*NOTE: The following is the text presented at TCC-2 (2025). Inputs from TCC will be provided to the Panel for further discussions.*

**Capacity Development Programme**

### 1. Purpose and scope

1.1 The WMO Capacity Development Programme (CD Programme) is a cross-cutting, strategic programme that enables all WMO Members to strengthen their capacity to implement the full value-chain of providing high-quality, fit-for-purpose meteorological, climatological, hydrological, and related environmental services. The purpose of the CD Programme is to identify and secure the necessary support for capacity development activities at national, regional and global levels so that Members can contribute to, and participate effectively and efficiently in, the implementation of WMO Programmes and collaboration activities, and ultimately support national sustainable development and advance the benefits for the global community.

1.2 The scope of the Programme includes:

* Institutional development through legal, financial, and organizational support;
* Human resource development through education, training, mentoring, and mobility;
* Technological and infrastructure capacity support;
* Facilitation of partnerships, resource mobilization, and international cooperation;
* Capacity development of National Meteorological and Hydrological Services (NMHSs) for addressing the evolution of science, innovation, and technology, while transferring research to operations;
* Capacity development aimed at promoting equity, inclusiveness, and the empowerment of youth and women;

1.3 The CD Programme is closely interlinked with all other WMO Programmes, serving as a transversal enabler that underpins their effective implementation. By ensuring that NMHSs have the necessary competent human resources, technical infrastructure, legal and institutional frameworks, as well as adequate financial, partnership, and other resources, the CD Programme provides the foundation upon which all WMO Programmes can achieve their objectives. At the same time, the capacity development components embedded within WMO’s scientific, technical, and regional programmes contribute directly to the overall goals of the CD Programme, reinforcing a mutually supportive relationship. The CD Programme fosters synergy and cost-efficiency, helping to align and optimize capacity development activities across programmes, thereby maximizing impact for Members at national, regional, and global levels.

1.4 WMO’s Resource Mobilization and Development Partnerships are pillar activities supporting CDP. It supports Members by securing financial and in-kind resources to develop capacity of NMHSs. Guided by the WMO Resource Mobilization Strategy, these efforts respond to the global demand for actionable and tailored weather, climate, water and related environmental information.

1.5 Through the CD Programme, Members also receive advice and technical assistance on identifying potential sources of funding for capacity development and on how to effectively access these resources, working in close collaboration with the WMO Secretariat and partners.

### 2. Overall objectives

2.1 The overarching objective of the Capacity Development Programme is to enhance the relevance, impact, and sustainability of WMO capacity development activities. It contributes to closing the capacity gap in the weather, climate, hydrological, and related environmental services value chains by enhancing the Members' capacity for service delivery and ensuring the availability of essential information and services needed by governments, economic sectors, and citizens.

2.2 The CD Programme operates and provides support to the WMO Major Programmes addressing the WMO long-term goal 4: “Close the capacity gap on weather, climate, hydrological and related environmental services: Enhancing service delivery capacity of developing countries to ensure availability of essential information and services needed by governments, economic sectors and citizens” and directly contributes to achieving WMO´s strategic objectives, particularly regarding:

* Address the needs of developing countries to enable them to provide and utilize essential weather, climate, hydrological and related environmental services (Strategic Objective 4.1).
* Develop and sustain core competencies and expertise (Strategic Objective 4.2).
* Scale up effective partnerships for investment in sustainable and cost-efficient infrastructure and service delivery (Strategic Objective 4.3).

2.3 Contributing to and in alignment with the other WMO Major Programmes, the objectives of the CD Programme are to assist Members:

1. To mobilize human and financial resources to strengthen the capacity of Members, support institutional development, and ensure business continuity;
2. To effectively plan and implement the Members’ capacity development activities to attain cumulative impacts and sustainable results;
3. To identify the services required of NMHSs as well as the human, infrastructural, institutional, legal, and procedural gaps that limit Members’ ability to deliver these services;
4. To identify gaps that may exist in Members’ compliance with WMO Technical Regulations with a view to using this information for further development and enhancement of their institutions towards compliance;
5. To develop strategic plans and suitable project/programme proposals for Members to meet domestic and international obligations and to seek appropriate national and regional political support for their implementation;
6. To gather and exchange information on the needs of recipient Members and on opportunities offered by Members, development partners and institutions, and support the mobilization of required national and international resources;
7. To develop and implement regional and national capacity development projects and programmes, to enhance services to Members derived from meteorology, hydrology, climatology, and related environmental sciences, as required;
8. To establish partnerships with regional and international organizations, including those within the United Nations system, to ensure that scientific and technical aspects of projects and national development activities are fully aligned with WMO standards and recommended practices;
9. To develop the capacities of their NMHSs by advocating for the necessary external and internal support as may be required to meet national requirements for services and national development activities, as well as to ensure compliance with WMO standards;
10. By promoting international cooperation in capacity development of NMHSs and related institutions, to ensure that Members possess the relevant capacity and resources needed, particularly to bridge the gap between the levels of relevant services provided;
11. To enhance the technical, strategic, operational, and managerial skills of NMHS staff, including competencies in resource mobilization, as critical elements for achieving sustainable development and related services of NMHSs.

### 3. Programme structure

3.1 The Programme is structured, planned, and implemented on a national, regional, and global basis. Activities are supported by a range of sources, including regular and extrabudgetary resources as well as in-kind contributions from Members and other development partners. The Programme supports other WMO Programmes in the implementation of priority activities and requires the collaboration of all WMO bodies and Programmes. The Programme includes resource mobilization and development partnership as pillar activity, and the following subsidiary programmes::

* Education and Training Programme;
* WMO Voluntary Cooperation Programme;

**A. Education and Training Programme**

***Purpose and scope***

3.2 Education and Training (ETR) activities are foundational for the Organization as promulgated by Article 2 of the Convention: “(f) To encourage research and training in meteorology and, as appropriate, in related fields and to assist in coordinating the international aspects of such research and training”.

3.3 The purpose of the WMO Education and Training Programme (ETRP) is, under the oversight and guidance of the EC-Capacity Development Panel, to address the growing deficit in the capability and number of adequately educated and trained staff required to implement the full value-chain to provide weather, climate, hydrological and related environmental services, particularly in Members facing challenges in this regard.

3.4 The Programme aims to facilitate continuous training and education to equip NMHSs personnel with the competencies necessary to adapt to rapid advances in scientific innovation, technological developments, public communication needs, and respond to fast-evolving user needs. Aligned with the WMO Strategic Plan, the ETRP seeks to enhance the capacity of NMHSs to fulfil their national, regional, and international obligations and effectively meet emerging challenges.

3.5 The scope of the ETRP encompasses various dimensions:

1. Capacity-Building and continuous professional development: the Programme focuses on building and sustaining the competencies of NMHSs personnel, enhancing the training capabilities of institutions and experts, and developing leadership and management skills within NMHSs;
2. Technology Integration: Emphasizing sustainable development, the Programme aims to increase the capability of NMHSs to utilize new technology applications effectively;
3. Institutional Partnerships: Education and training activities are conducted in collaboration with various institutions, in the spirit of the WMO Global Campus initiative, including WMO Regional Training Centres and other WMO Centres with training functions, national meteorological training institutions, universities, and research centres;
4. Global Reach: The ETRP prioritizes assisting Members, particularly Least Developed Countries (LDCs) and Small Island Developing States (SIDSs), by providing bilateral and multilateral support for national education, training, and research activities.

***Main long-term objectives***

3.6 The ETRP's long-term objective is to provide comprehensive opportunities to address education and training gaps in meteorology, hydrology, and related disciplines.

