### **WMO OMM**





World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация

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14 July 2017

Our ref.: 23693/2017/OBS/WIGOS/OSDE

Annexes: 3 (available in English only)

Subject: Monitoring progress of actions of the Implementation Plan for the Evolution

of Global Observing Systems (EGOS-IP)

Action required: Members feedback toward implementing actions of EGOS-IP

Dear Sir/Madam,

As you may recall, the Implementation Plan for the Evolution of Global Observing Systems (EGOS-IP), responding to the Vision for the Global Observing System in 2025, was adopted by the Executive Council at its sixty-fifth session through Resolution 10 (EC-65).

The seventeenth session of the World Meteorological Congress (Geneva, Switzerland, May/June 2015) requested Members, in collaboration with partner organizations, and identified agents in EGOS-IP, to address all actions listed in the Plan in order to address the identified observational gaps with regard to the observational user requirements of the WMO Application Areas. Congress further requested Members who had not yet nominated their National Focal Points for the monitoring of progress on the actions listed in the EGOS-IP to do so. It also requested the Commission for Basic Systems (CBS) to find ways to improve the engagement of Members and Regions in completing the EGOS-IP actions and urged Members to mobilize resources to drive these activities forward.

Following discussions within the relevant CBS Expert Teams, a high level document synthetizing new ways to contribute to and benefit from WMO global observing systems through EGOS-IP has been prepared and is provided in Annex 1 and its attachments. The document provides a summary of the objectives of EGOS-IP, and obligations of Members regarding the implementation of the EGOS-IP actions.

In this regard, I request you to:

- (a) Pay particular attention to the attached list (Annex 2) of the key EGOS-IP actions and consider how you may address them; and
- (b) Ensure that your country has a National Focal Point for EGOS-IP (terms of reference and nomination form are provided in Annex 3, current list of focal points is at:

http://www.wmo.int/pages/prog/www/CBS/Lists\_WorkGroups/CBS/opag\_ios/fp\_egos-ip)

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO

cc: Hydrological Advisers to Permanent Representatives
President CBS and Chairs of CBS ICT-IOS and IPET-OSDE

The Secretariat will soon be communicating to all National Focal Points for EGOS-IP and ask them to provide feedback on key EGOS-IP actions listed in Annex 2 for the year 2016.

I should, therefore, be grateful if you could note the information in the letter and take necessary actions as requested.

Yours faithfully,

(P. Taalas) Secretary-General

# NEW WAYS TO CONTRIBUTE TO AND BENEFIT FROM WMO INTEG RATED GLOBAL OBSERVING SYSTEM (WIGOS) THROUGH THE IMPLEMENTATION PLAN FOR THE EVOLUTION OF GLOBAL OBSERVING SYSTEMS (EGOS-IP)

# **Purpose**

To bring to your attention, as the Permanent Representative with WMO for your country, the EGOS-IP and what you are being asked to contribute to its implementation<sup>1</sup>.

#### **Background**

The World Meteorological Organization (WMO) facilitates cooperation amongst its 191 Members so they are each better able to perform their weather, water and climate related functions. A prominent element of this is the sharing of observations obtained through the WMO global observing systems.

All members benefit from the exchange of data between countries. For example, your country benefits from numerical weather prediction which is improved using observations from yours and neighbouring countries, and forecasters the world over benefit from access to weather satellite imagery from satellite operators.

WMO global observing systems are well established, regulated and standardized as documented in WMO technical regulations and supporting guidance material. Most recently the introduction of new technical regulations has included the new Manual on the WMO Integrated Global Observing Systems (WIGOS), covering matters such as station identifiers and observational metadata. Your contributions are valuable and appreciated.

However there is a need to evolve in response to changing requirements for observations and new technological capabilities. WMO brought together technical experts to develop the "Vision for the Global Observing System in  $2025^{2_{ij}}$ , followed by a coordinated set of actions to pursue this vision. These actions were approved by the sixty-fifth Session of the Executive Council (EC-65, 2013) and published in WIGOS Technical Document No. 2013-4, the Implementation Plan for the Evolution of Global Observing Systems (EGOS-IP).

