

The Global Ocean Observing System



WORLD METEOROLOGICAL ORGANIZATION

environment

Environment Programme

United Nations



International Science Council

Meeting objectives Reporting by SO

GOOS Today & Building a fit-for-purpose global ocean observing system

GOOS 12th Steering Committee meeting, 25 - 26 April 2023

The GOOS 2030 Strategy

Vision

A truly global ocean observing system that delivers the essential information needed for our sustainable development, safety, wellbeing and prosperity

Mission

To lead the ocean observing community and create the partnerships to grow an integrated, responsive and sustained observing system





Meeting Objectives

- Assess advancement towards GOOS objectives
- Identify priorities, gaps, opportunities, and resource implications
- Assess advancement of GOOS Ocean Decade Programmes and provide guidance
- Provide feedback to GOOS Expert Panels, the Observation Coordination Group, GOOS Regional Alliances, and the Expert Team on Operational Ocean Forecasting (ETOOFS)
- Assess ToRs and evolving role, ETOOFS, GOOS National Focal Points, OOPC
- Assess new GOOS Project and TT applications
- Plan for evolving GOOS Governance and renewal of SC membership



Purpose by SO

Provide the SC with a view of progress across GOOS by Strategic Objective, 4 years into GOOS 2030 Strategy

- Evaluate progress by Strategic Objective against the outcomes defined in 2020 Implementation Roadmap:
 - Are there implementation gaps?
 - Are there barriers/opportunities?
 - Are the outcomes still relevant?
- Identify areas for improved integration across GOOS
- Receive input, ideas, and advice Set priorities



A Roadmap for the Implementation of the Global Ocean Observing System 2030 Strategy

for an open planning process

April 2020





Actions

Sustain, strengthen and expand observations coordination through GOOS and partner communities, promoting standards and best practices, and developing metrics to measure success

✓ SO6: Strengthening and expanding system

	Activity		Status	Priority	Lead	Timeline ①
>	6.3 Ocean Observations in EEZs 3	G	Working on it	Medium	HQ Office	Apr 1, '21 - Dec 3 <mark>1</mark> , '23
	6.6 Advancing BGC/BioEco observations across global networks	2	Working on it	Medium	BioEco	Apr 1, '21 - Dec 3 <mark>1</mark> , '23
>	6.11 Building the BioEco community 8	2	Working on it	Low	BioEco	Apr 1, "21 - Dec 31, "25
>	6.2 GOOS Endorsed Best Practices available across EOVs and 1	2	Working on it	Medium	OCG/Ocea	Apr 1, '21 - Dec 3 <mark>1</mark> , '23
>	6.4 Emerging network integration 4	2	Working on it	Medium	OCG/Ocea	Apr 1, '21 - Dec 3 <mark>1</mark> , '23
>	6.7 Environmental Stewardship 3	2	Working on it	Medium	OCG/Ocea	Apr 1, '2 <mark>1 - Dec 31, '25</mark>
>	6.12 Marine network additions to GBON/SOFF 1	G	Working on it	Medium	OCG/Ocea	
>	6.1 Implementation of multidisciplinary initiative VOICE 2	2	Working on it	Medium	BGC	Apr 1, '21 - Dec 3 <mark>1</mark> , '23
>	6.5 Develop and/or maintain an up to date referenced hardwar 2	G	Ready for r	Medium	BGC	Apr 1, '21 - Dec 3 <mark>1</mark> , '23
>	6.8 Inter-comparison and standards 4	2	Working on it	High	BGC	Apr 1, "21 - Dec 31, "25
>	6.9 Coordinate and expand surface ocean biogeochemistry ob 2	20	Working on it	High	BGC	Apr 1, '2 <mark>1 - Dec 31, '25</mark>
	6.10 CoastPredict	2	Working on it	High	Ocean Dec	Apr 1, '2 <mark>1</mark> - Dec 31, '25



Actions

Build advocacy and visibility for the observing system with stakeholders, communicating with key users and national funders

