|  |  |  |
| --- | --- | --- |
| WEATHER CLIMATE WATER | **World Meteorological Organization****REGIONAL ASSOCIATION VI (EUROPE)****Nineteenth Session (First Part)**15 to 16 October 2024, Virtual Session | **RA VI-19(I)/INF. 3.4(1)** |
| Submitted by:Secretary-General 12.IX.2024 |

## PUBLIC-PRIVATE ENGAGEMENT: REGIONAL OPEN CONSULTATIVE PLATFORM (R-OCP) AND UPDATES ON PPE ACTIVITIES

### Open Consultative Platform (OCP)

The Eighteenth World Meteorological Congress (Cg-18), through its [Resolution 79 (Cg-18)](https://library.wmo.int/viewer/56690/?offset=3#page=253&viewer=picture&o=bookmark&n=0&q=) – Open Consultative Platform “Partnership and Innovation for the next generation of Weather and Climate Intelligence”, agrees that WMO should continue to play a central role in facilitating the dialogue between the sectors in line with the general policy established through [Resolution 80 (Cg-18)](https://library.wmo.int/idviewer/56690/254) - Geneva Declaration - 2019: Building Community for Weather, Climate and Water Actions, and agrees further with the proposal for conducting annual thematic sessions of OCP as part of the programme of the Executive Council (EC) or the World Meteorological Congress (Cg) sessions.

The Second High-Level Session of the Open Consultative Platform (OCP-HL-2) was successfully held on 26 and 27 May 2021 as an online event consisting of two thematic sub-sessions because of the COVID-19 pandemic. The first sub-session launched the WMO OCP White Paper #1 on the future of weather and climate forecasting. The discussions in the second sub-session looked at the diversity of the institutional arrangements related to the National Meteorological and Hydrological Services (NMHSs) of Members and provided perspectives for the whole community to understand the drivers and trends shaping the future evolution of NMHSs and stakeholders.

The Third High-Level Session (OCP-HL-3) was held as part of the programme of the Seventy-Fifth Session of the EC (EC-75) to launch the OCP White Paper #2 on the future of National Meteorological or Hydrometeorological Services: Evolving roles and responsibilities and to discuss on that theme, which is significantly related to the Strategic Planning of WMO.

The Fourth High-Level Session (OCP-HL-4) was held as part of the programme of the Nineteenth World Meteorological Congress (Cg-19) to discuss how to engage multiple stakeholders in delivering on the Early Warnings for All initiative (EW4All) goal, focused on mapping the strengths and potential contribution from the private sector to the early warning-related capacity gaps in the least developed countries (LDCs) and Small Island Developing States (SIDS).

The Fifth High-Level Session (OCP-HL-5) was held as part of the programme of the Seventy-Eighth Session of the EC (EC‑78) and focused on the Public-Private Engagement (PPE) for sustainable satellite data service.

This new WMO-facilitated consultative mechanism has been playing an instrumental role in strengthening relationships and will lead to an improved common awareness through a sustainable dialogue between the public, private and academic sectors, as well as with user communities and civil society.

### Regional Forum linked to OCP

The Cg-18, through [Resolution 79 (Cg-18)](https://library.wmo.int/viewer/56690/?offset=3#page=253&viewer=picture&o=bookmark&n=0&q=), also requests the presidents of regional associations (RAs) to stimulate in their regions informal consultations with stakeholders from all sectors, across the value chain, to analyse and build understanding of subregional and regional circumstances. All the WMO RAs made decisions in response to the above Resolution. The RA VI, at its Eighteenth Session in November 2020, adopted [Decision 8 (RA VI-18)](https://library.wmo.int/idviewer/57474/29) which decides to consider organizing, in partnership with associations of the private sector, a Regional Forum on PPE linked to OCP to discuss region-specific issues, opportunities and initiatives for leveraging cooperation and collaboration between sectors that enhance socioeconomic benefits.

The Regional Forum of RA III was held in Colombia in July 2022, the Regional Forum of RA VI in Geneva in November 2022, the Regional Forum of RA IV in Jamaica in February 2023, the Regional Forum of RA I in Ethiopia in February 2023 as part of the RA I Regional Technical Conference (RA I RECO 2023), and the Regional Forum of RA II and V in Singapore in April 2023. These regional forums have brought together the Permanent Representatives of respective regions and high-level representatives of the private and academic sectors to facilitate dialogue among all stakeholders at the regional level and to discuss region-specific issues, opportunities, and initiatives for leveraging cooperation and collaboration between sectors that enhance socioeconomic benefits of weather and climate service.