# The EGOS-IP and your contributions

The EGOS-IP contains activities to be implemented during the period 2012 to 2025 for maintaining and developing all WMO component observing systems. These systems have a collective identity as the WMO Integrated Global Observing System (WIGOS). WMO observing systems also make major contributions to co-sponsored observing programmes (GCOS<sup>3</sup>, GOOS<sup>4</sup>), the Global Earth Observation System of Systems (GEOSS) and to the Global Framework for Climate Services (GFCS).

There are 115 Actions in the EGOS-IP, many of which depend on implementation by Members. We request initial focus and feedback on 15 of these Actions, as listed in Annex 2. The full document should be consulted for elaborative information and the relevant context.

<sup>1</sup> The document, published as WIGOS Technical Document No. 2013-4, is available in 5 languages at http://www.wmo.int/pages/prog/www/OSY/gos-vision.html#egos-ip

<sup>2</sup> The Vision for the GOS in 2025 is available in four languages here: http://www.wmo.int/pages/prog/www/OSY/gos-vision.html#egos-ip

<sup>3</sup> WMO-IOC-UNEP-ICSU Global Climate Observing System

<sup>4</sup> IOC-WMO-UNEP-ICSU Global Ocean Observing System

According to the Manual on the WIGOS (WMO No. 1160) which invokes the EGOS-IP, you are requested to undertake the following (excerpt from the Manual):

- 2.2.6.1 Members should follow the plans published by WMO for the evolution of WIGOS component observing systems when planning and managing their WIGOS observing systems.
- 2.2.6.2 Members shall coordinate the activities of organizations within their country, including National Meteorological and Hydrological Services (NMHSs) and other agencies, in addressing relevant actions of the WMO plans for the evolution of WIGOS observing systems.

For some of the EGOS-IP Actions, in your efforts to make progress you may find assistance through collaboration with your WMO Regional Association and other sources of assistance for capacity development.

Other parties have been asked to give attention to the other actions, although their implementation efforts may in some cases lead them to seek your collaboration.

# Monitoring progress

WMO regularly monitors progress on all the EGOS-IP actions and seeks to resolve any problems and to assist the understanding and ability to implement the actions. To report annually against the EGOS-IP actions, all Permanent Representatives were asked to nominate a National Focal Point (NFP) for the EGOS-IP. The current list of NFPs is available on the WMO web site<sup>5</sup>. A copy of the call for nominations is reproduced in Annex 3. To date around 90 Members have nominated a NFP; a nomination for your country is requested if you have not provided one already.

The NFPs play a critical role by providing annual reports on progress. It is intended that an overall annual report will be compiled and made available to you. So far only a brief assessment has been undertaken, as indicated in the relevant agenda paper<sup>6</sup> of the WMO Commission for Basic Systems' Expert Team responsible for this activity.

#### Action required

You are requested to:

- (a) Pay particular attention to the attached list of key EGOS-IP actions and take action nationally in order to consider how these actions are being addressed at the national level,
- (b) Ensure that your Country has a National Focal Point for the EGOS-IP who will respond to future requests for information on your country's progress against the 15 actions.

<sup>5</sup> At http://www.wmo.int/pages/prog/www/CBS/Lists\_WorkGroups/CBS/opag\_ios/fp\_egos-ip

<sup>6</sup> The agenda paper is available at https://drive.google.com/file/d/OBzxtAFnFpjaRcExHNFdaS2JzakU/view?pref=2&pli=1

#### **KEY EGOS-IP ACTIONS FOR MEMBERS**

Note: These are the key actions, on which we encourage initial focus and feedback. It should be noted however, that the remaining actions are also important and need to be addressed by the identified actors in the EGOS-IP.

