

# Report on the status of the update of the WMO data policy

Lars Peter Riishojgaard, Anthony Rea  
WMO Secretariat



**WMO OMM**

World Meteorological Organization  
Organisation météorologique mondiale

*(CGMS-48-WMO-WP-15)*

# Overview

1. Current data policy activities in WMO
2. Study Group on Data Issues and Policy
3. Draft data resolution for WMO Congress
4. GBON, SOFF, the CGMS Baseline and the Critical Satellite Data paper
5. Plans for Data Conference

# Major policy-related thrusts in WMO

## 1. Study Group on Data Issues and Policies

- Developing overarching WMO Data Policy
- Consolidates Resolutions 40, 60, 25 and expands to cover Earth System monitoring and prediction
- WMO Data Conference in November is a critical milestone;

## 2. Study Group on the Global Basic Observing Network (GBON; introduced by WMO at CGMS-47)

- Developing regulatory material and implementation plan
- Aimed at clearly restating WMO observational obligations for Members

## 3. Systematic Observations Funding Facility (SOFF)

- Support to help poorest WMO Members meet their GBON obligations
- SOFF concept developed by WMO and various funding partners (World Bank, GCF, GEF, AF, UNDP, UNEP, Multilateral Development Banks, ...)

# Link to CGMS activities

- Free and open exchange of (especially) observational data is critical to the generation of meteorological products and services
  - Emphasized in the CGMS Baseline and other documents
  - Satellite data play a vital role in all of WMO's activities, measured both by volume and by impact; position of CGMS agencies on WMO data policy data exchange is therefore important;

# Study Group on Data Issues and Policies (SG -DIP)

Geneva, February 11-13 2020



*Strong, diverse group convened as result of Resolutions 55, 56 (Cg-18) and Resolution 2 (EC-71), with representation from all WMO Regions, major WMO activity areas, public, private and academic sectors*

Sue Barrell (Australia, Chair)  
Eizi oyoda (Japan)  
Fred Branski USA  
Zeng in China; teleconference)  
Francis Moseelho South Africa)  
Ramon de Elia Argentina)  
Michael Staudinger (Austria)  
Øystein odøy (Norway)  
Silvana Icoz Uruguay)  
Steve Kopp(ESRI)  
William aynard ICAO)  
Stefan Rösner (Germany)  
Fabio Venuti (ECMWF)  
Erik Andersson (EU; teleconference)  
Rachelle Antal-Wokes (EUMETSAT)  
Paul Counet (EUMETSAT)  
Steve Early (IBM; eleconference)  
William cCairns Ecomet)  
Jim Anderson (HMEI)  
Conrad Lautenbacher (GeoOptics)  
Sarah Dance (UK; teleconference)  
Nadia Pinardi (Italy)  
Wong Chin Ling (Singapore)  
Franz Uirab (Namibia)  
Joerg Klausen (GAW) (Switzerland)  
Simon McLellan (UK)  
Aileen Semple (UK)  
Manon Vignes (France)

# Major outcome of SG-DIP-1

- **Strong recommendation from the group that new overarching draft Congress resolution on data policy should be developed, building on Res. 40, 25 and 60;**
  - Res. 40 remains a cornerstone of WMO data exchange, however
    - It is severely outdated in terms of scope, spatial characteristics of models and observing networks, observing technologies, role of satellite data, commercial role(s) of NMHSs, etc.
  - Having a number of different data policy resolutions risks effectively weakening their individual impacts, and does not represent the integrated approach that WMO is striving for;
    - WMO would eventually have to develop additional data policy resolutions for greenhouse gases, air pollution, cryosphere data, space weather, etc.

