

**Workshop of World Meteorological Centres**  
Beijing, China, 26-29 March 2019

**Questionnaire for World Meteorological Centres**  
(as of 27 February 2019)

Note: The following seven questions will be used to orient participants' discussion on:

- *Agenda III. WMCs in the context of WMO Constituent Bodies Reform, and*
- *Agenda IV. Overall coordination mechanism between WMCs and WMCs/RSMCs to support Members.*

Your answers will be distributed to all participants in advance.

I would deeply appreciate if you could send your feedback **before or on 15 March 2019**

**Name of World Meteorological Centres:** Moscow

### **Agenda III**

**1. What areas your WMC wants to improve in near future and in the long-term by considering the functionality described in [WMO-No. 49](#)**

*Note: World Meteorological Centre (WMC). A centre of the GDPFS that has the primary purpose of issuing meteorological analyses and prognoses, including probabilistic information and long-range forecasts on a global scale. (WMO-NO. 49, Technical Regulations, Basic Documents No. 2, Volume I – General Meteorological Standards and Recommended Practices)*

For near future: To provide support for various tailored applications, for limited-area NWP systems, for GDPFS RSMCs and capacity building.

In the long-term: Step by step development of seamless forecasting system.

## **2. What could be additional roles of your WMC to support the WMO Constituent Body Reform and Strategic Plan of WMO, especially Strategic Objectives 2.3**

*Note: Strategic Objective 2.3: Enable access and use of numerical analysis and prediction products at all temporal and spatial scales from the WMO seamless Global Data Processing and Forecast System*

### *References:*

- *Reform presentation - CBR-TF-sc,*
- *Constituent Bodies Reform - substructures and presidents and vicepresidents,*
- *EC70 Strategic Plan*

Available at [http://www.wmo.int/pages/prog/www/DPFS/Meetings/WMCs-Workshop\\_Beijing2019/Docplan.html](http://www.wmo.int/pages/prog/www/DPFS/Meetings/WMCs-Workshop_Beijing2019/Docplan.html)

Support the cascading approach at different scales – from short-term (e.g. SWFDP activities) to long-term (RCC and RCOF activities).

## **Agenda IV**

### **3. Please provide the name of organizations that you are currently working with/worked/will work, identifying the nature of the work and your role and responsibilities.**

*Note: organizations can be UN agencies, NGOs, Regional entities such as RIMES and other GDPFS Centres*

WMO GDPFS entities (e.g. involvement into RCC activities in the RA-II, RA-VI regions and the polar region – in coordination with the North EurAsia Climate Centre (NEACC), severe weather forecasting and early warning activities - SWFDP-Central Asia, South-East European Multi-Hazard Early Warning Advisory System (SEE-MHEWS)) – provision with operational information, consultancy and capacity building.

Intergovernmental Council for Hydrometeorology of the Commonwealth of Independent States (ICH of the CIS countries): CIS ICH is a regional framework for various joint technological, scientific and capacity building programs (counterpart of EUMETNET in the North Eurasia).

Bilateral agreements with a number of NMHS – cooperation in various areas of mutual interest.

World Bank technical modernization and capacity building projects and initiatives.

**4. In relation with question 1, what are the most difficult challenges you met and how you did overcome it, if you did.**

In the activities related to LDCs this might be sustainability (of expertise, contacts, obligations etc.). The lack of human resources (lack of critical mass) in these NMHSs might hamper building long-term system partnerships and capacity building. Probably this is a kind of problem that can't be solved in a universal way.

**5. Is there a good example of coordination mechanism between your WMC and other centres you want to share. Tell us why it is a good example of coordination mechanism.**

From our experience, combining functions of WMC with additional RSMC and NMC functions within the same forecasting center might be beneficial. It simplifies their interaction/communication. It also creates prerequisites for the seamless data processing and forecasting.

De facto majority of WMCs are thought to practice this kind of approach.

**6. As a WMC, do you have specific request to make to SIDS and LDCs to help improve your system?**

*Note: For instance, Ghana utilized cloud resources with Reading University for forecasting drought. They provided their observations which were assimilated in UKMO Land Surface Model to enhance quality of drought forecast.*

Information on the local needs, forecasters feedback and support of observational network are important.

**7. LDCs and SIDS are interested in not only chart-type products but also NWP output. To help them to develop applications (post-processing), how do you see your WMC addressing these needs?**

Request of some LDCs for the NWP output seems to be a natural need if the local resources allow its processing. Besides this, LDCs are interested in WMCs/RSMCs' calibrated location-specific postprocessing products.

WMC/RSMC Moscow provides some LDCs with model short-, medium- and long-range forecast output along with calibrated location-specific

postprocessing products. From our experience, Internet channel bandwidth can be a serious problem at least for some LDCs. Probably to some extent it might be alleviated developing more sophisticated interfaces for the necessary data extraction from the original bulky model output.