GRA Council Meeting 16 April 2025

GOOS Update

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Overview

Governance

GOOS Steering Committee Workplan

IOC Data Architecture

Progress report on Ocean Observations in areas under National Jurisdiction

Joint WMO-IOC Collaborative Board (JCB) strategic advice on joint work to achieve common objectives



Decision EC-57/4.1 Request to ES

Proposal by the Executive Secretary to evolve GOOS governance, in consultation with the GOOS Steering Committee, representatives from Member States and GOOS sponsors.



1. Define the mission and scope of GOOS moving forward – the WHY and the WHAT.

Phase 1. Discover and Define GOOS

- 1 Mission and Scope review and revision
- 2 Structure review
- 3 Draft Proposal for GOOS reform to A-33 (and side event)
- 4 **Communications toolkit**
- 2. 2026+ the approach taken to develop and deliver a reformed GOOS

the HOW

Phase 2. Develop and Deliver GOOS

- ⁵ Revised GOOS (mission, scope, structure, TOR, processes, delivery mechanisms)
- 6 User and Uptake Strategy
- **7** GOOS (EOV) status and implementation plan (GOOS basic network)
- 8 IOC Data Architecture
- 9 **Communications Plan**
- 10 GOOS 2030+ revised strategy



GOOS SC Workplan 2025-2027

- Core Coordination and Collaboration
- II. Observation system design and development
 - A. Expert Panels
 - B. Carbon and GHG Plan
 - C. Biodiversity Plan
 - D. EOV-led Ocean Indicators
 - E. RRR and Evolving GBON

III. Strengthening data integration and delivery A. Observations Coordination

B. IOC Data Architecture

IV. System implementation

A. At national and regional level
1. National Focal Points
2. GOOS Regional Alliances

B. And applications

1. ETOOFS
2. Engagement on applications, including forecasting
3. Early Warning for All

V. Outreach and Partners

- A. Projects and partners
- B. Communications

VI. Reform

GOOS SC are tasked to **advise** on developing the capacity of all **Member States** to participate in and benefit from GOOS

Deliver an integrated, 'fit for purpose' observing system built on the systems approach outlined in the Framework for Ocean Observing (GOOS Strategy 2030, Strategic **Goal 2**).

GOOS SC identified strengthening data integration and delivery as a needed new area of emphasis for GOOS (all goals)

Deepen engagement and partnership from observations to end users to advance the use and impact of the observations and demonstrate their benefits (GOOS Strategy 2030, Strategic **Goal 1**)

Building for the future through innovation, capacity development, and evolving good governance (GOOS Strategy 2030, Strategic **Goal 3**)

IOC Data Architecture

Goal

"To establish optimized collaboration between IODE and GOOS, develop an integrated view of the data landscape and lay the ground for the development of an integrated, efficient, future facing, and FAIR data landscape between GOOS and IODE and across GOOS OCG, BioEco and BGC data components"

- Agreed architecture based on ODIS, EOVs, FAIR & CARE metadata (linked to original source)
- In line with OCG Data Implementation Strategy
- GOOS OCG working towards this GOOS as a Hyper node
- WMO presented WIS2 connections to ODIS
- Metadata: 'GOOS' metadata
 - signal of quality, provenance, licensing
- Indicators/products e.g. O2 will harvest and compile
- GOOS-IODE joint agenda item
- Detailed implementation plan and minimum viable product demonstrators



Observations within National Jurisdiction

- Requests GOOS to raise awareness of the MSR process, such as through relevant communications, including appropriate links to information;
- Also requests GOOS to consult with its networks, and relevant UN organizations and stakeholders, including DOALOS, on the feasibility of revising the 2010 DOALOS "Marine Scientific Research. A revised guide to the implementation of the relevant provisions of the United Nations Convention on the Law of the Sea" and report back to the IOC Assembly at its 34th meeting;
- Invites Member States to promote collaboration between neighbouring coastal States to facilitate bilateral and regional facilitation of MSR clearance;
- Invites IOC's Regional Subsidiary Bodies and GOOS Regional Alliances to act as intermediaries between national authorities and research networks and facilitate awareness of the MSR clearance process by offering consistent technical advice and guidance, as well as coordinating efforts to streamline procedures among countries with similar regional characteristics;
- Requests GOOS Steering Committee to provide a draft proposal on the actions that IOC could take to address the challenges, identified by the Working Group, for the Ship of Opportunity Programme to the IOC Executive Council at its 59th meeting, with the aim to present a proposal for consideration by the IOC Assembly at its 34th meeting;

WMO/IOC Joint Collaborative Board

- 1. Global Basic Observing Network (GBON)
 - Co-create a definition of the Ocean GBON, incorporating additional ocean variables, in complement to / as a part of WMO's Global Basic Observing Network (GBON).
 - Joint WMO/IOC working group on GBON TOR written/ membership determined and group to be started in 2025
- 2. Data Management and Interoperability
 - Enhance interoperability for an integrated observing and data system.
 - Improve data sharing between the WMO Information System (WIS) and the Ocean Data Information System (ODIS).
 - Develop a structured approach to Marine Climate Data Systems (MCDS) and enhance the integration of observation networks.
 - Joint WMO/IOC technical working group for data management
- 3. Coastal and Maritime Resilience
 - Strengthen coastal and maritime community resilience against hazards like tsunamis
 - Supporting the UN's Early Warning for All (EW4All) initiative.
 - IOC and WMO experts contributed to the report "Meteotsunamis: definition, detection and alerting services investigation" (IOC Technical Series 200, 2025). GOOS SC formed a task team to develop a proposal on how to contribute to the EW4ALL initiative
- 4. Capacity Development
 - Establish a Joint Oceanography and Meteorological Specialized Training Centre.
 - Share data management capabilities with developing countries and provide guidance on marine observing systems.
 - IOC and WMO coordination includes Global Campus Initiative and the Ocean Teacher Global Academy IOC member join the WMO Executive Council Capacity Development Panel (David Farrel)