



The Global Ocean Observing System

Programmatic Development: Ocean Observations

Dr Joanna Post
IOC/GOOS

Agenda item 8

8.1 Global Ocean Observing System Governance Reform

8.2 Progress report on Ocean Observations in areas under National Jurisdiction

8.3 Brief update on GOOS related reports: progress report on Global Climate Observing System & Joint Collaborative Board

8.1 Mandate

IOC Decision A-32/4.8.1 GOOS Work Plan for 2024–2025

Invites GOOS Sponsors to support evolving GOOS governance that would lead to improved advice and operational support, be inclusive of additional stakeholders, and be open to advice from a process of governance change;

Requests the Executive Secretary to review progress with reform of GOOS governance to meet the needs of Member States, including any proposed actions or otherwise in response to the nine recommendations of the ‘Report of the Study on Support Provided to Global and Regional Ocean Observing Systems’ by Neville Smith commissioned by GOOS as referred to in the report of the GOOS Steering Committee Part 1 ([SC-10-1](#) section 4) in 2021, and to report progress to the IOC Executive Council at its 57th session in 2024

Recommendations for GOOS governance in the Neville Smith report

Recommendation 1. The **GOOS community should reconsider its structure** within the governance discussions, aligning GOOS uniquely with ocean observation activities, and recognizing a Global Ocean Information System and a Global Ocean Processing, Modelling and Forecasting System as the two other elements of a world ocean system.

Recommendation 2. A plan for **rejuvenating national engagement** should be developed, including for communicating progress with all parts of the support structure. Communiqués should be issued immediately upon the conclusion of any major activity (e.g., Committee or Panel meetings) to inform stakeholders of areas of discussion and decisions to create a sense of timely action. Such activity was at best only partly resourced as part of the present support structure.

Recommendation 3. **Regional networks** should be recognized as part of the support structure when and where they offered advantage and value for implementing the six pillars of the support strategy and for regional user/societal engagement.

Recommendation 4. **Experimental and ad hoc research contributions** to observations, data and information management and modelling and forecasting **should be recognized**, but not necessarily coordinated through the support structure. Research use of products and system services should be captured in the user and uptake strategy.

Recommendation 5. **A plan for show casing user uptake** and energising the dialogue and engagement with the user community more generally should be developed. Such an activity was presently not resourced as part of the support structure.

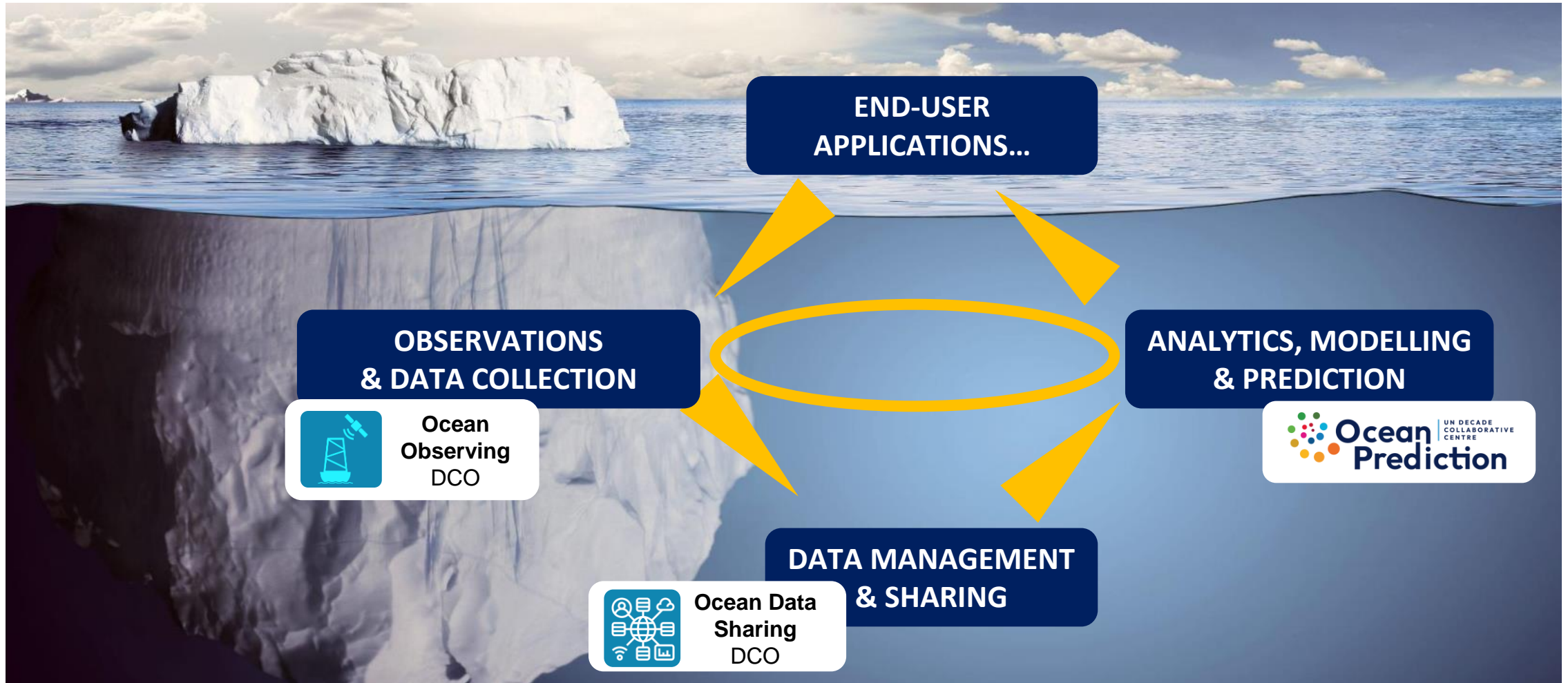
Recommendation 6. A small **study group should be formed** from the major supporters of **capacity building, education, and training** to provide guidance on how activities should be identified, prioritised and executed within the framework of support.

