

*Extraordinary Session of the World Meteorological Congress  
11-22 October 2021*

*Introduction to Agenda items 4.1, 5.2 and 4.2:*

**WMO Unified Policy for the International Exchange of  
Earth System Data,  
Global Basis Observing Network (GBON)  
Systematic Observations Financing Facility (SOFF)**



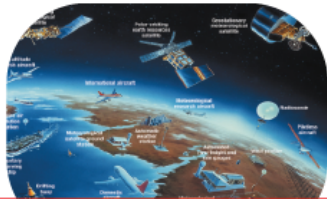
*Michel Jean, INFCOM President  
Anthony Rea, WMO Secretariat  
Lars Peter Riishojgaard, WMO Secretariat*

**WMO OMM**

World Meteorological Organization

Organisation météorologique mondiale

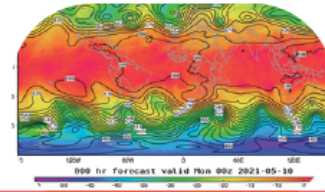
# Successful application of weather and climate services depend on a functioning meteorological value chain



Observations from the entire globe



International exchange of observations



Global Numerical Weather Prediction

Weather and climate-related infrastructure - **must be designed and managed globally**

Last-mile activities undertaken primarily at regional, national and local level

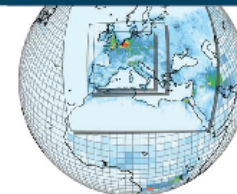
Effective decision-making and action



Delivery of weather and climate services



Local data processing, forecast, warning and advisory products



# *International exchange of data is a major purpose of WMO*

*(WMO Convention, Art. 2 b)*

## What does it take to do this?

- I. Requirements and gap analysis;
- II. **Outreach and advocacy** – analyzing and explaining benefits of data exchange to stakeholders;
- III. **Data policy** – general commitment of national governments to exchange certain data for certain purpose(s);
  - [WMO Unified Data Policy \(Cg-Ext\(2021\)/Doc. 4.1\)](#);
- IV. **Regulatory material** – agreement on specifics of data exchange (what, when, where, how, ...);
  - [Global Basic Observing Network \(GBON; Cg-Ext\(2021\)/Doc. 5.2\)](#);
- V. **Financial and technical support if needed**; capacity development;
  - [Systematic Observations Financing Facility \(SOFF; Doc. 4.2\)](#);



# Data Policy, GBON and SOFF

## Development timelines

### Data Policy

- **Congress-18**, June 2019, Res. 55, 56; launch of data policy review;
- **SG-DIP-1**; Feb 2020; Review; proposal to draft new resolution;
- **EC-72**; Sep 2020; Authority to proceed w/ draft Congress resolution;
- **WMO Data Conference** and preparatory events; Sep-Nov 2020; Broad consultations;

### GBON

- **Joint GCOS/WIGOS Workshop**, Fiji, Sep 2017; Regional plan for surface-based observations for NWP;
- **EC-70**; June 2019; initiated development of GBON to improve observational data exchange;
- **GBON Design Workshop**; Geneva July 2019;
- **Congress-18**, June 2019, GBON Concept approved;

### SOFF

- **Congress-18**, June 2019; VIP event “Closing the Capacity Gap”; how to finance GBON implementation?
- **First Brainstorming Workshop**, Geneva July 2019;
- **Alliance for Hydromet Development** (Dec 2019 launch): SOFF established as priority.
- **Second SOFF Workshop**, Offenbach February 2020
- **SOFF Working Groups**: throughout 2020; concept nature;

• **Data Policy, GBON and SOFF have been vetted and consulted extensively with WMO Members and other stakeholders;**

• **Thanks to all who participated in the consultations!**

• **Members with interest in these topics are strongly encouraged to join the**

• **Infrastructure Commission.**

- **Cg- Ext(21)**; preparatory regional consultations (all Members) Aug/Sep 2021

- **EC-73**; June 2021 (go/no go decision for Cg-Ext)
- **Cg- Ext(21)**; preparatory regional consultations Aug/Sep 2021

- **SOFF Funders Forums, 2021**; (three held so far, 4<sup>th</sup> on Oct 28; direct engagement with potential donors;
- {Briefed to multiple stakeholders in throughout 2020, 2021;
- **Cg- Ext(21)**; Oct 2021; preparatory regional consultations Aug/Sep 2021
- **SOFF MTPF established** (Oct 2021);
- **COP-26**; Nov 2021, SOFF creation announcement

# Three linked strategic WMO initiatives

## WMO Unified Data Policy

- Increased international exchange of observations by all Members (GBON)
- Return of high-quality model output to all Members

## Global Basic Observing Network

- Example of regulatory implementation of data policy
- Increased exchange of observations by all Members, **facilitated by both Data Policy and SOFF**

## Systematic Observations Financing Facility

- Technical and financial support for GBON implementation where it is most needed
- Building on GBON regulations

# *Expected Benefits to Members of Data Policy, GBON and SOFF*

## **1. GBON (Doc. 5.2);**

- Will significantly increase the flow of surface-based observations to global NWP systems used for weather and climate monitoring and prediction;
- Quality of model products used as a basis for weather and climate services for will improve everywhere, but especially in currently data sparse areas;
- Important tool for NMHSs in engagement with national governments and development partners on funding priorities;

## **2. Data policy (Doc 4.1)**

- Unifying WMO's data policy under common umbrella will facilitate earth system approach and allow better leveraging between different discipline/domain areas;
- Expected to lead to development of regulatory text for all areas; continued review and update of regulations will ensure that the implementation of the policy remains fit for purpose;
- Will provide model data to all WMO Members in return for their observations; preparatory activities for this already underway within WIS and GDPFS;

## **3. SOFF (Doc 4.2)**

- First Multilateral initiative targeted specifically at improving international exchange of observations, in recognition of shared interest in this among all countries;
- Support for implementation of GBON in areas where it would otherwise be impossible;
- Significantly increased visibility and credibility of NMHSs achieving GBON compliance;

# *Sequence and decision logic for Congress deliberations of Data Policy, GBON and SOFF*

## **1. GBON (Doc. 5.2);**

- Commitment by all WMO Members to exchange specific surface-based observations for NWP (weather and climate);
- Will replace certain commitments currently captured in Annex I to Res. 40; must therefore be approved before data policy resolution;

## **2. Data policy (Doc 4.1)**

- Overarching umbrella for regulatory material, some of which is still to be developed;
- New resolution will replace Res. 40, 25 and 60; Res. 40 must remain in effect until GBON has been approved;
- Will provide model data to all WMO Members in return for their observations;

## **3. SOFF (Doc 4.2)**

- Multilateral initiative targeted specifically at supporting GBON implementation; GBON must therefore be approved first.