Action No.	Action	Performance indicator	
C3	<b>WIS Standards</b> – Ensure all operators producing observations adhere to the WIS standards.	Extent to which WIS standards are applied.	
C4	Users consultation – Careful preparation is required before introducing new (or changing existing) observing systems. The impact needs to be assessed through prior and ongoing consultation with data users and the wider user community. Also, data users need to be provided with guidance on data reception/acquisition, processing and analysis infrastructure, the provision of proxy data, and the provision of education and training programmes.	Extent to which user community concerns are captured.	
C7	"Change management" procedures – Ensure time continuity and overlap of key components of the observing system and their data records, in accordance with user requirements, through appropriate change-management procedures.	Continuity and consistency of data records.	
C8	Data sharing principles – For WMO and cosponsored observing systems, ensure continued adherence to WMO data sharing principles irrespective of origin of data, including data provided by commercial entities.	Continued availability of all essential observational data to all WMO members.	
C12	Radio frequencies – Ensure a continuous monitoring of the radio frequencies which are needed for the different components of WIGOS, in order to make sure they are available and have the required level of protection.	Observation frequency bands available/not available with required level of protection.	
G2	Hourly data exchange – Ensure, as far as possible, a global exchange of hourly data which are used in global applications, optimized to balance user requirements against technical and financial limitations.	The standard monitoring indicators used in global NWP.	
G4	WIGOS Standards – Ensure exchange of observations from atmosphere, ocean, terrestrial observing system, according to the WIGOS standards. If needed, organize different levels of pre-processed observations in order to satisfy different user requirements.	Statistics on the data made available to each application.	
G7	Radiosondes in data-sparse areas – Expand radiosonde stations, or re-activate silent radiosonde stations, in the data sparse areas of Regions I, II and III which have the poorest data coverage. Make all possible effort to avoid closing of existing stations in these data sparse areas, where even a very small number of radiosonde stations can provide an essential benefit to all the users.	The standard monitoring indicators used in NWP	

Action No.	Action	Performance indicator	
G13	Radiosonde data availability – Identify radiosonde stations that make regular measurements (including radiosondes operated during campaigns only), but for which data are not transmitted in real-time. Take actions to make data available.	A number of the above radiosonde stations providing data to GTS, plus standard monitoring indicators on radiosonde data availability and timeliness.	
G14	HR Radiosonde data – Ensure a timely distribution of radiosonde measurements at high vertical resolution, together with position and time information for each datum, and other associated metadata.	Number of radiosonde sites providing the high resolution profiles.	
G17	Regional remote sensing profiling stations – Develop networks of remote-sensing profiling stations on the regional scale in order to complement the radiosonde and aircraft observing systems, mainly on the basis of regional, national and local user requirements (although part of the measured data will be used globally).	A number of profiling stations providing quality-assessed data in real-time to WIS/GTS.	
G18	Processing & exchange of profiler data – Ensure, as far as possible, the required processing and the exchange of profiler data for local, regional and global use. When profiler data can be produced more frequently than 1 hour, a dataset containing only hourly observations can be exchanged globally following the WIS principles.	A number of profiling stations exchanged globally.	
G40	Metadata & representativeness of special stations – Ensure, as far as possible in real-time, exchange of observations, relevant metadata, including a measure of representativeness made by surface-based stations serving specific applications (road transport, aviation, agricultural meteorology, urban meteorology, etc.).	A percentage of observations from the above stations exchanged regionally and globally in real-time.	
G45	<b>Dual polarization radars</b> – Increase the deployment, calibration and use of dual polarization radars in those regions where it is beneficial.	Data coverage obtained from this type of radar for each Region.	
G47	Weather radars for developing countries & DRR – For areas in developing countries which are sensitive to storms and floods, a special effort has to be made to establish and maintain weather radar stations.	The number of operational weather radar stations in the above areas.	

# NOMINATION OF NATIONAL FOCAL POINT(S) ON THE IMPLEMENTATION PLAN FOR THE EVOLUTION OF GLOBAL OBSERVING SYSTEMS (EGOS-IP)

#### A. Terms of Reference

The National Focal Points (NFPs) responsible for reporting progress and plans in the Country related to the Implementation Plan for the Evolution of Global Observing Systems (EGOS-IP):

- 1. Shall report annually as requested by the WMO Secretariat on the status of the national components of the Surface- and Space-Based Sub Systems of the Global Observing System vis-à-vis recommendations of the EGOS-IP; and
- 2. Should share national and/or regional plans for the evolution of the national components of the Surface- and Space-Based Sub-Systems of the Global Observing System taking into account recommendations of the EGOS-IP.

#### B. Nomination Form

The I	Permanent Representative of		
nomi	inates the following person as	NATIONAL FOCAL POINT on the EGOS-IP:	
1.	Family name:		
2.	First name:		
3.	Business address:		
Telephone:			
Fax:			
Ema	il:		
4.			
Date			
Sian	ature of Permanent Repres	sentative:	

To be completed and returned to the WMO Secretariat:

The Secretary-General World Meteorological Organization Case Postale No. 2300 CH-1211 Geneva 2

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