Recommendation 7. A **high-level description of the architecture of the ocean system should be developed and put out for public comment and feedback**. The architecture should include clearly delineated observation, information and data management, and production and forecasting elements and a virtual 'cloud of support' that ensured it operated effectively as a system, with effective connectivity internally and externally.

Recommendation 8. The **framework for support should be further developed**, along with a 5-10-year strategy based on the guidance provided in this Report.

Recommendation 9. The community supporting relevant ocean activities should be engaged to **renovate and rejuvenate the current hub-and-spoke arrangement**, consistent with whatever changes in governance that might be agreed elsewhere and following the other Recommendations and Findings of this Report. The change should be in place by 2025 and follow the roadmap outlined in this study.

DCO-00, DCO- ODS and DCC – OP Coordination



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Update

- GOOS must be fit for purpose to provide the global ocean observing system that addresses Decade and societal challenges, including those related to the ocean-climate nexus, ecosystem management and protection, marine pollution, blue food and the development of a sustainable ocean economy
- GOOS is the only entity that provide global view and global implementation plans on ocean observation – coastal zones and particularly high seas
- GOOS can “lift” the whole system – particularly with a strengthened hub under new budget
- We need to strengthen and sustain Earth system monitoring understanding, and deliver data with end user cost/benefit in mind.
- Many regional and national systems are observing and forecasting with good reason.
- The Decade structure provides some framing into which GOOS governance can support and lead delivery of observations at international, regional and national
- This is a good start and management team is leading delivery through the value chain with end-users in mind.

Update

- Next steps
 - **Circular letter for new SC members – with wider skill set (all 10 members exceeded their term of office)**
 - **Report for EC57 according to request from Assembly**
 - Inc. SWOT and Progress against 9 recommendations – (available end April)
- What next?
 - **New Steering Committee – with wider skill set to help evolve GOOS**
 - **Build GOOS management team strategy and GOOS implementation plans (as requested) e.g. for Carbon and in consideration of MSP**
 - **Close collaboration with sponsors**
 - **Link into the decade framework / governance**
 - **Potential for EC to request further evolvement of GOOS governance based on this progress**
- IOC member states and sponsors must be involved



8.2 Mandate

IOC Decision A-32/4.8.2 Summary Report on the Consultation on Ocean Observations in Areas under National Jurisdiction

Requests the Working Group to report to the IOC Assembly at its 33rd session in 2025, with a progress report provided to the Executive Council at its 57th Session in 2024

Mandate:



Identify and document specific examples of problems in making sustained ocean observations in areas under national jurisdiction and an assessment of their level of impact on GOOS, and research, services, and products reliant on such GOOS data.



Through this process, seek additionally to identify examples of best practice relevant to the taking of sustained ocean observations in areas under national jurisdiction.



Should specific cases with material adverse impact on GOOS be identified, provide a diagnosis of the root cause of the problem, and identify whether potential action is within the IOC mandate, in consideration of international law, including UNCLOS, or whether other bodies need to be engaged.



For those where potential action fall within the IOC mandate, identify recommendations with regard to potential action, for discussion at the IOC Assembly in 2025.



Present the results from these discussions, with any recommendations for action on this issue, to the IOC Assembly at its 33rd Session in 2025, with a progress report provided to the Executive Council at its 57th Session in 2024.