# “Res. 42” development timeline

- **INFCOM** (May-June 2020); SG-DIP formally established, with updated ToRs and core membership;
- **PAC-1** (May 2020): Report from SG-DIP-1, focusing on principles and future work plan;
- *June 2020; Working groups established to prepare themed sessions for the WMO Data Conference and draft conference output;*
- **SG-DIP** teleconferences (tentatively),
  - July 1; Review of Res. 40/25/60; Res. 42 outline agreed; drafting assignments distributed;
  - July 21; Mid-term status update on drafting of Res. 42;
  - August 19; Zero draft distributed and available for discussion;
  - September 9; Second round of discussion; preparation of input to EC-72;
- **EC-72** (September 2020): Report from SG-DIP endorsed, including overarching principles, work plan, first draft of Res. 42
- **Stakeholder consultations** (Sep-Oct 2020) involving RA’s, RB, HMEI, broader private sector, CGMS; CEOS; GOOS, GCOS co-sponsors, Hydromet Alliance partners,...
- **INFCOM-1** (Nov 2020); review of draft Res. 42, recommendation to EC-73;
- **WMO Data Conference** (16-19 November 2020); draft resolution socialized, discussed; feedback recorded as Conference output;
- *SG-DIP informal meeting immediately following the Data Conference*
- **SG-DIP-2** (January 2021); Input from Data Conference included in draft Res. 42;
- **PAC-2** (spring 2021); final adjustments to draft Congress resolution;
- **EC-73** prior to Cg (Ext)-21; Congress recommendation on new resolution;
- **Cg (Ext)-21**: New resolution on WMO Data Policy;

