



International Civil Aviation Organization

**MIDANPIRG Meteorology Sub-Group
Thirteenth Meeting (MET SG/13)**

(Cairo, Egypt, 16 – 17 December 2025)

Agenda Item 6: Future Work Programme

PROPOSAL FOR CERTIFICATION OF METEOROLOGICAL SERVICE PROVIDERS

(Presented by Saudi Arabia)

SUMMARY

This paper proposes the establishment of a standardized certification framework for entities providing meteorological (MET) services for international civil aviation. Unlike air traffic service providers and other aviation stakeholders, MET service providers are not subject to uniform global certification requirements, which leads to inconsistencies in quality assurance and oversight. The paper proposes the development of a certification mechanism—based on ICAO and WMO frameworks—to strengthen service quality, improve regulatory oversight, and align MET service provision with broader safety and performance-based requirements. Action by the meeting is in paragraph 4.

REFERENCE(S)

- ICAO Annex 3 – *Meteorological Service for International Air Navigation*, 21st Edition.
- ICAO Annex 19 – *Safety Management*, 2nd Edition.
- ICAO Doc 9734 – *Safety Oversight Manual, Part A – The Establishment and Management of a State's Safety Oversight System*.
- ICAO Doc 9735 – *Universal Safety Oversight Audit Programme Continuous Monitoring Manual*.
- WMO-No. 1129 – *Guide to the Implementation of a Quality Management System for NMHSs*.
- MET/14-WP/41 – *Qualifications for Oversight of Aeronautical Meteorological Service Provision* (Presented by China, 2014 ICAO/WMO MET Divisional Meeting).

1. INTRODUCTION

1.1 Meteorological information is critical for safe, efficient, and sustainable air navigation. Timely and accurate MET data supports decision-making in flight planning, en-route operations, aerodrome management, and contingency responses.

1.2 While ICAO Annex 3 specifies that MET services must be provided by "authorized" or "designated" entities, there is currently no global mechanism to certify or approve these service providers in a manner equivalent to ATS, CNS, AIS, Instrument Flight Procedures Design, and aviation training organizations.

1.3 This has led to variations in how MET services are provided, regulated, and overseen globally, with potential implications for service quality, safety, and interoperability in cross-border operations and dissemination of weather information at regional level.

2. DISCUSSION

2.1 ICAO Annex 3 (Meteorological Service for International Air Navigation) lays out performance and quality requirements for MET services, including the implementation of Quality Management Systems (QMS). However, it does not establish a formal global certification mechanism for MET service providers.

2.2 Many States rely solely on administrative 'designation' scheme. While this satisfies the legal appointment of the authority, it often lacks a technical capability assessment. Furthermore, many States rely on ISO 9001 certification issued by non-aviation third-party auditors as a proxy for oversight. This does not constitute State Safety Oversight as defined in ICAO Doc 9734, leading to a regulatory gap where the CAA cannot effectively enforce corrective actions. This creates challenges for:

- Ensuring uniform quality and performance standards;
- Conducting effective oversight;
- Supporting the mutual recognition of services in a regional or global context.

2.3 In contrast, air traffic service providers (ATS), aircraft maintenance organizations (AMOs), and even MET training institutions are often subject to certification processes that validate their compliance with ICAO Standards and Recommended Practices (SARPs).

2.4 Despite the absence of global guidance, some States have proactively established national certification frameworks. For example, Saudi Arabia successfully certified its MET service provider in 2024 under GACA Regulation 170. This process involved a formal separation of the Regulatory Authority (GACA) from the Service Provider, ensuring that the provider underwent a rigorous technical audit of their personnel competency, MET equipment accuracy, and Quality management systems prior to certification issuance.

2.5 A formal certification process would:

- Provide objective recognition of providers' capabilities and quality systems;
- Directly improve the State's Effective Implementation (EI) score in the ICAO Universal Safety Oversight Audit Programme (USOAP), specifically regarding ANS protocol questions;
- Provide a legal mechanism for the CAA to enforce compliance and, if necessary, limit or suspend operations for safety reasons;"
- Support alignment with ICAO's State Safety Programme (SSP) and safety management principles;
- Enhance harmonization and interoperability of MET services across borders and adjacent States;
- Increase confidence among operational users (e.g. ATCOs, pilots, dispatchers).

2.6 Such a framework could include:

- Clear requirements and criteria for certification (e.g., QMS implementation, compliance with Annex 3, staffing competency);
- Periodic audits and renewal procedures;
- Strengthen coordination with WMO and ICAO Regional Offices;
- Exploration of regional or sub-regional certification models under ICAO Planning and Implementation Regional Groups (PIRGs).

2.7 This proposal aligns with prior discussions in:

- MET/14-WP/41, which addressed qualification for MET oversight services;
- ICAO's Global Air Navigation Plan (GANP), emphasizing information integrity and performance-based service delivery;
- WMO's initiatives to strengthen regulatory compliance through its Quality Management Framework.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) acknowledge the importance of formal certification of MET service providers;
- b) establishment of an ad-hoc team to draft 'MID Region Guidance on the Certification and Oversight of MET Service Providers,' considering global and regional practices and experience as a baseline reference;
- c) recommend that ICAO explore the inclusion of MET service provider certification within its global regulatory and safety oversight framework; and
- d) encourage States to share their experiences or national practices regarding the oversight of MET service providers.

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