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GOOS National Focal Point (NFP) Forum

2025.10.27

Agenda

1. **GOOS Updates**
   - GOOS Workplan & Governance Reform (Joanna Post)
   - NFP Updates and key findings of 2025 NFP Survey (Jing Li)
   - GOOS Communication update (Laura Stukonyte)
2. **GOOS NFP Implementation Guidelines Development (Caroline Cusack)**
   - Progress on the guideline development
   - NFP Reporting
3. **National Updates**
   - Spain | Portugal | Malta | Chile | Indonesia | DR Congo
4. **Thematic Talk & Discussion: How to support Ocean Observation Data Flow to GOOS?**
   - Presentation (Emma Heslop & Kevin O'Brien)
   - Discussions
5. **AOB**

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1. GOOS Updates

Joanna POST

Head, Ocean Observations and Services Section
Director Global Ocean Observing System (GOOS)
Acting Head International Oceanographic Data and Information Exchange (IODE)

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1.1 GOOS Workplan 2025-2027

GOOS Steering Committee

Focus 2025-2027

GOOS SC-14 Report
IOC-WMO/GOOS-SC-33/s

I.**Core Coordination and Collaboration**

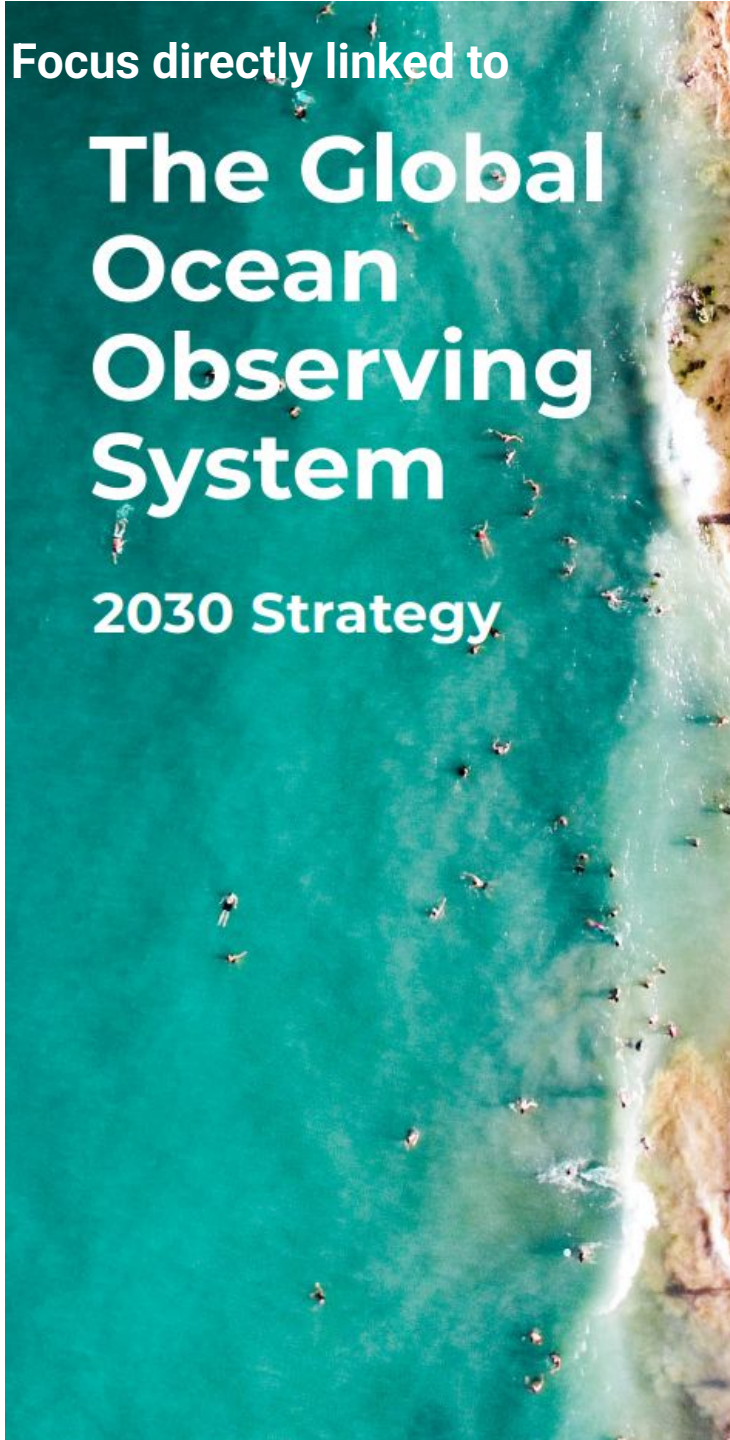
II. **Observation system design and development**
- A. Expert Panels
- B. Carbon and GHG Plan
- C. Biodiversity Plan
- D. EOV-led Ocean Indicators
- E. RRR and Evolving GBON