### Regional Open Consultative Platform (R-OCP)

In this connection, the Extraordinary Session of the World Meteorological Congress (Cg-Ext.(2021)), through [Resolution 8 (Cg-Ext(2021)](https://library.wmo.int/idviewer/57850/201) – Comprehensive review of the WMO regional concept and approaches, requested the presidents of the RAs: *(11) To encourage the engagement of NMHSs in PPEs in order to support their capacity development activities and supplement their limited budgets by using such mechanisms as the OCP on business models and partnerships between the public and the private sector*.

Region’s status of PPE, challenges and opportunities, interests and needs vary from each other. A global OCP and its annual session cannot cover the expectations and needs of each region. Regional forums carried out in the past year have shown that Members of each region have the desire to include PPE issues in regional strategy and RA agenda as a permanent one and make institutional arrangements for the deliberation on PPE-related issues specific to the individual regions. Regional Forum, therefore, could be evolved into a central platform for the region to develop and carry out multi-stakeholder dialogue, collaboration and projects in a coordinated and neutral manner and make regional PPE activities more relevant to the region’s specific interest.

Given the benefits and possibilities that such regional forums and related activities are expected to bring, and since the use of mechanisms such as OCPs is encouraged by the Resolution mentioned above, it is encouraged that Regional Forum should be renamed to Regional Open Consultative Platform (R-OCP) from the next session and that sessions of R-OCP should be conducted regularly in conjunction with, or as part of the programme of, RAs sessions.

The latest development at regional level is that the phase I of the Nineteenth session of the RA I approved the decision to establish the Regional Open Consultative Platform of RA I (R-OCP-RA I) as a regular regional dialogue mechanism, which is an open and volunteer-based platform for participation from the public, private and academic sectors, and civil societies.

### Updates on other PPE-related Activities

Policy development

Revision of the WMO Guidelines for PPE

The [*WMO Guidelines for PPE*](https://library.wmo.int/records/item/57344-guidelines-for-public-private-engagement?offset=1) (WMO-No. 1258) (2021 edition) was endorsed by EC-72 in 2020. It provides historical perspectives, principles, and specific guidance to inform and facilitate global, regional, and national actions by WMO and its Members. Since the 2021 edition was published, a few developments in WMO policies and Members’ emerging needs have made it necessary to revisit the Guidelines to provide up-to-date guidance to WMO Members and RAs in their efforts to develop effective and mutually beneficial partnerships and collaboration with the private and academic sectors. The revisions to the Guidelines were endorsed by [Resolution 26 (EC-78)](https://meetings.wmo.int/EC-78/_layouts/15/WopiFrame.aspx?sourcedoc=%7bE3497F96-3F6B-4FBB-92EA-F409693B8E7E%7d&file=EC-78-d06(1)-REVISED-GUIDELINES-FOR-PPE-approved_en.docx&action=default) in June 2024. The primary revisions include two parts:

1. Changes to the body text of the 2021 edition of the Guidelines, which reflect policy development since EC-72 with implications on the PPE, including mainly the WMO Unified Data Policy or [Resolution 1 (Cg-Ext(2021))](https://library.wmo.int/viewer/57850/?offset=2#page=9&viewer=picture&o=bookmark&n=0&q=) and its [Annex 3](https://library.wmo.int/idviewer/57850/23) of Guidelines on the application of the data policy in PPE, and the WMO Strategic Plan 2024−2027 adopted by Cg-19 setting the strategic objective of scaling up effective partnerships, including partnerships with the private sector;
2. Addition of an annex on legislative and institutional framework to promote PPE; it provides cases of laws and regulations collected from Members and templates of such framework.

[Resolution 26 (EC-78)](https://meetings.wmo.int/EC-78/_layouts/15/WopiFrame.aspx?sourcedoc=%7bE3497F96-3F6B-4FBB-92EA-F409693B8E7E%7d&file=EC-78-d06(1)-REVISED-GUIDELINES-FOR-PPE-approved_en.docx&action=default) requests the presidents of the Regional Association to give due consideration to the revised Guidelines in planning regional activities, particularly those for raising mutual awareness and building trust between the sectors, utilizing the potential of the PPE in bridging the capacity gap, and sharing good practices including those related to legal and institutional frameworks and strategies that underpin PPE. The Resolution also urges WMO Members to use the revised Guidelines in further establishing collaboration and partnership at the national level across public, private, academic, and civil society sectors that pursue the common goals for the public good, and in considering, as needed, their own legal and institutional frameworks and strategies that underpin PPE.