3.7 The overall objectives of ETRP are:

1. To assist the NMHSs in developing staff with the competencies required to deliver the weather, climate, hydrological and related environmental services mandated by their governments and that help them meet their international obligations;
2. To promote capacity development by assisting NMHSs in the attainment of an appropriate level of self-sufficiency in meeting their education and training needs and developing their human resources;
3. To coordinate education and training activities across WMO to avoid overlapping efforts and increase the cost-efficiency and impact of the education and training events by using the know-how and expertise of the WMO technical commissions and Regional Associations with the support of the Secretariat;
4. To support human resource development in NMHSs through a coordinated, priority-driven approach based on competency implementation outcomes;
5. Encourage and support the NMHSs in developing their own learning structures and strengthen the exchange of training knowledge, resources, and expertise;
6. To promote high-quality continuing education, training, and research so as to keep the Members’ relevant staff up to date with the latest scientific advances and technological innovations and to support the needed competencies.

***Implementation activities***

3.8 The activities of the ETRP encompass the following broad approaches:

* To develop and review the standards required for education, training, and competency in line with the evolution of technology, science, and societal demands;
* To assist Members in the implementation of authentic competency-based education and training approaches in alignment with the WMO Basic Instruction Packages and Competency Frameworks, to provide the specific information and services;
* To promote and strengthen the development and exchange of education and training knowledge and skills, resources, and expertise between Members, making particular use of relevant technologies and techniques;
* To promote high-quality continuing education in meteorology, climatology, hydrology, and related environmental disciplines to maintain the NMHS specialist staff in line with scientific, technological, and educational advances and innovations;
* Assisting training structures of NMHSs with their efforts on mutual interactions and exchanges of training knowledge.

*Activities to be carried out by Members*

3.9 Including but not limited to:

* Identify their key capacity gaps and needs for education and training;
* To collaborate in and give required support to the WMO education and training activities, as part of contributions to the WMO Global Campus initiative;
* To strengthen their national capacity in the attainment of self-sufficiency in meeting their education and training needs;
* To consider the benefits of the competency approach in collaboration with relevant WMO technical departments, promote and implement authentic competency management based on the WMO Frameworks and guides;
* To encourage the participation of women in education and training programmes in order to reduce the gender gap.

*Activities to be carried out by Regional Associations*

3.10 Including but not limited to:

* Identify the regional training needs of the Members;
* Monitor and evaluate the activities of the WMO Regional Training Centres;
* Provide information on the progress of implementing in the Region the WMO Qualifications, Basic Instruction Packages, and Competency Frameworks;
* Coordinate and promote regionally tailored capacity development activities and opportunities.

*Activities to be carried out by Technical Commissions*

3.11 Including but not limited to:

* Provide the support needed to identify and address the education and training requirements related to their respective domains;
* To engage in the development and update of qualification and competence requirements, and respective education and training courses and tools;
* Contribute to capacity development through their programmes and activities by supporting thematic training, and knowledge exchange related to accomplishing WMO long-term goals.

*Activities to be coordinated by the Secretariat*

3.12 In addition to the general role of the Secretariat defined by Regulation 154 (WMO-No. 15), including but not limited to:

* Providing secretariat support for the coordinated implementation of ETRP
* Support education and training activities as major components of WMO capacity development endeavours
* Support and promote the WMO Global Campus initiative, and development and ongoing activities that comprise the exchange of knowledge and expertise on education and training issues;
* Collaborate with development partners and training providers regarding the development of the required human resource capacity of Members through formal and continuing education;
* Work with stakeholders in promoting research and development as a major activity of meteorological and hydrological training institutions and to promote the uptake of scientific developments into education and training curricula;
* Develop suitable and sustainable programmes and projects to support Members' capacity and support the incorporation of education and training components in bilateral and multilateral cooperation projects;
* Enhance the leadership and management skills of NMHS managers through the development of learning resources and leadership and management training and by collaborating at subregional and regional levels in these endeavours.

**B. Voluntary Cooperation Programme**

***Purpose and scope***

3.13 Voluntary Cooperation Programme (VCP) is a collaborative funding programme managed by WMO to improve global meteorological and hydrological capabilities. Established to complement WMO's regular budget, VCP gathers voluntary financial and technical contributions from WMO Members to support the development of under-resourced Members in the weather, climate, water, and related environmental value chains.

3.14 The Voluntary Cooperation Programme supports WMO's mission to enhance weather, climate, water, and related environmental value chains worldwide. It is based on the international principles of collaboration and development assistance.