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
- B. Partners
- C. Communications

VI. **Reform**
- Evolve GOOS Governance



GOOS Steering Committee

Focus 2025-2027

I. **Core Coordination and Collaboration**

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- A. Expert Panels
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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 → **Task Team on NFP Implementation Guidelines**
  - 2. GOOS Regional Alliances
- B. And applications
  - 1. ETOOFS → **Task Team on ETOOFS**
  - 2. Engagement on applications, including forecasting
  - 3. Early Warning for All → **Task Team on GOOS engagement with EW4ALL**

V. **Outreach and Partners**
- A. Projects → **Task Team on GOOS Projects**
- B. Partners → **Task Team on Engagement with Private Sector**
- C. Communications

VI. **Reform**

Evolve GOOS Governance

Activities are continuing as per the focus shown as well as 5 focused task teams

A-33 Requests to GOOS
Observations in National Jurisdiction

- Requests GOOS to raise awareness of the marine scientific research (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 it at its 34th session; (*GOOS sec tasked to follow up*)
- Requests the 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 session, with the aim to present a proposal for consideration by the IOC Assembly at its 34th session; (*OCG tasked to follow up*)
- 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;

Joint WMO-IOC Collaborative Board (JCB)

Global Basic Observing Network (GBON)

- Evolving WMO GBON with GOOS to include additional ocean variables
- Evolving joint understanding of an ‘Ocean Basic Observing Network’ encompassing all GOOS delivery areas

Data Management and Interoperability

- Enhancing interoperability for an integrated observing and data system, improving data sharing between the WMO Information System (WIS) and the Ocean Data Information System (ODIS), and developing a structured approach to Marine Climate Data Systems (MCDS).

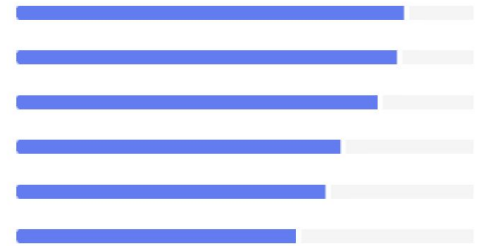
JCB survey result - GOBON

Backbones of GOBON

Category	Main Components	Key Objectives
Observation Platforms	Satellites, buoys (moored & drifting), Argo floats, gliders, ships, tide gauges, radar, ASVs	Provide multi-layer, multi-scale ocean data
Variables	Physical, Biogeochemical, Biological, Meteorological	Cover Essential Ocean & Climate Variables
Design Principles	Global coverage, interoperability, open data, sustained funding	Ensure standardization, inclusivity, and long-term operation
Governance	WMO–IOC coordination, regional/national nodes	Global cooperation and shared responsibility
Applications	Climate, weather, hazards, ecosystems, blue economy	Deliver science-based societal benefits

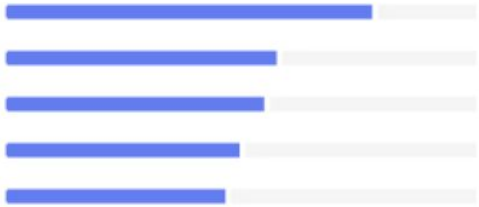
Opportunities in establishing GOBON

1. **Technological advances** e.g. Faster adoption of new technologies (such as autonomous systems, satellit...
2. **Partnerships and co-design** e.g. Collaboration through initiatives (like Southern Ocean Observing...
3. **GBON implementation** e.g. Expanded coverage and alignment with WMO
4. **Standardization of data** for ocean observations e.g. for quality monitoring and consistency in data...
5. **Increased capacity** e.g. raising the level of understand of what a global basic ocean observing...
6. **Donor engagement** e.g. Increased support from existing and/or new sources of resources such as...

