

Update from Infrastructure Department/INFCOM and contributions to the WMO Capacity Development Strategy



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World Meteorological Organization
Organisation météorologique mondiale

**Capacity Development Panel - 5
September 19-24, 2022**

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With contributions from INFCOM and
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EC-75 Outcomes with links to CD in INFCOM

EC-75 Res 4	Development of a WMO-coordinated Global Greenhouse Gas Monitoring Infrastructure
EC-75 Dec 6	Study on the potential integration of additional hydrological and cryosphere variables into the Global Basic Observing Network (GBON)
EC-75 Dec 4	Proposed Approaches to the Business Continuity and Contingency Planning

CD-related activities for these resolutions and others to be shared with CDP and ET

Annex to draft Resolution 5.1/1 (INFCOM-2) – details work plan for next inter-sessional period with outlook

Toward a coordinated Global Greenhouse Gas Monitoring Infrastructure (EC-75, Res 4)

Greenhouse gas monitoring provides critical input to scientific research and support for the implementation of the Paris agreement;

Will benefit from a coordinated, global, operational approach

Required infrastructure:

- Integrated carbon observing system (surface- and space-based);
- Earth System modeling with data assimilation tracking CO₂, CH₄ and N₂O;
- Timely international exchange of all observations and relevant model data;
- Framework for intercomparison of output, possibly also for collaboration on algorithms, model components;
- Coupling with ocean and/or land biosphere models;
- Design of road-map

Such an approach would help

- Leverage all existing GHG monitoring capabilities for common goals and increased understanding
- Maximize return on investments
- Enhance coordination and effort, both scientifically and politically
- Lead to a consolidated design

Capacity Development

- **Engagement** with stakeholders, of which those from developing countries
- **CD activities:** coordinate with GAW, GCOS, others
- **Pilot programs** addressing early advanced users and those from developing countries
- Could facilitate access to **funding** for the required observing systems in developing countries (e.g. GBON, SOFF)
- **WMO International Greenhouse Gas Monitoring Symposium** (30/01-01/02, 2023)

The WMO World Weather Watch as a paradigm



Earth system observations and monitoring

- **Global Basic Observing Network**

Study on the potential integration of additional hydrological and cryosphere variables into the Global Basic Observing Network (EC-75, Dec.6)

- Principles for expansion of GBON & drafting of concept note
- Collaboration (hydrological, ocean, cryosphere, carbon monitoring)
- Roadmaps (planned for 2024-2025)

- **Business Continuity**

Proposed Approaches to the **Business Continuity and Contingency Planning** (EC-75, Dec. 4)

Related to observations networks:

- Plan for collection of case studies for reference
- Development of guidance material for networks (2023)

Related to GDPFS:

- Considerations for compliance in GDPFS



SOFF status and next steps

- **SOFF first Steering Committee – 30 June.** Adopted the SOFF Governance and Programming criteria
- **Eight funders have pledged over USD 40 M on financial contributions to SOFF:** Austria, Denmark, Finland, Iceland, Ireland, Norway, the Nordic Development Fund, and the US (subject to confirmation)
- **The SOFF preliminary work programme for the first SOFF implementation period from 1 July 2022 to 30 June 2025 aims at supporting 55 beneficiary countries.** Full implementation will require contributions to the SOFF UNMPTF in the amount of US\$ 200 million.
- **Second SOFF Steering Committee meeting - 4 October 2022.** Expected to adopt the SOFF Operational Manual and to endorse the SOFF Resource Mobilization and Outreach Strategy
- After that meeting, **SOFF Secretariat and WMO will be reaching out to all WMO Members to provide further details** and next steps on how to access SOFF support
- **By March 2023** allocation of resources to about 20 initial countries



CD as an integral part of INFCOM activities

- Numerous activities and deliverables supporting the implementation of previous and recent resolutions/decisions
- Coordination and collaboration are fundamental to the development and delivery of outcomes supporting capacity development within NMHSs and other centres
- Enabling infrastructure such as WIS2.0 and other mechanisms: guidance, guidelines, lessons learned, workshops, etc
- Outreach enhances the awareness and uptake of activities and enables implementation
- INFCOM Strategy Paper



