WORLD METEOROLOGICAL ORGANIZATION

Summary Report

Services Committee (SERCOM)
Standing Committee on Services for Aviation (SC-AVI)
Expert Team on Education, Training and Competency (ET-ETC)

First Meeting (ET-ETC-1)

6, 7 and 8 December 2021
(Video/teleconference)

ET-ETC-1/PPT. xx

Agenda item x.x

Submitted by
xxxx

WORLD METEOROLOGICAL ORGANIZATION

Services Committee (SERCOM)
Standing Committee on Services for Aviation (SC-AVI)
Expert Team on Education, Training and Competency
(ET-ETC)

Proposed Amendments to WMO-No. 49

World Meteorological Organization EC-CDP-4
Executive Council (EC)

February 16th 2022

WMO Capacity Development Program and ET-ETC

- The Expert Team on Education, Training and Competency (ET-ETC) is a subsidiary body under the Standing Committee on Services for Aviation (SC-AVI), which in turn falls under the WMO and the Services Commission (SERCOM)

- Co-Chairs of ET-ETC. - Ms Kathy-Ann Caesar and Ms Andrea Henderson,

The ET-ETC's role in providing capacity development for LDC/SIDS

- The role of the ET-ETC in supporting capacity development efforts, particularly those that target least developed countries (LDC) and small island developing States (SIDS).

- **ET - ETC Operating Plan (2020-2023) – Objective B**
- *To assist the Capacity Development Panel (CDP) in the development and maintenance of competency and qualification standards of aeronautical meteorological personnel for inclusion in WMO Technical Regulations (WMO-No. 49), Volume I, and other regulatory documentation).*

Proposed amendment to Technical Regulations (WMO-No. 49), Volume I and WMO-No. 1209 concerning AMP competency and qualification

ET-ETC acknowledging the recent work of core experts, with the assistance of volcanic ash advisory centre (VAAC) focal points, to prepare draft second-level competencies for VAAC forecasters.

It was agreed that progression of the VAAC competency framework would be postponed whilst this overarching update on the following was undertaken:

- *Technical Regulations* (WMO-No. 49), Volume I, *General Meteorological Standards and Recommended Practices*, Part V, *Qualifications and Competencies of Personnel Involved in the Provision of Meteorological (Weather and Climate) and Hydrological Services*; and
- WMO-No. 1209, Section 2, *Competency Standards for Aeronautical Meteorological Personnel*.

ET-ETC reviewed proposed amendments to WMO-No. 49, Volume I, Part V and WMO-No. 1209, Section 2

WMO-No. 49, Volume I, Part V: QUALIFICATIONS:

- **Removal** of a ***Recommendation*** that WMO Members should decide, in light of their national circumstances, whether higher or more specific qualification requirements to those currently prescribed in WMO-No. 49, Volume I, Part V should be established for certain categories of operational personnel.
- **Addition** of a ***Recommendation*** that the necessary level of qualification(s) required for each category of operational personnel, including for aeronautical meteorological personnel (AMP), should be determined by the WMO Member based on relevant national, regional and/or global requirements.
- **Removal** of a ***Standard*** that requires an aeronautical meteorological forecaster (AMF) to possess the Basic Instruction Package for Meteorologists (BIP-M).
- **Addition** of a ***Note*** that the Basic Instruction Package for Meteorologists (BIP-M) and the Basic Instruction Package for Meteorological Technicians (BIP-MT) provide essential guidance on the pre-requisite educational frameworks, background skills, and knowledge necessary to underpin the required competencies for AMP.

COMPETENCIES (TOP-LEVEL):

- **Introduction** of the term "other relevant environmental" for the competencies associated with aeronautical meteorological forecasters (AMF) and aeronautical meteorological observers (AMO) in order to provide greater flexibility when/if competency frameworks are developed for other aeronautical meteorological specialisms.

ET-ETC reviewed proposed amendments to WMO-No. 49, Volume I, Part V and WMO-No. 1209, Section 2

WMO-No. 1209, Section 2

COMPETENCIES (SECOND-LEVEL):

- **Removal** of reference [in the regional variations section] that an aeronautical meteorological forecaster (AMF) is required to possess the Basic Instruction Package for Meteorologists (BIP-M).
- **Addition** of reference [in the regional variations section] that the Basic Instruction Package for Meteorologists (BIP-M) and the Basic Instruction Package for Meteorological Technicians (BIP-MT) provide essential guidance on the pre-requisite educational frameworks, background skills, and knowledge necessary to underpin the required competencies for AMP.
- **Introduction** of the term "other relevant environmental" for the competencies associated with aeronautical meteorological forecasters (AMF) and aeronautical meteorological observers (AMO) in order to provide greater flexibility when/if competency frameworks are developed for other aeronautical meteorological specialisms.

ET-ETC reviewed proposed amendments to WMO-No. 49, Volume I, Part V and WMO-No. 1209, Section 2

- **Action 5 (ET-ETC-1):**
  - a) Socialize the proposed amendments to WMO-No. 49, Volume I and WMO-No. 1209 addressing aeronautical meteorological personnel (AMP) qualification and competency with the Capacity Development Panel (CDP) for feedback; and
  - b) Upon completion of a), forward the proposed amendments to the Second Meeting of the Standing Committee on Services for Aviation (SC-AVI-2) for review and recommendation.

- Subject to

i. a satisfactory (positive) review by the Capacity Development Panel (CDP) and

ii. a (positive) recommendation by the Standing Committee on Services for Aviation (SC-AVI),

The proposed amendments to WMO-No. 49, Volume I and WMO-No. 1209 would consequently be subject to review and recommendation by the Services Commission (tentatively October 2022) prior to adoption by Congress or Executive Council 75 (June-2023).

Benefits of the proposed changes

- Benefits to be realized by making these amendments to WMO-No.49 Vol 1:
- Allows for a greater degree of **flexibility in prerequisite qualifications,** spanning a range of scientific specialisms outside of traditional meteorology, including but not limited to volcanology, astrophysics, computer science and modelling.
- Recognizes **the ability of a person to acquire the relevant background skills and knowledge to support competency** through other means such as on-the-job experience and field work. The result of which is expected to diversify entry pathways for NMHSs onboarding candidates into aeronautical 'meteorological' forecasting specialisms.
- **Anticipates future skill requirements** in consideration of the changing role of AMP linked to service delivery transformation, including an increased emphasis on communication, customer relationships, and quality assurance, which are skills not readily acquired by formal academic means. Thus, reducing the administrative burden on WMO to define and redefine prerequisite qualifications at the pace of service delivery transformation.
- **Increased focus on competency-based training**, creating more targeted and cost-effective training program, potentially reducing the amount of time in classroom training.
- Enables the **NMHS to determine the level of academic rigour appropriate for the background skills and knowledge** in support of the AMP functions specific for their national needs.

Any Questions

WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

aviation@wmo.int

www.wmo.int/aviation

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WMO OMM

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