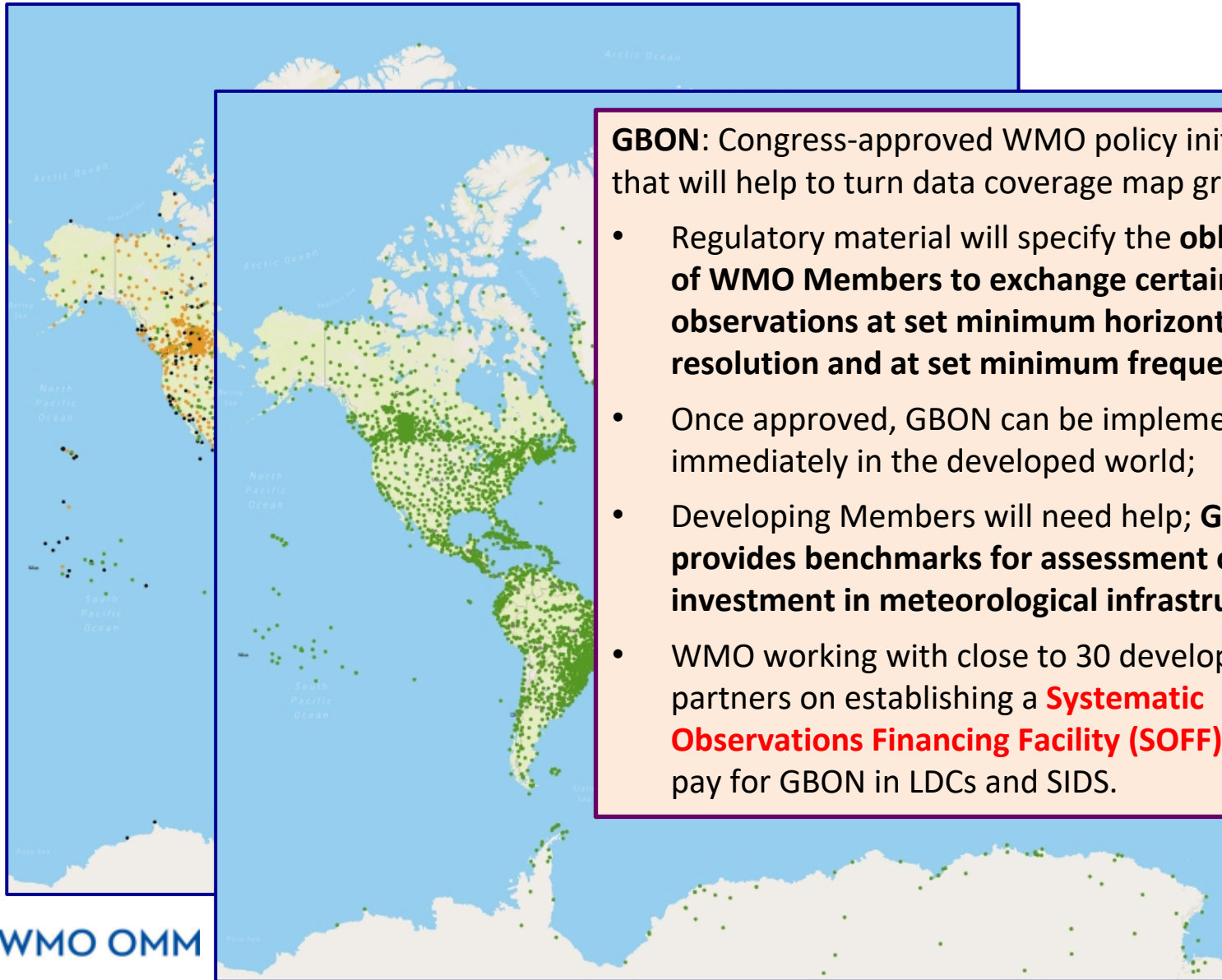
# Current status of drafting work

- Zero draft of single, overarching data policy resolution developed (75%); existing Res. 40 used as strawman
  - Modernized language and context;
  - Emphasis on earth system monitoring and prediction;
  - New elements with respect to Res. 40, 25 and 60:
    - Built-in cycle for reviewing and updating as requirements change;
    - Call for subsequent implementation activities (regulatory material, capacity development);
    - Request for systems and procedures to review of compliance.
- Open issues (among others):
  - Scope of resolution; emphasis on “Members” versus NMHSs;
  - Emphasis on international vs. more general data exchange;
  - Right balance of text addressing Members versus text addressing other partners



# Global Basic Observing Network (GBON)

(see also CGMS-47 WMO-WP-06)