Information Paper on Capacity Development (INFCOM-2)

- Informs about the status of WMO's competency frameworks, the knowledge and skill frameworks related to INFCOM (as published in WMO No-1209), and the need to review and perhaps update, or develop new frameworks
- Highlights specific capacity development activities (training, workshops, guidance, etc) to be undertaken during the next inter-sessional period.
- Presents examples where material supporting CD are available and, the need to further facilitate access



Decisions supporting Capacity Development (INFCOM-2)

- Draft Decisions to support:
 - Review of existing **Competency Frameworks** and development of new frameworks;
 - **Endorsement of CD activities** listed in Information paper;
 - Enhanced collaboration of **INFCOM-related regional centres** (e.g. RWCs, RICs, RMICs, MLs) **with RTCs/Regional offices**
 - Enhanced collaboration with **WMO Global Campus** and other partners;
 - **Leverage** existing CD and training material and **facilitate access**;
 - Explore **innovative ways** to provide material in other languages;
 - **Coordination mechanism** on CD activities among INFCOM groups;
 - Use of **WMO TECOs** as opportunities for CD and training.



Discussion on Capacity Development (side-meeting)

- Internal INFCOM MG discussion focus on INFCOM-lead CD initiatives:
 - Sharing and reinforcing linkages with the CDP and WCDS
 - Promoting awareness of activities
 - Facilitating access to current and future material
 - Ensuring sustainability and use of material
 - Reporting on training and other CD-related activities
 - Ensuring efficiency of CD specific initiatives
 - Identifying available or required resources or support from ETR, CDP and others

Information also gathered through survey to INFCOM MG



Other initiatives

Upcoming

- Online webinars on the process for the **designation of Global Basic Observing Network (GBON) stations** (October 6-7, 2022)
 - how to undertake the process for the designation of GBON stations and GBON requirements
 - how to conduct national gap analysis and contribution plan
- **TECO 2022 on 'Meteorological and Environmental Instrumentation and Methods of Observations** (October 10-13, 2022- Paris, France)

"Sustainable fit-for-purpose measurement – a foundation of the WMO Earth System approach."

Linking with multiple participants from NMHSs, environmental agencies, other national and international organizations dealing with measurements, research institutes and academia, the private sector

- **Topic 5: Capacity development towards quality measurements and sustainability**

Recent

- GDPFS Symposium (August 2022); RA-III Workshop for WIGOS/WIS/GDPFS (July 2022)
- Regional WIGOS Centres Global Workshop (July 2022)



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Recommendations from RWC Global Workshop

Draft recommendations of the RWC Global Workshop of interest to the WCDS aim to ensure that:

- RWC capacity development activities be included within NMHS's CD strategies, in particular to address current gaps and support the use of new tools;
- Training on WIGOS tools be enhanced through train-the-trainer mechanisms and through coordination with RTCs and other WMO Regional Centres (RICs, GISCs);
- Guidance material planned to include best practices, and CD activities will support auditing processes;
- Availability of guidance and training material in all WMO languages will help support the implementation of initiatives and contribute to capacity development



WMO Capacity Development Strategy

Suggestions/Comments regarding the WCDS:

- Considerations regarding succession planning and diversity in addition to gender;
- Highlight the importance of creating CD material (guidelines, training) in WMO's official languages;
- Reinforce the need to facilitate or provide support for CD/training adapted to the language and culture by working with regional centres;
- Enhance the importance of defining competencies, skills and knowledge related to technology and scientific development;
- and the development and delivery of training related to cloud-based technology and the use of GDPFS products;



WMO Capacity Development Strategy

Suggestions/Comments regarding the WCDS:

- Identify and establish external partnerships with capacity development mandates and resources (knowledge, infrastructure, expertise);
- Identify options or resources for supporting the development/delivery of training (including machine translation), in order to reduce cost barriers;
- Information on how to establish mechanisms of sponsor training, fellowships or other funding mechanisms (ex: SOFF);
- Capacity development for New Experts – how can the WCDS also help to prepare?
- Section 5.2 – Priorities for 2024-2027: Need for review for completeness.



Thank you