Consultation with industry

Restoring regular high-level consultation and communication with Association of the HydroMeteorological and Environmental Industry (HMEI)

The WMO-HMEI High-level Consultative Meeting is an informal consultation mechanism for WMO and HMEI, which came to a suspension during 2019–2022 due to the COVID-19 pandemic and other reasons. It was resumed as the seventh of such meeting (HLCM-7) on 27 May 2023 during Cg-19, where HMEI Chair met with the WMO President, presidents of the Commission for Observation, Infrastructure and Information Systems (INFCOM) and the Commission for Weather, Climate, Hydrological, Marine and Related Environmental Services and Applications (SERCOM), the Director of Infrastructure Department and the Director of the PPE Office. The meeting discussed a few issues, including the joint development of a Code of Ethics, a possible initiation of the collaboration on tender specification for the upper air system, a possible incorporation of the topic of the long-term sustainability of observation networks into future Regional Association’s sessions, and a possible HMEI’s support to WMO capacity development via collaboration with WMO specialized regional centres like Regional Training Centres (RTCs) and Regional Instrument Centres (RICs). The HLCM-7 also agreed on initiating the monthly meeting between HMEI council members and the PPE Office of the WMO Secretariat to strengthen communication and information sharing.

The HLCM-8 was convened on 14 June 2024 on the last day of EC-78, where HMEI Chair met with the WMO President, the Secretary-General, the Assistant Secretary-General, the President of SERCOM, the Co-Vice President of INFCOM, the Directors of the Infrastructure Department, the Services Department, and the PPE Office. The HLCM-8 reviewed the status of collaboration, including the application of a joint Code of Ethics (see below), the capacity development and sustainability of observation networks.

Joint development of Code of Ethics (CoE)

A WMO-HMEI Code of Ethics has been developed jointly by the WMO Secretariat and HMEI in accordance with section 3.3.3 of the Working Arrangement between WMO and HMEI approved by [Decision 52 (EC-70)](https://library.wmo.int/idviewer/56243/221). It was endorsed by EC-78 in June 2024 through [Resolution 27 (EC-78)](https://meetings.wmo.int/EC-78/_layouts/15/WopiFrame.aspx?sourcedoc=%7bF04EB0D8-80EF-4648-A15A-908AD0497F8C%7d&file=EC-78-d06(2)-CODE-OF-ETHICS-BETWEEN-WMO-AND-HMEI-approved_en.docx&action=default). And the CoE was then signed by WMO Secretary-General and the HMEI Chair on 14 June at the end of EC-78, witnessed by the Executive Council members. The purpose of CoE is to outline an essential set of ethical principles that stakeholders from both public and private sectors should commit to when engaging each other in activities along the value chain for the delivery of weather, climate, water, and related environmental services. The set of principles included in the CoE stem from the Geneva Declaration 2019 and the principles and metrics for successful PPE and partnership included in the United Nations Global Compact’s “10 principles”. CoE is intended to help stakeholders properly manage their relationships, maximizing the mutual benefits of an inclusive approach, increase transparency in engagement, policy, and practice, and enhance the socioeconomic benefits of high-quality weather and climate services.

The Resolution 27 (EC-78) calls on Members to facilitate dialogue with the private sector to apply the ethical principles in their PPE for activities along the value chain for the delivery of weather, climate, water, and related environmental services. It also invites HMEI to urge its members to abide by the principles specified in the CoE in developing and managing relationships with the NMHSs.

Capacity development

English, French, and Spanish versions of PPE training modules

The PPE training course, PPE in Weather, Climate and Water Services, with its English version launched in March 2023, has provided the very first online self-learning course on the theme of PPE for Members and stakeholders. It makes use of videos, interviews, text, interactive graphics, case studies and activities to introduce the basic concepts and issues surrounding engagement with the private sector and other stakeholders. In the second half of 2023, the WMO Secretariat started developing the French and Spanish versions, which are now available on WMO Moodle (see links of the course in [English](https://etrp.wmo.int/course/view.php?id=277&lang=en), [French](https://etrp.wmo.int/course/view.php?id=336) and [Spanish)](https://etrp.wmo.int/course/view.php?id=337), providing these training resources with more language choices. The PPE Office has also started exploration with the RTC to include the PPE training course into the RTC’s international training programmes for NMHS management.

Promoting innovation and technical collaboration involving PPE mechanism

RA II Pilot project on PPE for Smart Meteorological Services in Mega-Cities

This PPE pilot project in RA II, approved by its Seventeenth Session in September 2021 and kicked off in February 2022, has been in smooth implementation with the Secretariat support provided by the PPE Office and the Regional Office for Asia and the South-West Pacific (RAP). The midterm review of the pilot project was held in November 2023. The Scientific Advisory Committee and Project Coordination Group of the pilot project reviewed and confirmed the achievement of the midterm goals under all seven objectives of gridded data sharing, impact-based forecast and risk-based warning, targeted information distribution, urban climate assessment, storm surge forecast services, smart meteorological service community and exploration of PPE models of smart meteorological service in Mega-cities. The details and progress report of the pilot project can be found [here](https://wmo.int/about-us/partnerships/activities-and-events/pilot-project-public-private-engagement-smart-meteorological-service-mega-cities-regional). The outcomes of the pilot project will be shared with interested WMO Members of other regions as well as with the technical bodies of WMO.