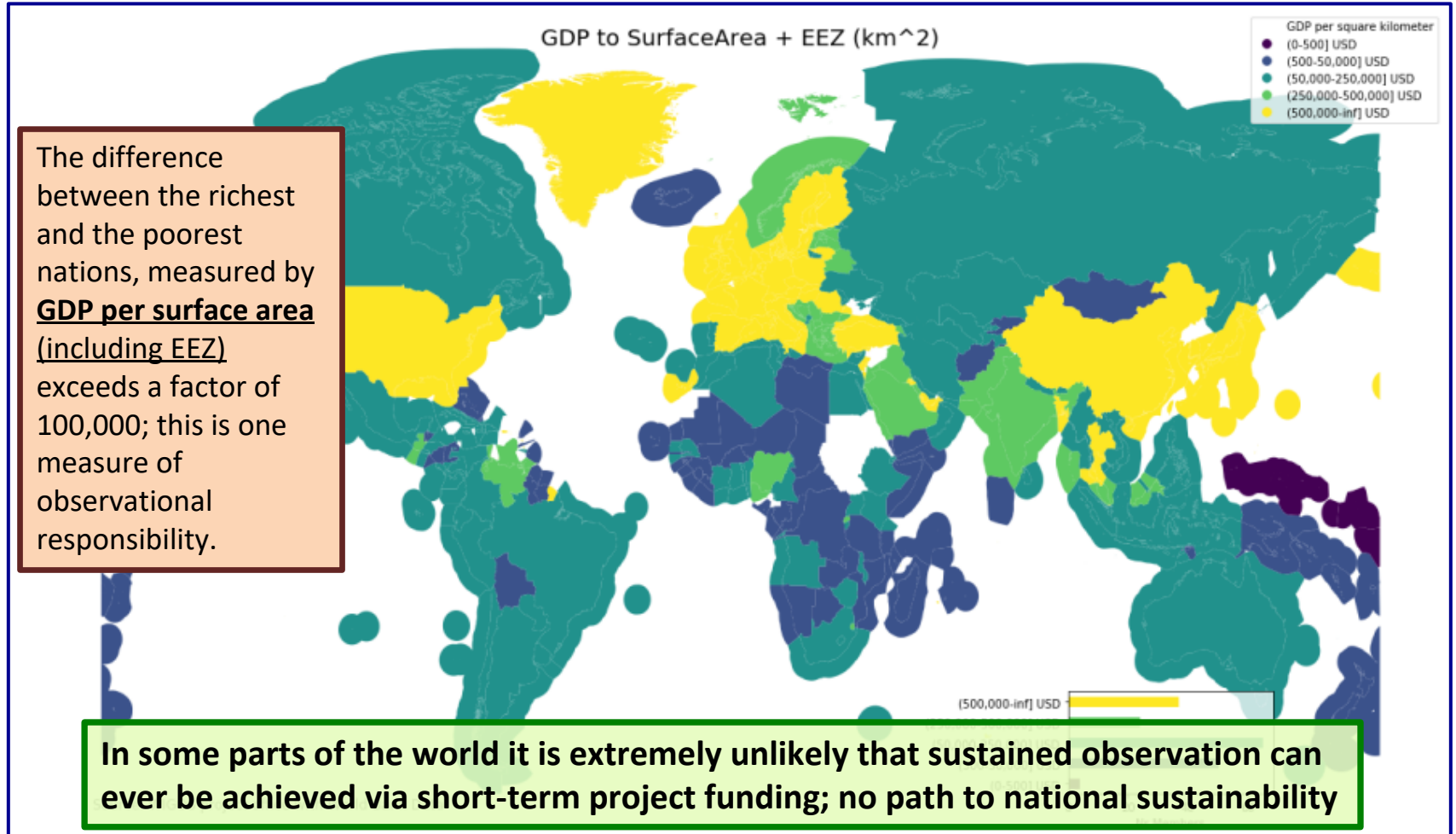


**GBON:** Congress-approved WMO policy initiative that will help to turn data coverage map green;

- Regulatory material will specify the **obligation of WMO Members to exchange certain observations at set minimum horizontal resolution and at set minimum frequency;**
- Once approved, GBON can be implemented immediately in the developed world;
- Developing Members will need help; **GBON provides benchmarks for assessment of investment in meteorological infrastructure;**
- WMO working with close to 30 development partners on establishing a **Systematic Observations Financing Facility (SOFF)** to help pay for GBON in LDCs and SIDS.



# A different look at available resources



Proposed solution to the mismatch between observing responsibility and resource distribution:

## Systematic Observations Finance Facility (SOFF)

- Will provide equitable, predictable and sustainable assistance to facilitate implementation and sustained operation of GBON in developing countries, in particular Africa, SIDS, and LDCs;

This was acknowledged by SBSTA 51 (subsidiary body under the Paris Agreement), which recognized GBON and re-emphasized the need for sustained funding to meet the essential needs for global climate observation;

- Support for GBON compliance through technical assistance and funding
- Will cover both initial capacity development (capital investment and training) and sustained operations where needed;

# The SOFF Concept was initially developed during a Workshop in Geneva in July 2019 (immediately following GBON approval by Congress 18, and is currently being developed by five Working groups involving WMO and key development and climate finance institutions

## Working Group 1

The value of GBON

**Anthony Rea**

WMO - Lars Peter Riishojgaard

DWD - Karolin Eichler

DFID/UK Met - Helen Bye

World Bank - Rob Varley

BMZ/GIZ - Andrea Cullman

ECMWF - Fabio Venuti

GCF - Joseph Insitful

### Country cases

ADB - Arghya Sinha Roy

AfDB - James Kinyangi (Nigeria)

IDB - Gerard Alleng (Caribbean)

UNDP - Benjamin Larroquette

UNEP - Jochem Zoetelif (Maldives)

World Bank - Daniel Kull (Central Asia)

## Working Group 2

GBON gap analysis and implementation options

**Lars Peter Riishojgaard**

WMO - Markus Repnik (country case)

DWD - Claudia Rubart

GCF - Joseph Insitful

### Country cases

ADB - Arghya Sinha Roy

AfDB - James Kinyangi (Nigeria)

IDB - Gerard Alleng (Caribbean)

UNDP - Benjamin Larroquette

UNEP - Jochem Zoetelif (Maldives)

World Bank - Daniel Kull (Central Asia)

