



WORKING PAPER

ASSEMBLY — 41ST SESSION

EXECUTIVE COMMITTEE

Agenda Item 26: ICAO Civil Aviation Training and Capacity Building

**COMPETENCY AND QUALIFICATION ENHANCEMENT OF AERONAUTICAL
METEOROLOGICAL PERSONNEL**

(Presented by China)

EXECUTIVE SUMMARY

This paper provides information on the competency and qualification standards and requirements for aeronautical meteorological personnel (AMP) as established by the World Meteorological Organization (WMO), the implementation of competency and qualification enhancement activities by WMO and the plans that it has developed in this regard, as well as its cooperation with ICAO. It introduces China's efforts in carrying out aeronautical meteorological services training under the WMO Voluntary Cooperation Programme (VCP) and Education and Training Programme (ETP) to support the AMP competency and qualification enhancement in developing and less developed countries (especially Asian countries).

The purpose of this paper is to, by providing an overview of the current practices in the training of AMP to improve their competencies and qualifications, invite the Assembly to give attention to AMP competency and qualification enhancement involved in the provision of services for international air navigation, continuously strengthen the cooperation between ICAO and WMO, especially between ICAO regional offices and WMO regional associations, in the area of AMP competency and qualification enhancement, and provide support accordingly.

Action: The Assembly is invited to:

- a) pay attention to AMP competency and qualification enhancement involved in the provision of services for international air navigation, and urge the continuous strengthening of cooperation between ICAO and WMO, especially between ICAO regional offices and WMO regional associations, in the area of AMP competency and qualification enhancement; and
- b) recommend that ICAO headquarters or ICAO regional offices encourage willing and capable countries or regions to organize and conduct activities for enhancing the AMP competency and qualification involved in the provision of services for international air navigation, and provide additional assistance and coordination support to jointly promote the enhancement of AMP competency and qualification worldwide.

<i>Strategic Objectives:</i>	This working paper relates to the Strategic Objectives of Air Navigation Capacity and Efficiency.
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¹ English and Chinese versions provided by China.

<i>Financial implications:</i>	The activities referred to in this paper will be undertaken with resources available in the 2022-2025 Regular Programme Budget.
<i>References:</i>	Doc 7475, Working Arrangements between the International Civil Aviation Organization and the World Meteorological Organization (WMO Basic Document No.3 (WMO-No.60), Chapter II) WMO-No.49, WMO Technical Regulations, Volume I, Part 5 WMO-No.1205, WMO Guide to Competency WMO-No.1209, Compendium of WMO Competency Frameworks WMO-No.1083, Guide to the Implementation of Education and Training Standards in Meteorology and Hydrology, Volume I – Meteorology WMO AeM SERIES No. 5, Long-term Plan For Aeronautical Meteorology

1. INTRODUCTION

1.1 The competencies and qualifications of aeronautical meteorological personnel (AMP) and their continuous enhancement have a significant impact on the future pace of progress in air transport modernization and/or the quality of products of the aeronautical meteorology community, and on the safety and efficiency of aviation operations.

1.2 The International Civil Aviation Organization (ICAO) and the World Meteorological Organization (WMO) have been coordinating, collaborating and cooperating with one another in international air navigation meteorological services through their long-standing working arrangements (refer to ICAO Doc 7475 and WMO-No.60), and have been conjointly promoting the education, training and competency and qualification enhancement of AMP in line with aviation development needs to support the implementation of the Global Air Navigation Plan (GANP).

1.3 As the entity responsible for specifying standardized meteorological technical methods and practices recommended for use in providing required meteorological services, WMO has developed requirements and standards concerning the education, training, and competency of AMP (refer to WMO-No.49, WMO-No.1205, WMO-No.1209, and WMO-No.1083), and long-term plans (refer to WMO AeM SERIES No.5), and has been, through the WMO Voluntary Cooperation Programme (VCP) and WMO Education and Training Programme (ETP), encouraging WMO regional training centers and Member States to carry out AMP education and training involved in the provision of services for international air navigation to continuously improve their competencies.

1.4 ICAO, as the entity responsible for developing aviation needs associated with meteorological services for international air navigation, has rarely organized and carried out activities to enhance AMP competency and qualification, except for proposing relevant requirements to WMO. For example, there are few courses on meteorology in ICAO's portfolio of training courses for 2022 published on the ICAO official website (<https://igat.icao.int/ated/TrainingCatalogue/Sessions>). In addition, the ICAO regional offices have done less in respect of activities for AMP competency and qualification enhancement.

1.5 Under the WMO VCP and WMO ETP, China has been making efforts for many years to provide training courses, workshops or on-job trainings aimed at enhancing the AMP competency and qualification involved in the provision of services for international air navigation in developing countries and less developed countries (especially Asian countries).

2. DISCUSSION

2.1 To help improve the AMP competency and qualification in developing countries and less developed countries or regions (especially in Asia), and to help improve the capacity and level of

aeronautical meteorological services in these countries or regions, Civil Aviation Administration of China (CAAC) has been cooperating with China Meteorological Administration (CMA), WMO Beijing Regional Training Center, WMO Nanjing Regional Training Center and other units under the WMO VCP and WMO ETP, to provide training courses, workshops and on-job trainings of different levels covering different aspects of aeronautical meteorological services over the years, and has provided financial support (covering travel, training, food and accommodation) for some participants from developing countries and less developed countries.

- a) CAAC, CMA and WMO Beijing Regional Training Center have jointly organized 11 international training courses or workshops on aeronautical meteorological services since 2007, where experts from home and abroad were invited to give lectures to over 500 people from more than 80 countries or regions. Due to the impact of the pandemic, international training courses on aeronautical meteorological services were held online in 2021 and 2022.
- b) CAAC and WMO Nanjing Regional Training Center have jointly organized several training sessions on aeronautical meteorological forecasting and observation, and sent CAAC forecasting and observation experts to provide on-site training in several countries. WMO Nanjing Regional Training Center also provided academic degree education for aeronautical meteorological personnel from some countries.
- c) CAAC also provided on-job trainings for Cambodian aeronautical meteorological personnel, and has provided internships for AMP from some countries to provide special technical training.

2.2 China will continue its efforts to help improve AMP competency and qualification involved in the provision of services for international air navigation, continue to organize international training courses related to aeronautical meteorological services and is willing to provide support such as lectures or training materials for related aeronautical meteorological training organized by ICAO headquarters or ICAO regional offices.

2.3 At present, due to the limited notification and contact channels of the training organizers, personnel of aeronautical meteorological departments in some countries are not able to receive training information, resulting in limited scales in terms of the organization and implementation of training sessions as well as the number of participants. ICAO's assistance and coordination is needed to enable more personnel to participate in the competency enhancement.

2.4 In addition, due to the limited funding available which is insufficient to cover more people in need of financial assistance, some people who wish to participate in competency and qualification enhancement training are denied the chance to attend such training. Thus, more funding support is needed.