



The Global Ocean Observing System

Global Ocean Observing System Observations Coordination Group (OCG)

Terms of Reference, membership, governance, & operating principles

Overview

The Global Ocean Observing System (GOOS) Observations Coordination Group (OCG) aims to guide and strengthen the implementation of the Global Ocean Observing System (GOOS) and WMO Integrated Global Observing System (WIGOS), through identifying, coordinating and developing relevant initiatives across the OCG global ocean observing networks.

The vision is to support the delivery of a fit-for-purpose, integrated, and coherent global ocean observing system of networks that support 1) a rapidly expanding set of weather, climate, marine and ocean services, including consideration of the blue economy, targeting stakeholders across the globe; 2) a vibrant international research community developing knowledge and solutions for the next decade, 3) the Global Ocean Observing System 2030 Strategy¹.

The OCG develops actions under its strategic foci (see Annex 1), which are the nuclei for cross-network activity that strengthens integration across the OCG global ocean observing networks (see Annex 2), enhances delivery of information to stakeholders, and supports development of a fit-for-purpose global ocean observing system. OCG initiates projects and new strategic foci to support innovation, evolution, and to fulfill emerging coordination needs.

GOOS OCG recognizes global-scale ocean and marine meteorological observing networks that meet certain criteria and work towards maturity as GOOS OCG networks². In addition the OCG identifies and works with emerging observing networks, and offers guidance and opportunities to advance their readiness to become an OCG network. The OCG provides

¹ [goosocan.org/2030Strategy](https://www.goosocan.org/2030Strategy)

² Observations Coordination Group (OCG) Network Attributes, Commitments and Benefits - What it means to be an OCG network - https://www.goosocan.org/index.php?option=com_oe&task=viewDocumentRecord&docID=24002

guidance and oversight to OceanOPS, the GOOS OCG monitoring and support centre, in achieving its community identified vision, mission and 5-Year Strategic Plan³.

Terms of Reference

The Observations Coordination Group (OCG) shall:

- (a) Coordinate across the designated OCG global ocean observing and emerging networks, associated pilot projects, and appropriate bodies to ensure an effective and integrated global ocean observing system
- (b) support the development and implementation of regular processes for reviewing and evaluating the integrated GOOS
- (c) Provide at minimum an annual report to the Global Ocean Observing System Steering Committee (GOOS SC) and the WMO Infrastructure Commission (INFCOM) on the effectiveness, coordination and operation of GOOS OCG observing networks, for example on implementation status, performance, progress towards meeting observing system user requirements, implementation of standards and best practices, capacity development, and delivery of data and metadata to designated centers and users.
- (d) Provide advice to IOC and WMO, for example on potential innovations, technologies, solutions, and pilot projects towards enhancing earth-system observing.
- (e) Encourage technical development within and across existing OCG observing networks and engage with emerging networks and communities of practice, that are the key to better address existing and new requirements and needs;
- (f) Develop network specific metrics and targets, reported through OceanOPS, to assess and report observing system performance and implementation, progressing over time towards reporting on system wide metrics;
- (g) Advance timely exchange and unrestricted flow of network observational data and metadata to identified systems and users through targeted data management integration and pilot projects, by leveraging community data standards and best practices, and through integration with IOC/IODE and WMO systems;
- (h) Improve the availability, completeness and timeliness of metadata through OceanOPS, and through integration with IOC/IODE and WMO systems;

³ www.ocean-ops.org/strategy



(i) Encourage system-wide integration and quality standards through development and dissemination of community agreed best practices and standards;

(j) Oversight and approval of OceanOPS Work Plan and budget. Support OceanOPS strategic planning and oversight of implementation.

(k) Increase the ability of states and communities to develop their observing capability and access to data, through coordination of capacity development activities and cooperation across the global ocean observing networks, and in conjunction with other IOC and WMO programs and activities

(l) Encourage environmental stewardship across the OCG ocean observing networks

(m) Strengthen and promote diversity and inclusion in ocean observing and OCG activities

(n) maintain appropriate connections and interaction with other parts of the ocean observing and forecasting ecosystem, towards advancing the observing system and connection along the value chain to better serve societal needs.

Membership

The Membership is selected to ensure an appropriate range of expertise, and to maintain appropriate geographical and gender representation.

