



Overview of ICAO Annex 3 Amendment 82 – Roles of the MA and MSP

**INTERNATIONAL
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Presentation Overview

This presentation will:

- Explain the **intent and scope of Annex 3 Amendment 82 and PANS-MET**
- Clarify the **Meteorological Authority (MA) and Meteorological Service Provider (MSP) roles and responsibilities**

Annex 3 Amendment 82 and PANS-MET

What It Is and What Has Changed

- ICAO Council:
 - Adoption: **2 April 2025**
 - Effective: **4 August 2025**
 - Applicable: **27 November 2025**
 - Quantitative volcanic ash concentration info (QVA): **26 November 2026**
- **Restructured Annex 3 supported by the introduction of PANS-MET**
- Regulatory and Implementation Benefits
- Clarification of Roles and Responsibilities
 - **Meteorological Service Provider**
 - **Operational and Regional Implications**
- Clear separation of **regulatory and operational roles**
- New and enhanced services (QVA, VONA, WAFS, SWIM)





Restructured Annex 3 and introduction of a new PANS*-MET – A New Structure

- Principles of restructuring of the Annex 3 and development of a new PANS-MET
 - Contain higher level of requirements in the Annex and technical specifications in the PANS
 - Relocate descriptive provisions and technical specifications in Annex 3 Appendices and Attachments to the new PANS
- PANS-MET, as a means of compliance document;
 - Enables the transition of MET service from “product centric” to “information centric” under SWIM
 - Improve responsiveness to States’ national regulations for evolving technical requirements by PANS
- Benefit from this restructuring;
 - The new PANS-MET will provide solely technical specifications to ensure compliance with higher-level requirements in Annex 3, assisting States in optimizing their implementation plan.
 - The adjustment of national regulations could be resolved more easily at lower level, compared to current “all-in-one” Annex 3.



Clarified definition of meteorological authority

Meteorological authority is responsible for:

- High-level internal coordination with the civil aviation authority
- International coordination with meteorological authorities of other States

Meteorological service provider is responsible for:

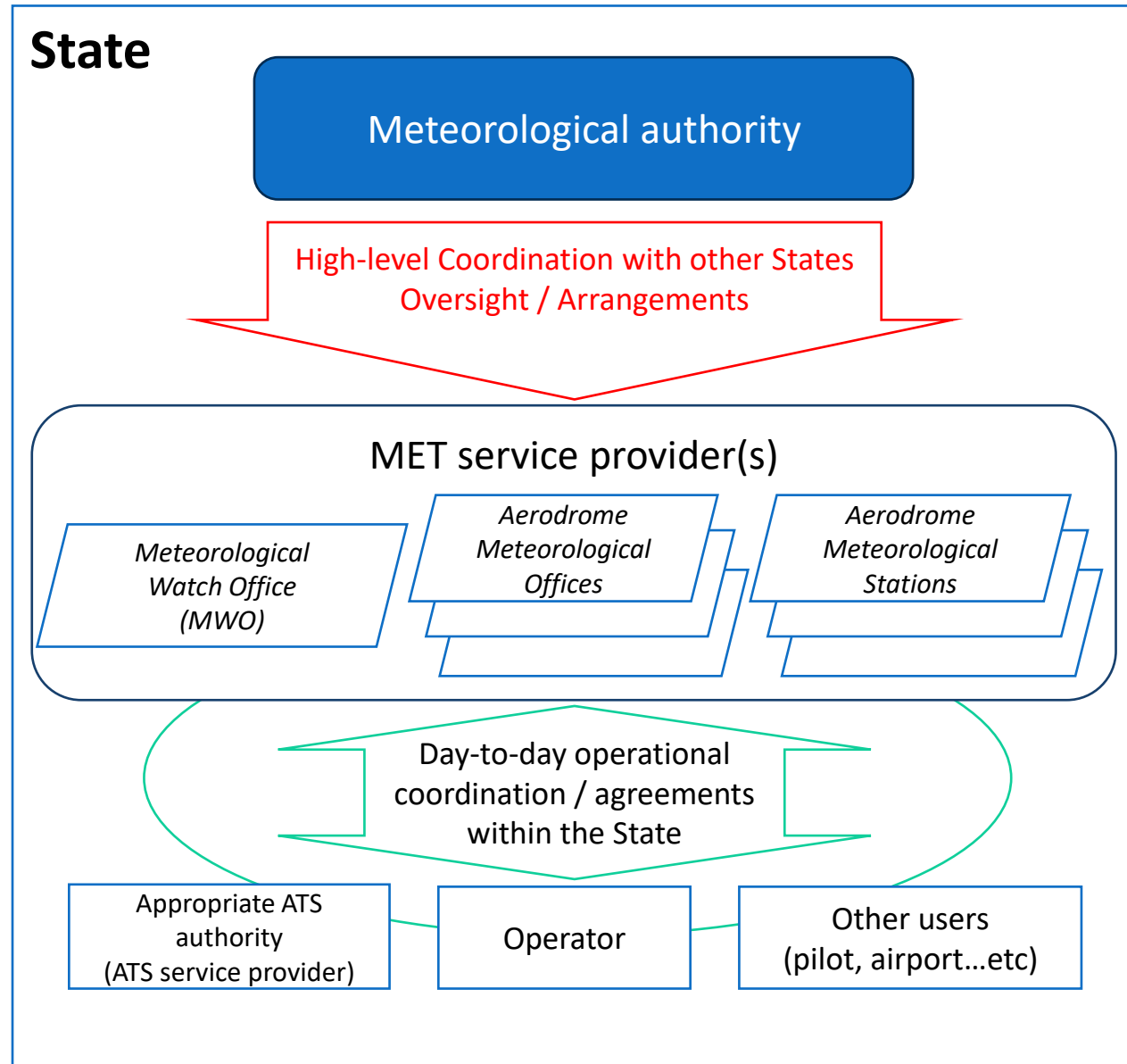
- Dealing with day-to-day, operational issues in relation to the service provision
 - Operational coordination within a State with users
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- Since 1990's, increasing trend for States to delegate the MET service provision to an entity (public or private), distinct from the one responsibility for regulation and oversight.
 - ICAO USOAP has identified in many States the lack of sufficient separation of regulatory/oversight function and the service provision.
 - MET Divisional Meeting (July 2014) requested ICAO to modify Annex 3 to provide further clarifications concerning the role of meteorological authority
 - Functional separation between “authority” and “service provider”
(in line with safety management principles, as stipulated in Annex 19 - *Safety Management*, the *Safety Oversight Manual* (Doc 9734, para 3.3.4.1 and 3.3.4.2), and the *Manual on Aeronautical Meteorological Practice* (Doc 8896, para 1.1.5).