Pilot Study on the application of Google Flood Forecasting Model

Following its presentation at the Hydrological Assembly held during Cg-19, a pilot study was initiated in November 2023 after several rounds of discussion among the Standing Committee on Hydrological Services (SC-HYD), Standing Committee on Data Processing for Applied Earth System Modelling and Prediction (SC-ESMP), Google’s team on Flood Forecasting and the WMO Secretariat. The goal of the pilot study is to understand the methodologies of Machine Learning-driven (Artificial Intelligence (AI) - based) models for flood forecasting, and their potential benefits to pilot participants.

The pilot study, an integral part of the work programme of SERCOM for the next intersessional period, linked to output 1.3.08 and SC-HYD milestones 7 and 8, involves performing a retrospective analysis using Google’s flood forecasts and historical data from pilot basins to evaluate flood forecasts. The pilot will also be used to evaluate opportunities and technical details for incorporating AI-based forecasting models into the WMO [inventory](https://www.floodmanagement.info/e2e-ews-ff-community-of-practice-area/resources/inventory/) of interoperable flood forecasting models.

The participants (NMHSs with the operational function of hydrological forecast) joined the pilot study on a voluntary basis and the collaboration conditions were agreed upon between Google and the participating NMHSs individually. Four NMHSs (including Czechia from RA VI) are participating in the pilot study and are now in the second phase of the study to evaluate flood forecasting products from Google’s model. Google has recently shared the initial results with participating NMHSs and WMO.

The role of the WMO Secretariat is providing expertise support to the participating NMHSs and collect pilot study experience and lessons to be learned, which will inform AI-related technical discussion and standardization work within the WMO community.

A potential WMO Integrated Processing and Prediction System (WIPPS) pilot project on AI-driven satellite-based nowcasting (AINPP)

Research and operation on Earth system observation and prediction using AI technology is being vigorously pursued. One promising application is satellite nowcasting, which predicts the weather for the immediate future from vast amounts of satellite data. With the support of the Standing Committee on WMO Integrated Processing and Prediction System (WIPPS) of the Infrastructure Commission and the Working Group on Nowcasting and Mesoscale Research of the World Weather Research Programme, experts of WMO Members in RA I, II, IV and VI initiated a project on the AI-based satellite nowcasting, which is now recognized as a WIPPS pilot project.

Some private high-tech companies and academic institutes have also indicated interest in this pilot project. This pilot project aims to assess the performance of various AI-based satellite nowcasting products and to make all WMO Members access such products and AI tools to support the United Nations EW4All initiative. It is expected to increase the satellite nowcasting products from WIPPS Designated Centres for nowcasting as the outcome of this pilot project. AINPP Steering Group is going to meet in November 2024 to finalize the implementation plan and kick off the intercomparison of products.

Working Group on Digital Transformation for Hydrology and Water Resources

The Standing Committee on Hydrological Services (SC-HYD) under the Services Commission (SERCOM) has established a Working Group on Digital Transformation for Hydrology and Water Resources. This group is tasked with developing guiding principles for effectively engaging the private sector in supporting flood-related early warnings and risk management. Additionally, the Working Group will promote the adoption of emerging technologies in operational hydrology by fostering collaboration among key stakeholders, including international organizations, governments, the private sector, and academia. Through its efforts, the group aims to raise awareness, mobilize resources for new technologies, and harmonize global initiatives in this critical field.

The [Working Group](https://www.itu.int/net/epub/TSB/2024-UN-Executive-Briefing-on-unlocking-potential/index.html#p=48) was officially launched on June 14, 2024, during the first [UN Virtual Worlds Day](https://www.itu.int/metaverse/un-virtual-worlds-day/) at the International Telecommunication Union (ITU). Following the launch, the core group held its first virtual meeting, which included representatives from the ITU, the United Nations Convention to Combat Desertification (UNCCD), and the United Nations Development Programme (UNDP). Future meetings will expand the group's membership to include experts from the private sector, who will contribute to the Working Group’s specific tasks.

### Resource mobilization

The PPE Trust Fund

The PPE Trust Fund was established in May 2023 and is open for contributions from both public and private sectors. The purpose of this Trust Fund is to provide complementary funding to the regular budget, which is insufficient to support the ever-growing PPE activities of WMO. Contributions to this Trust Fund will not be used for activities directly related to WMO policy development on PPE, but for activities other than that, for example good practices collection and sharing, Member support, training, outreaching, advocating, meetings, and other Open Consultative Platform (OCP)-related activities. So far, the Trust Fund has received contribution of CHF 87K from the Japanese Government and USD 60K from the Chinese Government.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_