Mapping
Regional Contributions: Bodies
Enhancing the Research-toOperation Continuum

Reference to <u>Decision 4 (EC-76) -</u>
Recommendations of Capacity Development Panel

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# Collaborative Convergence: Bridging Research and Operations in WMO Domains

Based on the UN and WMO reform, RA VI reinforced the unity between the research and operations communities.

This unity is characterized by active participation in WMO bodies and a shared commitment to contributing expertise, resources, and insights to advance the meteorological and hydrological venture.

Through collaborative convergence, research findings are seamlessly integrated into operational practices, fostering innovation, resilience, and effectiveness in meteorological services worldwide; **however**,

There is a need for a closer collaboration and integration between the research and operations communities within the WMO framework.

## Global Bodies contributions

## WMO TECHNICAL COMMISSION ON INFRASTRUCTURE - Technological Backbone for Services

**Contribute to Standards and Guidelines** 

**Technological Innovation** 

**Data Management** 

**Infrastructure Capacity Enhancement** 

## WMO TECHNICAL COMMISSION ON SERVICES -Aligning Research Outcomes with Operational Services

- Updated and newly developed Standards and Guidelines
- Capacity Building
- Collaborative Networks

#### WMO RESEARCH BOARD - Advancing Scientific Understanding and Operational Translation

**Research Prioritization** 

**Collaborative Research Initiatives** 

**Research-to-Operation Transition Support** 

### Regional Bodies contributions

#### **REGIONAL OFFICE (Bridging Global and Regional Levels)**

- Regional Coordination (e.g., Regional Coordination Platforms, such as MG, RAs)
- Policy Advocacy (Communication and Outreach mechanisms, Inter-agency Partnership and Collaboration)
- Resource Mobilization (e.g., Public-Private Partnerships, UN RCP, UN SDG Funds)

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#### **REGIONAL CENTRES (Enhancing Regional Capabilities for Seamless Transition)**

- Localized Research (e.g., Extreme Weather Events and Disaster Preparedness, Water Resource Management)
- Training and Capacity Building (e.g., NWP Workshops, Calibration workshops, Hydrological Modeling and Flood Forecasting Training)
- Operational Support (e.g., GPCs for LRF, Integrated MHEWS, such as SEE-MHEWS-A and others, RCC of RA VI)

#### **REGIONAL WORKING GROUP ON RESEARCH**

- Focus on Research, Modeling and Prediction component
- Science to policy communication and coordination

#### **REGIONAL SCIENTIFIC FORUM**

Emphasizes scientific exchange, research coordination, knowledge dissemination, and innovation support

### National Bodies contributions

## NATIONAL RESEARCH AND OPERATIONAL INSTITUTIONS

Aligning research efforts with operational requirements

- Operational Needs Identification
- Operational Input to Research
- User-driven Research Initiative
- Feedback and Continuous Improvement



#### **RESEARCH COMMUNITY**

Leveraging feedback to drive the development of improved products and services

- Receiving & analyzing feedback
- Iterative Development, Testing and Validation
- Collaboration and Knowledge sharing

TECHNICAL COMMISSION
ON INFRASTRUCTURE -Serves as
Technological Backbone for
Services

NATIONAL RESEARCH AND OPERATIONAL INSTITUTIONS-

Align research efforts with operational requirements

**REGIONAL SCIENTIFIC FORUM-**

Emphasizes scientific exchange, research coordination, knowledge dissemination, and innovation support

**TECHNICAL COMMISSION ON SERVICES -**Aligns Research
Outcomes with Operational
Services

REGIONAL WORKING GROUP
ON RESEARCH-Focus on
research, modeling and
prediction, Science to policy
communication
and coordination

REGIONAL CENTRES - Enhance Regional Capabilities for Seamless Transition

RESEARCH BOARD- Advances Scientific Understanding and Operational Translation REGIONAL OFFICE -Bridges
Global and National Levels
through Regional coordination
mechanisms

**RESEARCH COMMUNITY-**

Leverages feedback to drive the development of improved products & services

#### **TECHNICAL COORDINATION**

COMMITTEE- Aligns strategies, assesses needs, provides expertise, shapes policies

REGIONAL ASSOCIATION VI OFFICERS (PRESIDENT, VICE-PRESIDENT & HYDROLOGY ADVISER)-Advocate for science evidence-based policies, and fostering collaboration How can the Regional Office and the Regional Association use this document?

This document can have a strategic utilization, empowering the Regional Office and Regional Association to:

- Effectively enhance the capacity of Member states, by establishing a transparent and well-articulated Research to Operations (R2O) process. This involves creating a structured framework that clearly outlines the seamless transition of research findings into operational practices.
- Allocate adequate financial, technological, and human resources to support each stage of the R2O continuum. This includes funding for research initiatives, investments in cutting-edge technologies, and the development of skilled personnel.
- Chart a course that not only strengthens our internal capabilities but also enhances the value we provide to our users. This needs a thorough examination of the components of the R2O process and engaging in collaborative discussions.

## Conclusion

It's imperative to recognize the pivotal role that Regional Centers play as key components. Their strategic position makes them not just integral but essential in the overall process.

To unlock the full potential of the value chain, we should actively engage with and involve Regional Centers more proactively. By doing so, we leverage their expertise, capitalize on their capabilities, and ensure that they become dynamic contributors, guiding the success of the entire system.

## What is next?

## Regionalization of the WMO capacity development strategy

PLANNING CAPACITY DEVELOPMENT ACTIVITIES IN THE CONTEXT OF THE RESEARCH TO OPERATIONS PROCESS WILL FOLLOW. IT WILL:

#### ASSESS THE NEEDS

- ALIGN WITH R2O PHASES: RESEARCH, TRANSITION AND OPERATIONS, EVALUATION
- ENGAGE STAKEHOLDERS
- PROMOTE INTERDISCIPLINARY TRAINING, AND
- ESTABLISH A CULTURE OF CONTINUOUS LEARNING, ENCOURAGING PROFESSIONALS TO STAY UPDATED ON THE LATEST RESEARCH AND OPERATIONAL ADVANCEMENTS

## Feedback from CDP

May encourage ensuring synergy and avoiding duplication of efforts;

May suggest strategies for reaching a broad audience, including member countries and relevant stakeholders;

May discuss the document's potential for guiding future capacity development initiatives

