CODEVMET-AFI Project Familiarization Workshop

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Requirements for the Stakeholders in the regulation and Provisions of MET Services

Presented by the Secretariat

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Chicago Convention

Article 28 : Air navigation facilities and standard systems

Each contracting State undertakes, so far as it may find practicable, to:

a) **Provide, in its territory, airports, radio services, meteorological services and other air navigation facilities to facilitate international air navigation, in accordance with the standards and practices recommended or established from time to time, pursuant to this Convention**;

b) ……..

c) …….

Annex 3 to Chicago Convention

The obligation of a Contracting State is for the supply, under Article 28 of the Convention on International Civil Aviation, of meteorological information in its territory and airports, in accordance with the standards and practices recommended or established from time to time, pursuant to this Convention.

Assembly Resolution

A5-6 Resolution

- **A35-6**, adopted by the 35th Assembly, launched the Comprehensive System Approach of USOAP, **expanding the Scope of the Programme to All Safety related Provisions in All Annexes**, exception of Annex 9 related to Facilitation and Annex 17 related Aviation Security.

Annexes to the Chicago Convention

Annex 3 to Chicago Convention

- 2.1.1 The **objective** of meteorological service for international air navigation **shall be to contribute towards the safety, regularity and efficiency** of international air navigation.

- 2.1.2 This objective shall be achieved by supplying the following users: **operators, flight crew members, air traffic services units, search and rescue services units, airport managements and others concerned with the conduct or development of international air navigation**, with the meteorological information necessary for the performance of their respective functions.

- 2.1.3 **Each Contracting State shall determine the meteorological service which it will provide to meet the needs of international air navigation**. This determination shall be **made in accordance with the provisions of this Annex and in accordance with regional air navigation agreement.**

Annex 3 to Chicago Convention

- **2.1.4** Each Contracting State **shall designate the authority**, hereinafter referred to as the **meteorological authority, to provide or to arrange for the provision** of meteorological service for international air navigation on its behalf.

- **2.2.2** Each Contracting State shall ensure that the designated meteorological authority referred to in 2.1.4 **establishes and implements a properly organized quality system** comprising procedures, processes and resources necessary to provide for the quality management of the meteorological information to be supplied to the users listed in 2.1.2.

- **2.2.6 Demonstration of compliance of the quality system applied shall be by audit**. If non-conformity of the system is identified, action shall be initiated to determine and correct the cause. All audit observations shall be evidenced and properly documented.

Requirements for CAAs & MSPs

MET Authority VS MET Service Provider

Doc 8896, Chap. 1:§1.1.5 refers

- The **MET authority** refers to an administrative **entity or the State relevant authority empowered with the oversight function** to ensure that meteorological services comply with the local law and regulations. It has the power to exercise authority through the promulgation and amendment of regulation, as well as supervise and enforce such capabilities (Doc 8896, Chap. 1:§1.1.5. **The "MET regulator" can be considered as another term for the "MET authority".**

- "**MET service provider**": is the entity that is providing the facilities and services to be provided in accordance with Annex 3.

- In the context of safety oversight audits, the term "**entity providing the MET service**" is sometimes used to designate the "MET service provider".

MET Inspectorate

- The **"MET inspectorate"** refers to the body of inspectors responsible for conducting safety oversight for the "MET authority" over the "MET service provider" in the State concerned

- In accordance with Annex 3, the "**MET service provider" could be either within the "MET authority**" or, alternatively, **within an independent organization**.

- However, the legislation stipulates that the "**MET regulator**" (i.e. the "**MET authority**") and the "MET service provider" **must be separated**, at least, functionally.

- When the "**MET service provider**" is part of the **same organization as the "MET authority**", it is preferable that the oversight function be carried out by an external, independent "MET inspectorate". (**Doc 8896, Chap. 1:§1.1.5 refers).**

Responsibilities of key Stakeholders

ICAO	CAA	MSP
• Develops SARPs adopted in the Annexes • Approves Regional Air Navigation Plans	• Implements Annex SARPs in national Regulations • Carry out their Safety Oversight Responsibilities by implementing the eight critical elements and establishing an aviation infrastructure according to Regional Plan	• Provides facilities and MET services to aeronautical users in compliance with safety related regulations, procedures and guidance

Responsibilities of key Stakeholders *(Cont'd)*

Civil Aviation Authority (CAA)	Met Service Provider (MSP)
• Regulatory framework • Organization and staff • Guidelines and tools • Certification, including QMS approval • Surveillance activities • Enforcement actions	• Organization and staff • Documentation including Staff Operational Procedures • Manual of Operations for Aeronautical Meteorological Services • Compliance of facilities, equipment and services • Implementation of QMS

Civil Aviation Authorities & MET Service Providers

Civil Aviation Autorities

- **Legislative provisions** related to MET
- **MET regulations**, including provisions implementing QMS
- **Organization of the entity** in charge of MET oversight, including definition of functions and responsibilities
- **Education and qualification** of the technical personnel covering core MET areas
- **Technical guidance material for the inspectors**
- **Guidelines** on the implementation of applicable regulations, instructions and directives, for the industry
- **Convenient facilities and adequate office space**, modern equipment, MET inspection tools and instruments, ICAO documents

MET Service Providers

- **Organization of the entity in charge of providing MET services**, including definition of functions and responsibilities
- **Required weather services** to users and **mechanism for their review**
- **Manual of Operations for Aeronautical Meteorological Services**, including operational procedures, work instructions and guidance.
- **QMS implementation Manual** and **its related documentation.**
- **Organizational competence development and level of required resources.**
- …

Other Stakeholders

NMHSs	WAFS Services Provider	VAA and TCA services Providers	SWXC
• NMHSs to collaborate through constant supply of reliable observations data from all states to ensure accurate forecasts and climate products	• WAFS Services Provider to comply with the regional requirements related to the provision of WAFS forecasts to users.	• VAA and TCA services Providers to comply with the requirements related to the provision of VAA and TCA services to users.	• SWXC to comply with the provisions of space weather information to airspace users

ICAO

THANK YOU