## Working Group 3

SOFF financing mechanisms and opportunities

**Markus Repnik**

ADB - Robert Marc Schoellhammer

Adaptation Fund - Mahamat Abakar

AfDB - James Kinyangi

EBRD - Craig Davis

GEF - Fareeha Iqbal

GCF - Urvaksh Patel

UNDP - Benjamin Larroquette

UNEP - Jochem Zoetelif

IDB - Gerard Alleng

IsDB - Haruna Kachalla Gujba

WFP - Montserrat Barroso

World Bank - Vladimir Tsirkunov, David Grimes

CIFs - Loreta Ruffo

BMZ/GIZ - Andrea Kuhlmann

CPI - Angela Falconer and Valerio Micale

CREWS - John Harding

Switzerland/FOEN - Stefan Schwager

DWD - Claudia Rubart

## Working Group 4

Insurance sector use-cases

**John Firth**

WMO - Dimitar Ivanov

IDF - Nick Moody

Annette Detken

ARC - Federica Carfagna

Wills (CCRI) - Geoffrey Saville

MCII - Maxime Souvignet

Lloyds - Trevor Maynard

Oasis - Dickie Whitaker

InsuResilience - Tuga Alaskary

World Bank - Jack Hayes

World Bank - David Grimes

GCF - Joseph Insitful

## Working Group 5

Advocacy and Communications

**Michael Staudinger**

DWD - Karolin Eichler

WMO - Markus Repnik

WMO - Anthony Rea

WMO - Jonathan Fowler

WMO President Africa

WMO President Latinamerica

WMO - Lars Peter Riishojgaard

# GBON and the link to CGMS activities

- Following a presentation from WMO on the plans for GBON in Sochi ([CGMS-47-WMO-WP-06](#)): *“CGMS noted the importance of GBON and the need to identify ways for CGMS members to contribute to its implementation”*
- This led to
  - **Action A47.02:** *WMO to provide a report at next CGMS on baseline requirements for satellite products for global NWP, to trigger a CGMS discussion on status of delivery of such observations and possible improvements in the future and inclusion in the CGMS baseline document.*

## Proposed sequence of activities in response to A47.02

- WMO to revise the Critical Satellite Data Paper per action given to CBS (*never completed*) and submit to 1<sup>st</sup> Session of the Infrastructure Commission Session for approval in Nov 2020;
- CGMS WG-III to integrate relevant text from approved version of Critical Satellite Data paper into revised version of CGMS Baseline at its workshop to be held in Feb 2021;
- WMO Secretariat to integrate revised CGMS Baseline into draft Manual on WIGOS in March 2021;
- **CGMS-49 to approve new version of CGMS Baseline, May 2021;**
- **Draft Manual on WIGOS, including revised CGMS Baseline to be approved by WMO Extraordinary Congress in June 2021;**
  - *The inclusion of the new CGMS Baseline will be conditional on its approval by CGMS-49, which will have taken place one month prior to Congress;*



# WMO Data Conference

- **Why?** Resolution 55 (Cg-18): Members requested the Secretary-General to:
  - *Conduct a study on the evolution of meteorological data innovation and assessment*
  - **The Data Conference is as an essential part of the development process for WMO's new data policy resolution**
  - **The Conference provides an opportunity for broad consultation with a range of partners and stakeholders, and it will be preceded by seven thematic Preparatory Workshops;**
- **When?** November 16-19 2020;
- **Where?** Virtual conference; interpretation will be provided;
- **Who?** Broad group of stakeholders representing both data providers and data users from all relevant sectors.