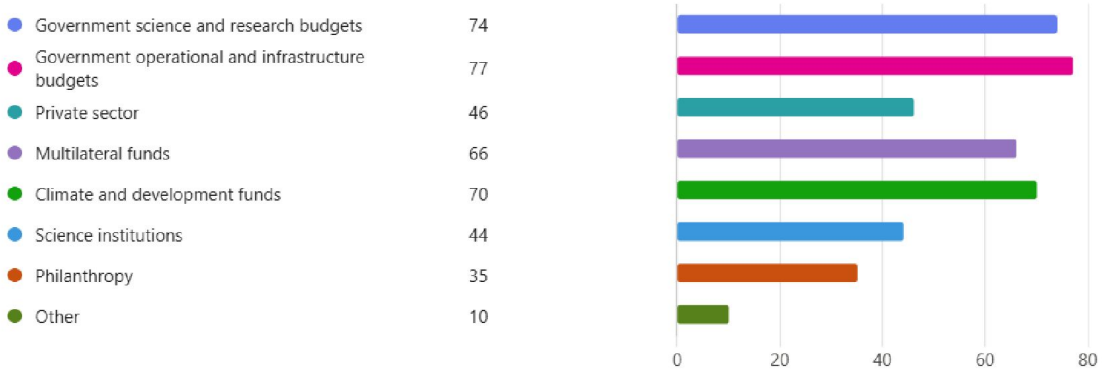


Barriers

1. **Funding constraints / sustainability** e.g. difficulty in maintaining long-term investment in ocean...
2. **Technical capacity** e.g. shortage of equipment or skilled personnel to operate, maintain, and/or use...
3. **Data gaps** e.g. sparse coverage, spatially or temporally, of GOOS EOVs (Essential Ocean...
4. **Awareness of current status** of the ocean observing system e.g. EOVs available
5. **Understanding of impact and benefits** of ocean observations e.g. for forecasting, ocean health and...



How should GOBON be supported?



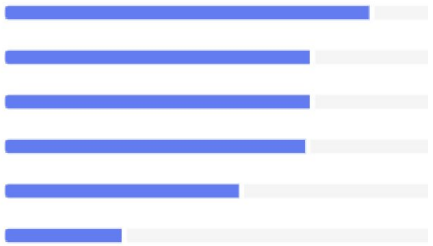
JCB Survey – Data Management and Interoperability

Technical priorities for enhancing EOV/ECV interoperability

Priority Area	Key Actions	Desired Outcome
Standards & Metadata	Harmonized formats, vocabularies, QC	Seamless data exchange
Automation & Efficiency	APIs, automated pipelines, real-time streaming	Reduced latency & duplication
Infrastructure & Systems	Federated catalogs, shared repositories	Unified IOC–WMO architecture
Innovation & Technology	AI, ML, blockchain, cloud	Smarter, traceable data management
Capacity & Governance	Training, coordination, governance	Sustainable interoperability
Observations	More instruments, standard QC	Broader, reliable data coverage
Assimilation	Integrated EOV–ECV modeling	Enhanced predictive power

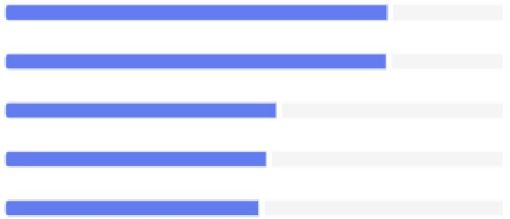
Barriers

1. **Lack of common standards and/or tools**: e.g. interoperability tools between meteorological,...
2. **Limited capacity**: e.g. challenges in data storage, sharing, and security
3. **Policy restrictions**: e.g. that limit data sharing
4. **Lack of support to implement standards, best practices and tools**: e.g. resources
5. **Complexity of the global ocean data sharing systems:** e.g. knowing where to share data
6. **Social barriers:** e.g. getting and recognising appropriate credit for collecting, managing and...



Opportunities

1. **Jointly promote WMO and IOC Data Policy**: to encourages free and open exchange of earth syste...
2. **Coordinated strategy, resourcing and governance between WMO and IOC**: e.g. to enable...
3. **Open technology systems:** e.g. WIS 2.0 and ODIS
4. **Integrating artificial intelligence and big data analytics**: Growing potential to leverage large...
5. **Improved planning of observations**: e.g. to decrease data and knowledge gaps



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1.2 GOOS Reform

GOOS Reform - Accenture

DELIVERABLE I (22/08/2025)

* Detailed project plan and approach to the work expected as part of the work and to be coordinated with the GOOS director and team.

DELIVERABLE II (26/09/2025)

* Mission and Scoping Review identifying what is the unique value proposition of GOOS. The deliverable will include GOOS' role, goals and the key activities it will undertake to achieve its mission.