Update

- Request for feedback survey “experiences related to undertaking sustained ocean observing in States’ Exclusive Economic Zones (EEZs)” so that the working group has good base of data for its work
- OONJ Working Group
 - **2 meetings (December 2023 and January 2024)**
 - **Monthly meetings planned**
- Co-chairs elected
 - **Cap. Ariel Troisi, Argentina**
 - **Dr. Suzan M. El-Gharabawy, Egypt**
- Report on progress of the Working Group being developed for EC57



8.3 Mandate

IOC Decision A-32/4.10 Report of the Joint Study Group on the Global Climate Observing System (GCOS)

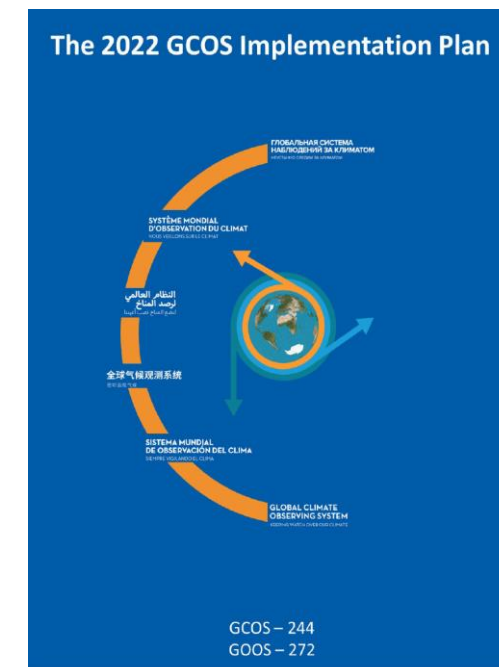
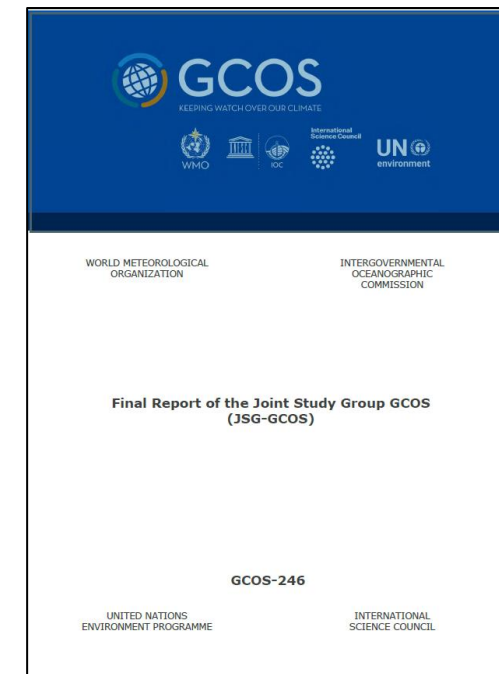
Requests the Executive Secretary to prepare a revised GCOS Memorandum of Understanding (MoU) with the co-sponsors for consideration by the Executive Council at its 57th session, based upon the draft MoU contained in the Joint Study Group Report (GCOS-246)

IOC Decision A-32/4.9 Four-year Review of the Joint WMO-IOC Collaborative Board

Requests the IOC Executive Secretary to oversee the Joint WMO-IOC Collaborative Board self-evaluation review of performance, and report back with the findings to IOC Executive Council in 2024

Background GCOS Joint Study Group and GCOS Implementation Plan (2022)

- A. A Joint WMO, IOC, ISC & UNEP Study Group (**JSG-GCOS**) was set up to **review GCOS governance and structure**. Martin Visbeck co-chair, and GOOS Co-Chair Toste Tanhua a member. Final Report published in April 2022 including a MoU in draft for further consideration by GCOS co-sponsors, and a call for increased support to GCOS Secretariat.
- B. The **GCOS Implementation Plan** was published in 2022 (GOOS Report 272) - and it **was welcomed at COP-27** by UNFCCC parties and by IOC General Assembly. It contains recommendations to improve the global climate observing system including direct requests to GOOS