The membership of the Observations Coordination Group, for surface to deep ocean, and above ocean observations, will include:

- Observations Coordination Group Chair;
- Observations Coordination Group Vice-Chairpersons (Vice-Chairpersons for WMO WIGOS/WIS, New Technologies, Standards and Best Practices, Data and Information);
- Representatives of member OCG observing networks and recognized emerging OCG observing networks, see Annex 2 for current list.
- OceanOPS Manager;

Additional experts may be invited as appropriate to lead OCG activities or as observers to facilitate connections for an integrated observing system. Including, emerging observing nation representation, representation from data management and GOOS Expert Panels.

Governance and operating principles

The OCG determines any changes to its ToRs, membership and operating principles. The GOOS Steering Committee has responsibility for approving the OCG Terms of Reference.

The OCG receives guidance from both GOOS Steering Committee (GOOS SC) and the WMO Infrastructure Commission (INFCOM) in the shaping of its agenda and work plans,



through the OCG Executive Committee and the GOOS SC, and from the global ocean observing networks through the annual OCG meeting. OCG reports annually on progress to the GOOS SC and WMO INFCOM. The OCG works in partnership with the GOOS Expert Panels and GOOS GRAs.

The GOOS Steering Committee has the responsibility of approving the OCG Chair, following solicitation of expressions of interest. An in-coming Chair may serve as a Vice-Chair to ensure continuity. The OCG is authorized to develop the terms of reference for its Vice-Chairpersons and solicit/appoint Vice Chairs. The OCG Chair is appointed for a term of up to 5 years. The Vice-Chairs are appointed for a term of up to 5 years. An overlap period with incoming Chairs/Vice-Chairs is encouraged, of 1 to 2 years.

The OCG Executive Committee (OCG Exec) is the body that oversees the development and implementation of the OCG Work Plan, managing resources, inter-sessional activities, communication with the OCG, and relationship with other bodies.

The OCG Exec consists of: Observations Coordination Group Chair; Observations Coordination Group Vice-Chairpersons; OceanOPS Manager, representative from developing ocean observing community, GOOS and WMO INFCOM secretariat.

The OCG Exec provides oversight and guidance to OceanOPS in achieving its community identified vision and mission, and supports its development in line with the OceanOPS 5-Year Strategic Plan, through regular meetings, annual approval of OceanOPS Work Plan and budget, and other activities as required.

The OCG is supported by secretariat resources from GOOS/IOC and WMO.

Annex 1

The OCG has 8 strategic foci on which it places strong emphasis, they were adopted at OCG-10 (2019):

- Requirements
- Observing Advances
- Standards and Best Practices
- Data Management
- OceanOPS
- Metrics
- Environmental Stewardship
- Capacity Development

Annex 2

The global networks that currently constitute GOOS OCG are:



- Data Buoy Cooperation Panel (DBCP), which includes the Global Drifter Array and Moored Buoy networks.
- Ship Observations Team (SOT), which includes the Voluntary Observing Ship Scheme (VOS), Ship Of Opportunity Programme (SOOP) and the Automated Shipboard Aerological Programme (ASAP) networks
- Global Ocean Ship-based Hydrographic Investigations Program (GO-SHIP)
- International Argo Programme (Argo)
- OceanSITES Open-Ocean Timeseries (OceanSITES)
- Global Sea Level Network (GLOSS)

The OCG emerging networks are:

- OceanGliders
- International High Frequency Radar (HF-Radar)
- Animal Borne Ocean Sensors (AniBOS)

Note: As a function of the legacy from the Joint Commission on Oceanography and Marine Meteorology (JCOMM), the Data Buoy Cooperation Panel (DBCP) and Ship Observations Team (SOT) and subsidiary bodies operate under their own governance, whereby their Terms of Reference are kept under review by the respective DBCP and SOT governance bodies. Any changes proposed to ToRs are considered by OCG with a view to their approval by the OCG Chair on behalf of the OCG. With leadership appointments to be reported to the OCG Executive Committee.

In general the OCG global and emerging networks are expected to operate under their own governance, this is a prerequisite to being recognized as an OCG network, and to keep their ToRs under review. They are encouraged to seek OCG input at a strategic level.

All OCG emerging networks are expected to be at least at pilot level for all OCG Network Attributes, and to commit to work towards achieving maturity in all attribute areas. See goosocean.org for information on the attributes, benefits, and process.