DELIVERABLE III (10/10/2025)

* Structure detailed Review across all the constituent internal components of GOOS as detailed in Terms of References. The deliverable will include a gap analysis with respect to the mission and scope as defined under Deliverable II highlighting areas where change may be required.

DELIVERABLE IV (30/11/2025)

* Initial draft of proposal for revised GOOS. The deliverable will include the following components:
- Organizational design for GOOS staff
- Key principles GOOS' ways of working
- Revised governance structure for GOOS' committees, accountability mechanisms and decision-making principles

DELIVERABLE V (31/12/2025)

* Submission of final Proposal following feedback from relevant stakeholders

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Thank you

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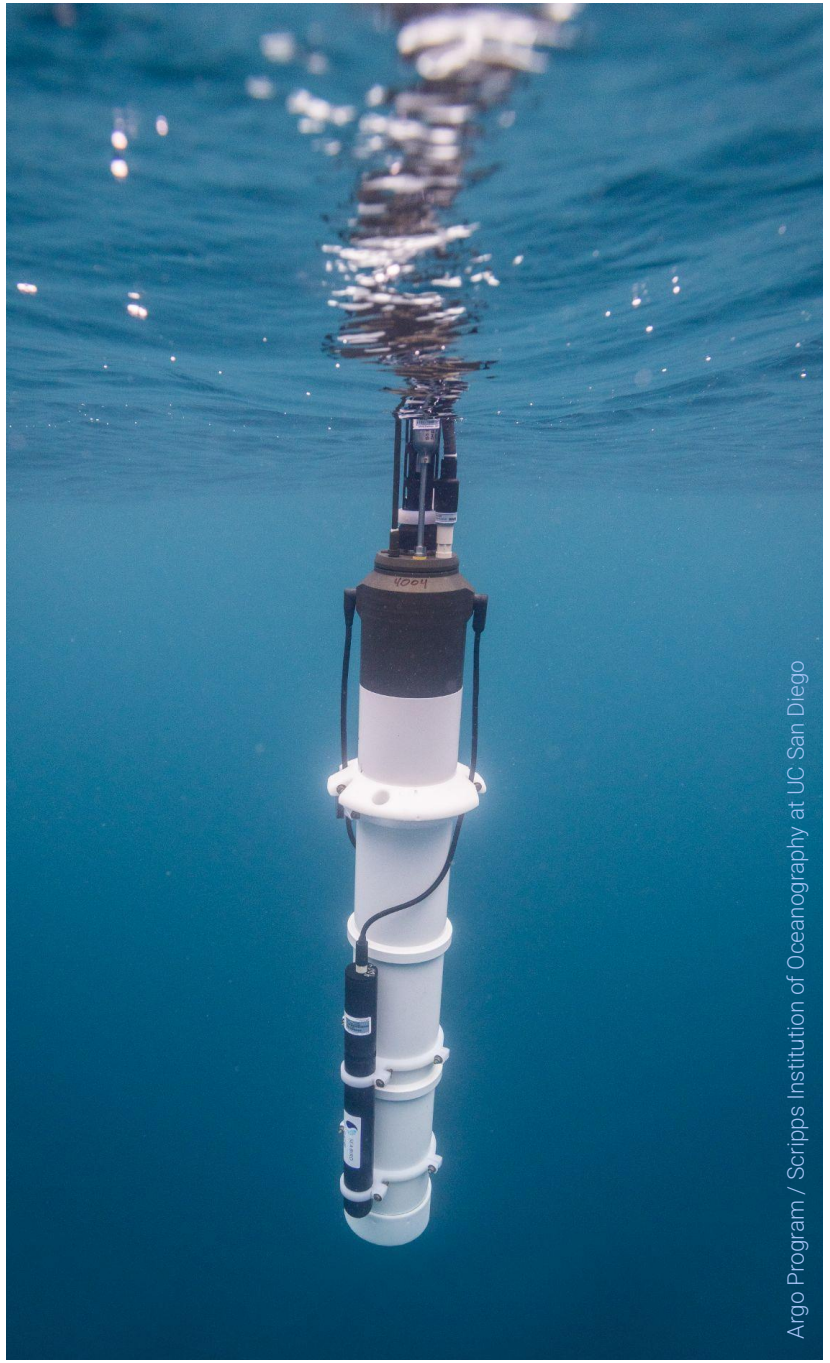

Argo Program / Scripps Institution of Oceanography at UC San Diego