



ICAO

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

WORKING PAPER

NACC/WG/6 — WP/11  
23/08/21

**Sixth North American, Central American and Caribbean Working Group Meeting (NACC/WG/6)**  
On-line, 25 to 27 August 2021, 09:00 to 13:00 (UTC-5)

**Agenda Item 2: Follow-up on Valid Conclusions and Previous Agreements of the NACC/WG, GREPECAS, NACC/DCA and Other Related Meetings**  
**2.3 Follow-up to GREPECAS improvements and AN Projects (AIM, ATM, AGA, CNS, MET and SAR)**

### STATUS OF MET ACTIVITIES

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
This Working paper presents the most relevant activities for the implementation of the Meteorological Service for International Air Navigation provisions.	
<b>Action:</b>	Suggested actions are presented in Section 4.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li><li>• Environmental Protection</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• Annex 3 – <i>Meteorological Service for International Air Navigation</i></li><li>• Doc 9750 - <i>Global Air Navigation Plan (GANP)</i></li><li>• Doc 8896 – <i>Manual of Aeronautical Meteorological Practice</i></li><li>• Doc 10003 – <i>Manual on the ICAO Meteorological Information Exchange Model</i></li><li>• ICAO Meteorology Panel <a href="#">website</a></li></ul>

## 1. Introduction

1.1 The ICAO Meteorology Panel (METP) has held five meetings at ICAO Headquarters and virtually: April 2015, October 2016, April 2018, September 2018 and June 2021. The meetings reports are available at the METP website (see [here](#)) for consultation and monitoring by States.

1.2 During the last five years, Annex 3 to the Chicago Convention has been updated through amendments 77A, 77B, 78, and 79, consolidated in its Twentieth Edition and the ongoing amendment 80.

1.3 The concept of Basic Building Blocks (BBBs) reference framework was introduced in 2019 by the Sixth Edition of the GANP.

## 2. Analysis of the amendments to Annex 3 and the BBBs

2.1 In a general view, the main topics introduced in the amendment process to Annex 3 have been:

- a) Information concerning en-route weather phenomena which may affect the safety of aircraft operations (SIGMET) concerning the release of radioactive material in the atmosphere; improved harmonization of SIGMET information;
- b) the provision of meteorological aerodrome report (METAR)/Aeronautical special meteorological report (SPECI), Terminal area forecast (TAF), SIGMET and Information concerning en-route weather phenomena which may affect the safety of low-level aircraft operations (AIRMET), volcanic ash and tropical cyclone advisories in the ICAO Weather Information Exchange Model (IWXXM) as a standard;
- c) introduction of World Area Forecast System (WAFS) information on cumulonimbus clouds, icing and turbulence and additional flight levels for WAFS gridded forecast information;
- d) removal of legacy satellite distribution systems in lieu of Internet-based services;
- e) modification of Area forecast for low-level flights (GAMET) requirements;
- f) clarification of runway visual range assessment requirements;
- g) use of a global reporting format for assessing and reporting runway surface conditions;
- h) introduction of space weather advisory information services;
- i) improvement of the provision of SIGMET information by meteorological watch offices (MWOs); information on the release of radioactive material into the atmosphere; SIGMET and AIRMET information;
- j) modifications of information representations in IWXXM format;
- k) modification of the qualifications, competencies, professional training and instruction of the personnel providing meteorological services, and consequent amendment regarding the modification of references in relation to the provision of aeronautical information services.

2.2 The Amendment 77-B to ICAO Annex 3, introduced changes to implement the use of a global reporting format for assessing and reporting runway surface conditions (GRF); Amendment 80 to the same Annex changed the applicability date of Amendment 77-B to 4 November 2021, due to the COVID-19 pandemic, among other introduced changes.

2.3 The METP continues to address a wide range of topics and at least 11 job cards, including the development of a brand new Procedure for air navigation services – Aeronautical meteorology (PANS-MET), based on a recommendation from the 2014 MET Divisional meeting, which will bring some benefits to States and industry, including the improved responsiveness to evolving future requirements. States need to keep abreast of the ICAO amendment process.

2.4 The BBB reference framework is aimed at guaranteeing that, before implementing the elements and modules of the GANP, the State complies with an adequate organization of the Air Navigation Services (ANS), particularly the MET Service, and that the Standards and Recommended Practices (ICAO) of Annex 3 have been properly implemented. Therefore, a verification of the effective implementation of the BBBs is required.

2.5 Statistics recorded by the Online Framework (OLF) of the Universal Safety Oversight Audit Programme (USOAP), for the Compliance Checklist (CC) in the Electronic Filling of Differences (EFOD) with respect to Annex 3 for CAR Region States, only reached 60% as of July 2021, indicating that some States do not successfully complete the SARPs amendment process and possible deficiencies of the meteorological service provision in the CAR Region.

### **3. Systemic Assistance Program (SAP) of the ICAO NACC Regional Office**

3.1 The SAP has established itself as one of the primary mechanisms to provide the assistance required by the States of the North American, Central American and Caribbean regions, assigned to the ICAO NACC Regional Office. The SAP has created the structure to facilitate the delivery of assistance directly to States, by promoting the effective implementation of ICAO SARPs, specifically those corresponding to the Meteorological Service for international air navigation.

3.2 States that have received direct assistance through video calls, teleconferences and other electronic mechanisms in recent months include: Barbados, Costa Rica, Dominican Republic, Honduras, Mexico and Trinidad and Tobago. Through the SAP, the assistance provided is configured in accordance with the issues of particular interest of each State given the diversity of needs and priorities that concern each administration. The following topics have been addressed and present successful results cover:

- a) Operational meteorological (OPMET) exchange and implementation of the IWXXM format.
- b) Implementation of qualification requirements and competencies of Aeronautical Meteorology personnel in accordance with the provisions of Annex 1 and the requirements of the World Meteorological Organization (WMO).
- c) Implementation of the Quality Management System (QMS) in accordance with the provisions of Annex 3.
- d) Implementation of the provisions related to the Aeronautical Meteorological Authority, quality assurance and the responsibilities and functions of safety oversight in the provision of MET Services.
- e) Specific operating regulations in accordance with ICAO Annex 3.
- f) Review of the validity of the deficiencies included in the GREPECAS Air Navigation Deficiencies Database (GANDD).

3.3 The Regional Office will continue to implement the SAP to meet the priority needs of the States and provide assistance in the effective implementation of ICAO Annex 3 SARPs.

**4. Suggested actions**

- a) That the Meeting analyze the information contained in this working paper and disseminate as appropriate among contracting States;
- b) that the contracting States consider the necessary mechanisms to verify the effective implementation of the BBBs and notify the their implementation to the Meeting; and
- c) that the contracting States require the necessary assistance through the Systemic Assistance Program (SAP) of the ICAO NACC Regional Office.

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