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| WEATHER CLIMATE WATER | **World Meteorological Organization**  **WORLD METEOROLOGICAL CONGRESS**  **Nineteenth Session** 22 May to 2 June 2023, Geneva | **Cg-19/Doc. 4.2(2)** |
| Submitted by: Chair of Plenary  1.VI.2023  **APPROVED** |

**AGENDA ITEM 4: TECHNICAL STRATEGIES SUPPORTING LONG-TERM GOALS**

**AGENDA ITEM 4.2: Earth system observations and predictions**

# Global Basic Observing Network (GBON) Implementation



# GENERAL CONSIDERATIONS

1. Through [Resolution 2 (Cg-Ext(2021))](https://library.wmo.int/doc_num.php?explnum_id=11113/#page=29) – Amendments to the Technical Regulations related to the establishment of the Global Basic Observing Network (GBON), Congress decided on Technical Regulations for GBON to come into force on 1 January 2023, and requested the Infrastructure Commission, inter alia*,* to develop the technical guidelines, processes and procedures needed to ensure the expedient and efficient implementation of GBON, and to prepare for the effective performance and compliance monitoring of GBON.

# DRAFT RESOLUTION

## Draft Resolution 4.2(2)/1 (Cg-19)

## GBON Implementation

THE WORLD METEOROLOGICAL CONGRESS,

**Recalling:**

(1) [Resolution 9 (EC-73)](https://library.wmo.int/doc_num.php?explnum_id=11008/#page=34) – Plan for the WMO Integrated Global Observing System Initial Operational Phase (2020–2023),

(2) [Resolution 1 (Cg-Ext(2021))](https://library.wmo.int/doc_num.php?explnum_id=11113/#page=9) - WMO Unified Policy for the International Exchange of Earth System Data, which defines GBON data as core,

(3) [Resolution 2 (Cg-Ext(2021)](https://library.wmo.int/doc_num.php?explnum_id=11113/#page=29)) – Amendments to the Technical Regulations related to the establishment of the Global Basic Observing Network,

(4) [Resolution 3 (Cg-Ext(2021))](https://library.wmo.int/doc_num.php?explnum_id=11113/#page=34) – Systematic Observations Financing Facility: Supporting Members in the implementation of the Global Basic Observing Network,

**Recognizing** that the operational observing systems of a National Meteorological and Hydrological service can be adversely affected during times of crisis, affecting their ability to meet GBON requirements,

**Reaffirming** that Members can request emergency support from WMO to facilitate the return of observing networks to operation in a timely and effective manner for continuity of global observational data,

**Recognizing further**

(1) That numerical weather prediction models are increasingly relying on the assimilation of high resolution data while the number of surface land stations and upper-air stations designated for GBON does not currently meet the GBON high density recommendations as per provisions 3.2.2.8 (for surface land observing networks, a horizontal resolution of 100 km or higher) and 3.2.2.13 (for upper-air stations/platforms, horizontal resolutions of 200 km or higher) of [*Manual on the WMO Integrated Global Observing System*](https://library.wmo.int/index.php?lvl=notice_display&id=19223) ([WMO‑No. 1160](https://library.wmo.int/doc_num.php?explnum_id=11157)),

(2) The critical importance of GBON data to the UN Early Warnings for All Initiative,

(3) That GBON is operated and managed as a critical basic infrastructure for all Members to serve as a global public good,

**Recalls** that GBON consists of stations operated by Members which share the data as defined in the [*Manual on the WMO Integrated Global Observing System*](https://library.wmo.int/index.php?lvl=notice_display&id=19223)(WMO-No.1160), paragraph 3.2.2 on GBON;

**Considering** the Convention of WMO which gives it no mandate to express any opinion whatsoever concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, [Japan]

**Decides** to keep in force Resolution 2 (Cg-Ext(2021)) – Amendments to the Technical Regulations related to the establishment of the Global Basic Observing Network; [Switzerland]

**Commends** Members for their efforts in implementing GBON and ensuring wider availability of the data;

**Urges** Members**:**

(1) To pay particular attention to compliance with the GBON high density recommendations as per provisions 3.2.2.8 (for surface land observing networks platform a horizontal resolution of 100 km or higher) and 3.2.2.13 (for upper-air stations/platforms horizontal resolutions of 200 km or higher) of [*Manual on the WMO Integrated Global Observing System*](https://library.wmo.int/index.php?lvl=notice_display&id=19223)([WMO-No. 1160](https://library.wmo.int/doc_num.php?explnum_id=11157)), where capability exists;

(2) To ensure that there will be no degradation of the existing international reporting and exchange of such station data with respect to their GBON January 2022 baseline;

**Requests** the Executive Council to provide guidance to INFCOM on how to fill the identified gaps, in cooperation with relevant stakeholders inclusive of development partners;

**Requests** the presidents of Regional Associations to support the implementation of GBON by providing regional or sub-regional technical coordination to Members;

**Requests** INFCOM:

(1) To continue to develop the technical guidelines, processes and procedures needed to ensure the expedient and efficient implementation of GBON, to prepare for the effective performance and compliance monitoring of GBON, and report to the Executive Council;

(2) To keep GBON compliance under review, and to regularly report to the Executive Council;

(3) To develop guidance material on how to address GBON high density recommendations where capability exists respectively[[1]](#footnote-2);

**Requests** the Secretary-General:

(1) To request the SOFF Steering Committee to explore opportunities to provide SOFF investment and compliance support to Middle Income Countries in need while continue prioritizing Least Developed Countries and Small Island Developing States;

(2) To communicate with and call on bilateral and multilateral development partners for their cooperation and funding in closing GBON gaps.

1. Where capability does not exist, new technologies are likely to be required in order to achieve higher density of upper-air observations. Priority should be on establishing and sustaining the initial basic network. [↑](#footnote-ref-2)