Respective roles of MET authority/service provider(s)



- Restructured Annex 3/new PANS-MET will clearly define
 - a) meteorological authority's role as being responsible for:
 - regulatory/oversight functions
 - arrangements for the provision of meteorological services
 - high-level coordination with stakeholders and meteorological authorities in other States.
 - b) meteorological service provider(s) designated by the meteorological authority as being responsible for:
 - the provision of services
 - day-to-day operational coordination with users.
- Meteorological watch office (MWO), aerodrome meteorological offices and aerodrome meteorological stations are operated by meteorological service provider(s) after having been designated by the meteorological authority of the State.





- All the provisions in a new PANS-MET are addressed to the meteorological service provider (as means of compliance).
- “Meteorological service provider” still appears in a few provisions in the restructured Annex 3 where the provision is subject to coordination with ATS service providers, operators and/or other users.
- Meteorological authority has an obligation to oversee meteorological service provider(s) within the State.
 - This is spelled out in some of the key provisions in Annex 3, e.g.:

2.1.56 ~~Each Contracting State~~ The meteorological authority shall ensure that the designated meteorological authority service provider complies with the requirements of the World Meteorological Organization (WMO) in respect of qualifications, competencies, education and training of meteorological personnel providing service for international air navigation.



- Day-to-day operations of specific meteorological facilities/offices are conducted by meteorological service provider(s).
- Notwithstanding that these specific facilities/offices (e.g., meteorological watch office (MWO), aerodrome meteorological offices, and aerodrome meteorological stations) are established through RAN agreements and reflected in the Regional Air Navigation Plans, involving meteorological authorities concerned.
- The designated facilities/offices are reflected in eANPs, Tables MET II-1 and MET II-2.
- Detailed guidance of the relationship between specific meteorological facilities/offices and meteorological service providers will be provided in ICAO Doc 8896.

Practical Oversight Tools

Acceptable oversight mechanisms include:

- Formal approval or authorization of MSPs
- Periodic audits and inspections
- Surveillance of quality management systems
- Monitoring of service availability and performance
- Review of incident reports and user feedback

Mechanisms for Ongoing Compliance

To ensure ongoing compliance by MET service providers, a satisfactory mechanism may include:

- Formal designation of MA and MSP
- Documented oversight programme
- Routine audits or surveillance
- Corrective action tracking
- Assurance must be Ongoing, Documented, Traceable
- **Key points:**
- This is **not new under Amendment 82**—it is now clarified and reinforced
- This reflects long-standing Annex 3 responsibilities, now clarified

Legislative Instrument or Surveillance Programme?

ICAO does **not** mandate.

A satisfactory mechanism may include:

- Legislation or regulatory instruments
- Certification or authorisation schemes
- Surveillance and audit programmes
- ISO-based quality systems
- Contractual arrangements with State oversight

Essential characteristics:

- Clear roles and responsibilities
- Defined periodicity
- Documented evidence
- Corrective action capability
- Continuity of assurance

MA and MSP Designation

- ICAO requires:
 - State designation of the MA and MSP
 - Publication in the AIP
- Legislative designation is **not mandated**



National Certification

National Certification: One Option, Not a Requirement

- Certification is one option, not an ICAO expectation
- Alternative approval mechanisms are acceptable
- Not an Annex 3 requirement
- Flexibility in form, not in outcome
- Oversight must be effective, proportionate, and documented

Update to Doc 8896

Manual on Aeronautical Meteorological Practices (Doc 8896)

- Doc 8896 update planned following Amendment 82
- Fourteenth Edition (2026) integrates:
 - Amendment 82
 - New definitions and roles of MA and MSP
 - MET inspectorate concepts
 - PANS-MET alignment
- Status: **under ICAO editorial review**

Key Takeaways

- **Separation into Annex 3 and PANS-MET**
- **MA regulates and oversees; MSPs deliver services**
- **Clarifies roles, accountability and oversight**
- **Oversight must be ongoing and evidenced**
- **Flexibility retained for States, but clarity and assurance are essential**

Thank You