3.15 The Programme aims to support NMHSs in improving the implementation of the full value-chain of delivery of weather, climate, hydrological, and related environmental services, as well as providing relief when necessary. In alignment with the WMO Strategic Plan, the VCP encourages collaboration and coordination among Members to strengthen the capacity of NMHSs to meet their national, regional, and international commitments and to tackle emerging challenges effectively.

3.16 VCP provides financial support for equipment, expert services, training and fellowships, as well as counterpart services, amongst others.

***Main long-term objectives***

3.17 The main long-term objective of the VCP is to address the specific needs of WMO Members and to promote collaboration and solidarity among them to strengthen the global meteorological community.

3.18 The overall objectives of VCP are:

* To support the development of relevant legislation and National Strategic Plans of NMHSs to strengthen institutional frameworks;
* To provide financial support for the organisation and delivery of education and training events, including fellowships, aimed at developing and maintaining staff competencies and managerial expertise;
* To promote user engagement in the development and delivery of meteorological, climatological, and hydrological applications and services;
* To establish and enhance observing and data-processing facilities, as well as services delivery and dissemination systems;
* To support contingency planning for severe disasters, ensuring preparedness and resilience of NMHSs;
* To address other areas of cooperation as may be proposed by the Executive Council or by the WMO Secretariat based on arising opportunities and needs.

***Implementation activities***

*Activities to be carried out by Members*

3.19 Members support VCP activities in a voluntary basis, by

* Providing financial, technical, and in-kind contributions in response to requests submitted by other Members;
* Share expertise and resources by deploying experts, organising education and training activities, and facilitating fellowships with other Members to help address their capacity gaps;
* Donation of or loaning equipment, spare parts, software, and other technological resources that improve the observing, data-processing, and service delivery capabilities of the recipient NMHSs;
* Promoting bilateral and multilateral cooperation through establishing partnerships with recipient Member for project implementation and capacity development;
* Engaging in knowledge and technical transfer, ensuring alignment with WMO standards;
* Providing support for contingency measures in cases of severe disasters, including emergency equipment, training, or advisory services;
* Contributing to reporting and information sharing on VCP-supported activities;
* Identifying and proposing additional areas of cooperation in coordination with the WMO Secretariat.

*Activities to be coordinated by Regional Associations*

3.20 Including but not limited to:

* Promote intra-regional cooperation through leveraging common interests of Members based on language, economic and political mechanisms, geographic similarities, hazards, etc.;
* Leverage joint resource mobilization with development partners and support South–South cooperation by pairing stronger NMHSs with less-resourced ones.

*Activities to be coordinated by Technical Commissions and Research Board*

3.21 Including but not limited to:

* Develop and update standards, protocols, and methodologies to ensure interoperability of solutions implemented through the VCP;
* Facilitate knowledge and technology transfer and closely work with RAs to ensure the technical feasibility of proposed collaborative activities.

*Activities to be coordinated by the Secretariat*

3.22 In addition to the general role of the Secretariat defined by Regulation 154 (WMO-No. 15), including but not limited to:

* Coordinate requests and offers to the programme, collecting and reviewing assistance needs from Members, matching them with financial/material/in-kind support from supporting Members, as well as facilitating bilateral and multilateral arrangements between recipient NMHSs;
* Mobilise resources by engaging donor countries and partners to contribute to the VCP, promoting its priorities at relevant events and securing extrabudgetary resources;
* Support activity development and implementation by offering technical guidance and monitoring progress, ensuring proper reporting;
* Support capacity development and training through fellowships and workshops, promoting knowledge sharing and bolstering technical skills;
* Support infrastructure and equipment needs by facilitating the installation, maintenance, and technology transfer for observing systems, information and communication technology tools, and calibration facilities;
* Ensure proper reporting and governance by maintaining the VCP-related documentation, reporting on activities, and keeping Members informed about achievements and challenges;
* Fiduciary responsibility by ensuring transparent and accountable management of financial resources, monitoring the proper use of contributions, and providing regular financial reports to Members and partners in accordance with WMO regulations and international best practices.