



International Civil Aviation Organization

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

(Cairo, Egypt, 16 – 17 December 2025)

Agenda Item 4: Future Work Programme

**PROPOSAL FOR THE ESTABLISHMENT OF A COMPETENCY CERTIFICATION
(LICENCING) FRAMEWORK FOR METEOROLOGICAL PERSONNEL**

(Presented by Saudi Arabia)

SUMMARY

This paper describes a proposal for a Competency Certification Framework for Meteorological Personnel providing aviation services, comparable to the licensing process of Air Traffic Controllers (ATCOs). Such licensing scheme would strengthen competency assurance, enhance service quality, and align MET personnel with international aviation safety standards. Action by the meeting is in paragraph 4.

REFERENCE(S)

- ICAO Annex 3 — Meteorological Service for International Air Navigation, 21st Edition, November 2025.
- ICAO PANS MET Doc 10157, Procedures for Air Navigation Services Meteorology, 1st Edition November 2025.
- ICAO Doc 9873 — Manual on the Quality Management System for the Provision of Meteorological Service for International Air Navigation.
- WMO-No. 49, Volume II — Technical Regulations: Meteorological Service for International Air Navigation.
- WMO-No. 1205 — Guide to Competency: Aeronautical Meteorological Personnel.
- WMO-No. 114 — Guide to the Qualifications and Training of Meteorological Personnel.
- ICAO-WMO Coordination: Working Arrangements between ICAO and WMO (WMO No. 25, Updated 2023).

1. INTRODUCTION

1.1 The delivery of accurate and timely meteorological information is essential for the safety, efficiency, and regularity of international air navigation.

1.2 While ICAO Annex 1 prescribes a structured licensing system for ATCOs and other aviation professionals, there is currently no equivalent licensing requirement for MET personnel under Annex 3.

1.3 This gap leads to variability in qualifications, competency management, and professional recognition across States, potentially impacting service quality and aviation safety.

2. DISCUSSION

2.1 ICAO Annex 3 outlines the functional requirements for MET services, including the need for personnel to be "appropriately qualified and competent." However, it does not provide a formal licensing requirement similar to those for ATCOs or aircraft maintenance personnel.

2.2 Many States rely on internal or ad hoc training programs, often with no standardized assessment or mutual recognition across borders. This can result in inconsistencies in the quality and reliability of meteorological information provided to aviation users.

2.3 A formal certification (licencing) framework for MET personnel could bring several key benefits:

- Standardization of qualifications and competencies across States and regions;
- Enhanced accountability and professional recognition for MET personnel;
- Support for ICAO's Competency-Based Training and Assessment (CBTA) model;
- Improved cross-border mobility of qualified MET professionals;
- Better alignment with global aviation safety frameworks and safety management systems (SMS).

2.4 Such a framework could draw on existing licensing models (e.g., ATCO licensing) as addressed in ICAO Annex 1 — Personnel Licensing, 12th Edition, November 2022, and ICAO Doc 8896 — Manual of Aeronautical Meteorological Practice, 5th Edition, 2016, and ICAO Doc 10056 — Manual on Air Traffic Controller Competency-based Training and Assessment, 1st Edition, 2016. to include elements such as:

- A defined training syllabus based on ICAO and WMO competency frameworks;
- Structured theoretical and practical assessments;
- Ongoing competency checks and refresher training;
- Optional medical or operational fitness assessments, if determined to be necessary for high-stress roles (e.g., aerodrome meteorological offices).

2.5 The development of a globally or regionally harmonized licensing system would require coordination between ICAO, WMO, regional planning groups, and relevant training institutions.

2.6 Initial steps could include the documentation and sharing of best practices by States already implementing internal licensing systems, to inform broader standardization efforts

3. CONCLUSION

3.1 The current absence of a globally standardized licensing framework for meteorological (MET) personnel represents a gap in the aviation safety and competency assurance system. While WMO No. 1205 provides the standard, there is currently no harmonized regional mechanism to validate and recognize the competency of operational MET personnel. This contrasts with the standardized licensing recognition used for Air Traffic Controllers.

3.2 Introducing a licensing framework for MET personnel — based on existing ICAO/WMO competency models and aligned with the structure of ATCO licensing — would enhance service quality, promote harmonization across States, and support mutual recognition of qualifications. It would also reaffirm the critical role of MET personnel in ensuring aviation safety and efficiency.

3.3 A collaborative effort between ICAO, WMO, regional planning groups, and training institutions is essential to explore the feasibility, structure, and implementation roadmap of such a framework. States with existing internal licensing models can provide valuable input and best practices to guide this process.

4. ACTION BY THE MEETING

4.1 The meeting is invited to:

- a) note the importance of establishing a standardized licensing system for MET personnel engaged in the provision of aviation meteorological services;
- b) establish an ad-hoc working group or task force to develop a 'MID Region Common Competency Framework' for MET personnel, aligned with WMO-No. 1205, to facilitate future mutual recognition of qualifications between States;;
- c) recommend the inclusion of this proposal in future regional and global planning and implementation discussions (e.g., MID eANP, GANP, GASP); and
- d) encourage States to share best practices and lessons learned in competency management and certification of MET personnel.