<https://meetings.wmo.int/WMO-Data-Conference>

## WMO Data Conference Preparatory Workshops

*Draft per 20 August 2020 (still to be finalized)*

Activity	Date	Topics	Proposed external lead(s)	Secretariat support
Preparatory Workshop-1 Changing landscape of weather and climate data	24-Sep	<ul style="list-style-type: none"> <li>Data exchange in the 1960's and today; what has changed, and what will need to change?</li> <li>WMO data policy for Members or for their NMHSs?</li> </ul>		Lars Peter Riishojgaard
Preparatory Workshop-2 Business models and data policy issues	07-Oct	<ul style="list-style-type: none"> <li>External views on WMO data policy; what works and what does not work?</li> <li>Increasing the amount of data available to all users; policy as enabler and as a roadblock</li> </ul>		Dimitar Ivanov
Preparatory Workshop-3 Filling the gaps in global data coverage	14-Oct	<ul style="list-style-type: none"> <li>Strengths and weaknesses of WMO's efforts to address this (Res. 40, RBSN, VCP,...);</li> <li>GBON/SOFF paradigm; extensions to other domains and disciplines?</li> <li>Access to prediction and analysis products;</li> </ul>		Anthony Rea/Markus Repnik
Stakeholder Consultation-1 Hydrological data and WMO Data Policy	19-Oct	<ul style="list-style-type: none"> <li>The role of data exchange and of WMO data policy for hydrology;</li> <li>Implications of move toward earth system monitoring and prediction;</li> </ul>		Johannes Cullmann/Lars Peter Riishojgaard
Stakeholder Consultation-2 Research data and WMO Data Policy	21-Oct	<ul style="list-style-type: none"> <li>WMO use of research-funded data;</li> <li>Research access to operational data;</li> </ul>		Juerg Luterbacher/Anthony Rea
Stakeholder Consultation-3 Satellite data and WMO Data Policy	23-Oct	<ul style="list-style-type: none"> <li>Role of satellite data in WMO; ensuring equitable access to critical observations;</li> <li>Role of private sector satellite data;</li> </ul>		Anthony Rea
Preparatory Workshop-4 Data exchange for Earth System Monitoring and Prediction	28-Oct	<ul style="list-style-type: none"> <li>Earth system prediction as a policy driver;</li> <li>Data requirements; data maturity</li> <li>Moving from requirements to policy;</li> </ul>		Juerg Luterbacher/Lars Peter Riishojgaard

<https://meetings.wmo.int/WMO-Data-Conference>



# Current status, activities



- Invitation flyers went out late June 2020, including *invitation to submit abstracts by August 23 (deadline extended to August 30)*;
- Conference Program Committee established;
- Secretariat Coordination Group active;
- Secretariat Support Team established;



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<https://meetings.wmo.int/WMO-Data-Conference>





# WMO Data Conference

Virtual Conference, 16 – 19 November 2020

## Draft Agenda

- Keynote speeches: 15 m + 5 m Q&A
- Contributed presentation: 10 m + 5 m Q&A; **3 slides maximum each**

Program in preparation, based on four days of up to three hours each; abstracts coming in steadily (25+ abstracts received so far, with one week remaining to the deadline).

### Day 1: Monday, 16<sup>th</sup> November 2020 (Opening, The changing landscape of weather, water and climate data)

Time	Item		
<b>Opening of the Meeting</b>			
13:00–13:15	Welcome from WMO	1.1	WMO President WMO Secretary General
13:15–13:30	Opening Remarks, high-level representatives	1.2	TBD
13:30–13:50	Setting the Scene: Challenges of Data Exchange	1.3	TBD
13:50–14:00	<b>Break</b>		
<b>Theme 1: The changing landscape of weather, water and climate data</b>		<b>2.</b>	<b>Chair: TBD</b>
14:00–14:10	Introduction	2.1	Chair 1
14:10–14.30	Keynote Speech #1	2.2	TBD
14:30–14.50	Keynote Speech #2	2.3	TBD
14.50–15.05	Contributed presentation #1	2.4	TBD
15:05–15:15	<b>Break</b>		
15:15–15:30	Contributed presentation #2	2.5	TBD

- **The CGMS Plenary is invited to**
  - Take note of the Plans for development of a new WMO Congress resolution on data policy;
  - Take note of the calendar of events leading up to WMO Data Conference in November
  - Comment on the proposed approach to responding to action A47.02
  
- **The CGMS agencies are invited to**
  - Engage in WMO data policy discussions, both in the preparatory *Stakeholder Consultation on Satellite Data and WMO Data Policy* on October 23, and during the Data Conference itself.