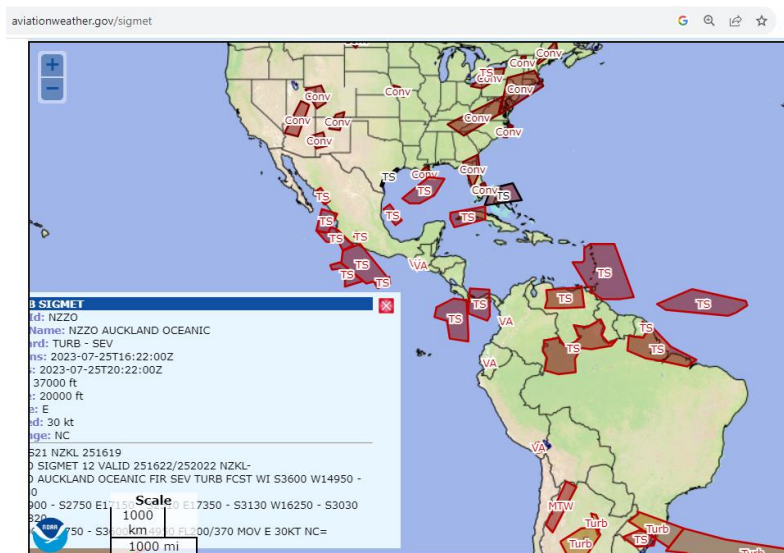
States	MET Service provider	CAA
Argentina	1	
Aruba	1	
Bahamas	1 (v)	
Brasil	1	
Costa Rica		1
Colombia	2 (v)	
Cuba		1
Ecuador	1 (v)	
El Salvador	2	2
Haití	2 (v)	
Honduras	1 + 3 (v)	
Mexico	4 + 3 (v)	2
Nicaragua	1 (v)	1
Panamá	4 (v)	1
Paraguay	1 (v)	
Saint Kitts and Nevis	1 (v)	
Saint Vincent and the Grenadines	1 (v)	
Trinidad and Tobago	1	
Total	11 + 20 (v)	8

Preliminary results

CAR/SAM Regional SIGMET Guide,

To provide guidance for standardization and harmonization of the procedures and formats related to the preparation and issuance of aeronautical meteorological information pertaining to specified en-route hazardous weather phenomena,

In cooperation with WMO RA IV - Expert Team on Services for Aviation, ICAO SAM RO, and CAR, SAM States,



SIGMET Guide

INTERNATIONAL CIVIL AVIATION ORGANIZATION



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CAR/SAM REGIONAL SIGMET GUIDE

Eleventh Edition — March - 2023

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Preliminary results

Quality Management Systems (QMS)

Supported by Cuba and the WMO ET-AVI

2 Webinars on the implementation of the QMS for the provision of MET services for international air navigation

ICAO MEXICO CITY

Webinar on the implementation of the Quality Management System (QMS) for the provision of Meteorological (MET) services for international air navigation

Webinario sobre la implementación del Sistema de Gestión de la Calidad (QMS) para el suministro de servicios Meteorológicos (MET) para la navegación aérea internacional

ICAO NACC Regional Office
Oficina Regional NACC de la OACI

9 November 2022 / 9 de noviembre de 2022

APLICACIÓN DE UN SISTEMAS DE GESTIÓN DE CALIDAD EN LOS SERVICIOS METEOROLOGICOS AERONAUTICOS (MET)

MSc Uvaldo Reina Milian Diaz
Inspector MET, Dirección de Aeronavegación
Instituto de Aeronáutica Civil de Cuba

QMS implementation



The Expert Team on Services for Aviation (ET-AVI) from WMO Regional Association IV (RA IV) presents:

Quality Management Systems (QMS) Webinar Series

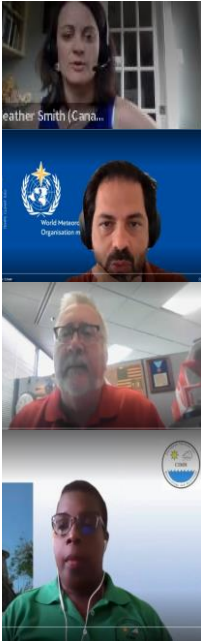
Thursday 29 June; 16:00-18:15 UTC, 10:00-12:15 Costa Rica, 12:00-14:15 Barbados
Friday, 30 June; 16:00-18:15 UTC, 10:00-12:15 Costa Rica, 12:00-14:15 Barbados

Objectives:

One of the goals of the Expert Team for Services to Aviation (ET-AVI) is to share guidance and training material to members relating to the implementation of quality management systems. The intended audience for this webinar series is QMS focal points, managers, and directors of met services in Latin America and the Caribbean.

Moderators: Heather Smith and Mike Graf, Co-leaders of the RA IV-ET-AVI

Note that interpretation will be provided in English and Spanish



Quality Management Systems (QMS)

Contracting States needs to ensure the establishment and implementation of a properly organized quality system that contribute towards the safety, regularity and efficiency of international air navigation.

Ongoing process for the approval of a QMS implementation project

- To establish partnerships for the deployment of a QMS mentoring programme.
- To enhance human resource capacity, performance management and operational efficiency to sustain the QMS.

QMS implementation



Upcoming activities

NAM/CAR/SAM Workshop on the proposed PANS/MET Document - Procedures for Air Navigation Services - Meteorology (Doc 10157)

Lima, Peru, 30 October to 1 November 2023

Confirm your participation by 1 October 2023

- To disseminate the process of creation and construction of the new 10157 PANSMET Document, and,
- to disseminate the content and format of the new PANS-MET Document.

PANS MET Workshop



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гражданской
авиации

منظمة الطيران
المدني الدولي

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When replying please quote:

Ref.: NT-NS2-26; NT-N1-4 — E.OSG-NACC98296

3 August 2023

To: States, Territories and International Organizations

Subject: **NAM/CAR/SAM Workshop on the proposed PANS-MET Document - Procedures for Air Navigation Services - Meteorology (Doc 10157)**
(Lima, Peru, 30 October to 1 November 2023)

Action
Required: **Confirm your participation by 1 October 2023**





Thank You!