SO2: Advocacy and communications

Activity		Status	Priority	Lead	Timeline ()
> 2.1 Value of Ocean Observations Project 3	G	Near Comp	Medium	HQ Office	Apr 1, '21 - Dec 31, '22
> 2.2 GOOS Communications Plan 3	26	Near Comp	High	HQ Office	Apr 1, '21 - Jun 30, '23
> 2.5 Advocacy into UN System 5	(\pm)	Working on it	High	HQ Office	
> 2.3 GOOS National Focal Points developed 3	20	Working on it	Medium	HQ Office	Apr 1, '21 - Apr 1, '23
> 2.4 Evolve Ocean Observing System Report Card 2	20	Working on it	High	OCG/Ocea	Apr 1, '21 - Apr 1, '25



Actions

Provide authoritative guidance on integrated observing system design, synthesising across evolving requirements and identifying gaps

✓ SO5: Authoritative guidance on design

Activity		Status	Priority	Lead	Timeline ③
> 5.1 Essential Ocean / Climate Variables Stewardship 2	20	Working on it	Medium	OOPC	May 31, '22 - Jun 30, '22
> 5.2 GOOS EOV Paper and Spec Sheets 3	\mathcal{L}_{0}	Working on it	High	HQ Office	Apr 1, '21 - Dec 3 <mark>1, '23</mark>
5.6 Observing System Design around EOVs	\mathcal{L}	Unknown	Low	HQ Office	Apr 1, '21 - Dec 31, '25
5.3.1 Strategy for Ocean Heat and Freshwater Cycles	20	In Planning	Low	OOPC	Apr 1, '21 - Dec 31, '23
> 5.5 Regional network coordination/OO19 synthesis 1	20	In Planning	Medium	OOPC	Feb 29, '24
5.3.2 Evaluation for Ocean-Atmosphere Interface and Boundary L	20	Working on it	High	OOPC	Apr 1, '21 - Dec 31, '23
> 5.3.3 Evaluation for Boundary Systems 2	20	Near Comp	Medium	OOPC	• Jun 30, '22
> 5.3.4 Optimal carbon flux observing system blueprint 2	20	Working on it	High	BGC	Apr 1, '21 - Dec 31, '23
> 5.7 Ocean Observing Co-Design Decade Programme 2	20	Working on it	High	Ocean Dec	Apr 1, '21 - Dec 31, '30
5.4 GOOS Evaluation and Review Framework	20				Apr 1, '21 - Dec 31, '23



Outcomes & Assessment

N o.	SO6 Outcomes	Assessments		
1	Increased efficiency in use of resources.	Slowly progressing (behind)		
2	More uses of data and more users served - enhanced delivery to end users across an integrated observing system.	Slow progress. Data flows mapped, uniform metadata standards/content in progress, data implementation strategy under review. Work needed on BioEco open data availability. Visibility of an integrated system lacking. No systematic approach to documenting use/users.	\bigcirc	
3	A system for identifying and sharing of best practices and adoption of common approaches.	On track, system in place, needs more action to complete. Updating of BioEco EOVs will lead to ID of BP and common approaches, still some work to be done and support needed.		
4	Increasing the number of observing networks, sensors and platforms with a Technology Readiness Level of 7 or more.	Slowly progressing. Negative impact of COVID, but recovering. Working on expand the attributes based on the FOO and report card, 3 tiered OCG network readiness level. TRL level of BioEco EOVs need work and support to improve.		
5	Coordination towards achieving common goals across global, regional and national systems.	Behind. Support and improved mechanisms for activities and coordination across GOOS components is needed. [Co-Design / agreed priorities]		
6	Expansion and evolution into new areas, identified through requirements and supporting emerging communities focused on solving global needs.	Lacking. More support needed for BioEco community to advance requirement setting and increase coordination and TRL improvement.		
7	Increased interoperability of ocean data from variety of sources.	Big challenge. Steady, slow progress with data mapping/data strategy as first steps. Integration across OCG, BioEco, and BGC panels needs more work. [OCG, BioEco, BCG]		
8	Support for sustainability through participation in a global integrated system.	Not yet (message is not strong enough. Report card is a good job, but not enough for sustainable funding)		
			8	

Meeting Etiquette

- Forest can help!
- Forest will monitor online chat / questions etc.
- Log into zoom meeting to give your presentation (email from forest)
- Log into eduroam or Dal-WPA2 with the login on the paper on the desk





The Global Ocean Observing System

Thank you

goosocean.org







International Science Council