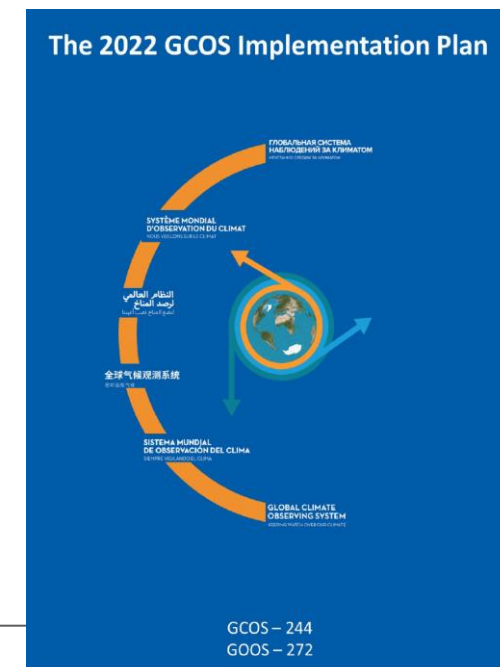
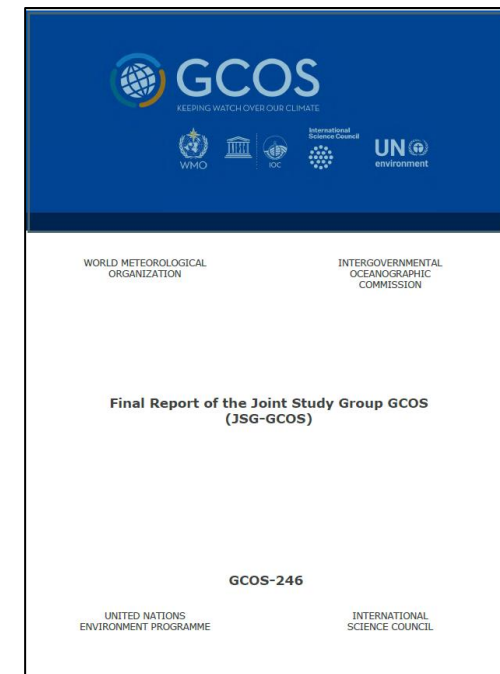
GCOS Update

A

1. Requests the Executive Secretary:
 - (i) to **prepare a revised GCOS Memorandum of Understanding;**
 - (ii) to continue contributing to the Climate Observing System Fund (COSF)
2. Invites the GCOS Chair, in consultation with the Head of Ocean Observing and Services Section of IOC, to inform IOC on the progress, performance and requirements of the global observing systems for climate;

B

1. Endorses the conclusions of the 2022 GCOS Implementation Plan (GCOS-244, GOOS-272).
2. Requests the Head of the IOC Ocean Observations and Services Section to **facilitate the coordination and implementation of the relevant actions** provided in the IOC Supplement to the GCOS Implementation Plan 2022 (IOC/A-32/4.10.Doc(1))
e.g. inc Implementation plan for C observation



JCB update

- Discussion with co-chairs
- SWOT analysis and Timeline developed
- Questions developed for self-review
- Virtual meeting planned in February
- Important to identify common strategies and threats based on new opportunities, and to find a mechanism to influence decisions
- Survey with questions will be sent before the February meeting in order to get members thinking of JCB objectives and activities.
- Report back on findings will be provided for EC57

Regional Representatives – renewal?

IOC				WMO			
JCB Members	Surname	Firstname	IOC Region	JCB Members	Surname	Firstname	WMO Region
IOC Co-Chair	Srinivas	Kumar T	India, IV Asian and Pacific States	WMO Co-Chair	Mohapatra	Mrutyunjay	India, II Asia
IOC Regional rep	Lahijani	Hamid Alizadeh	Islamic Republic of Iran, IV Asian and Pacific States	WMO EC-1	KARNAWATI	Dwikorita	Indonesia, V South West Pacific
IOC Regional rep	Johnson	Ashley	South Africa, V African and Arab States	WMO EC-2	Abader	Ishaam	South Africa, I Africa
IOC Regional rep	Santiago Scardilli	Alvaro	Argentina, III Latin America and Caribbean	WMO EC-3	Martis	Albert	Curacao, IV North America, Central America and the Caribbean
IOC Observation (GOOS)	Tanhua	Toste	Germany I W. European and North American States	WMO SC-ON rep	Thurston	Sid	USA, IV North America, Central America and the Caribbean
IOC Data (IODE)	Fyrberg	Lotta	Sweden, I W. European and North American States	WMO SC-IMT rep	Tandy	Jeremy	UK, VI Europe
IOC Data (IODE)	Sierra	Paula Cristina	Colombia, III Latin America and Caribbean	WMO SC-ESMP rep	Richardson	David	UK, VI Europe
IOC Forecasting (GOOS/OceanPredict)	Davidson	Fraser	Canada, I W. European and North American States	WMO SC-MMO rep	Paker	John	Canada, IV North America, Central America and the Caribbean
IOC TOWS-WG rep	NISHIMAE	Yuji	Japan, IV Asian and Pacific States	WMO RB rep	Wheeler	Matthew	Australia, V South West Pacific
IOC Research rep	Legg	Sonya	USA, I W. European and North American States				