

Ocean Observing Co-Design

by The Global Ocean Observing System

Transforming our ocean observing system assessment and design process

Supporting the Decade of Ocean Science
for Sustainable Development



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development

This programme is endorsed by the **UN Decade of Ocean Science**

Ocean Observing Co-Design will build a system co-designed with scientific experts in observations and forecasts, and with key user stakeholders.

It will provide fit-for-purpose ocean observing, supplying the information required to manage the ocean we need for the future we want.

— The challenge

We need more information on the ocean to meet challenges such as climate change mitigation and adaptation, improving ocean, coastal and weather prediction, food security, and human health and safety.

For this we need to establish clear priorities for how we invest in ocean observing for the future and better integrate observations and models to produce useful ocean knowledge.

This demands a more integrated ocean observing system design. It also requires repeatable processes that satisfy global, regional and local stakeholder needs while developing integrated observing and modelling capabilities.

— The answer

Ocean Observing Co-Design will develop a more user-focused co-design process to evolve a truly fit for purpose, integrated, responsive ocean observing system.

This will include the large range of ocean observing efforts already in place working together more closely and between disciplines, as well as actively involving the modelling, forecast, and services communities.

Together, we will build a better design process, as well as infrastructure and tools, to take full advantage of growing ocean observing and modeling technologies and capabilities necessary to benefit society.

“ We will have tools in place that allow sponsors to ask key questions about cost and benefit and receive clear answers.

— The benefits

By 2030, Ocean Observing Co-Design will demonstrably advance the maturity and robustness of global ocean observing and forecasting for the benefit of society.

We will have tools in place that allow sponsors to ask key questions about cost and benefit and receive clear answers.

This will enable more effective decision-making on future observing system improvements, including what gaps need to be addressed and which new technologies should be used.

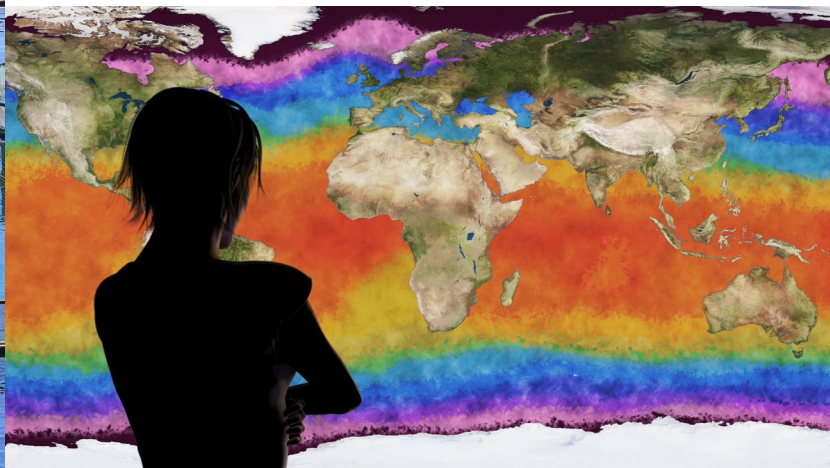
The tools, the processes, and the conversations they stimulate will clearly connect design to value and increase long term thinking around investment in ocean observations.

All stakeholders will benefit from knowledge, products and services being delivered more effectively.

Specifically, we will be able to:

- Better track the current state and future variability of the ocean.
- Predict and warn more skillfully.
- Manage ocean resources.
- Empower society to adapt to change.
- Assess the impact of action towards a sustainable ocean.

This will enable the Ocean Decade to achieve its goals and we will have the ocean we need for the future we want.





— The objectives

1. Offer **national government funders** the information needed to target investment globally, regionally and locally and establish which ocean observing system design will have the greatest impact. Governments will be able to track implementation is delivering the benefits identified, justify costs and increase ROI.
2. Make ocean observing and information appreciably more accessible and impactful through transformative co-design, working with the **modelling community and key user stakeholders** to achieve tangible integration and interoperability.
3. Develop system diagnostics, tools and reporting capability to better assess **fitness-for-purpose** across evolving requirements and use-inspired needs, including digital scenario tools that work backwards from intended impact to give us a priority plan for observing.
4. Establish the international capacity and modular infrastructure to **co-design and regularly evaluate** the observing system at different scales. For example, using a toolkit of software and user engagement/co-design methods that we can apply to global problems or local challenges.

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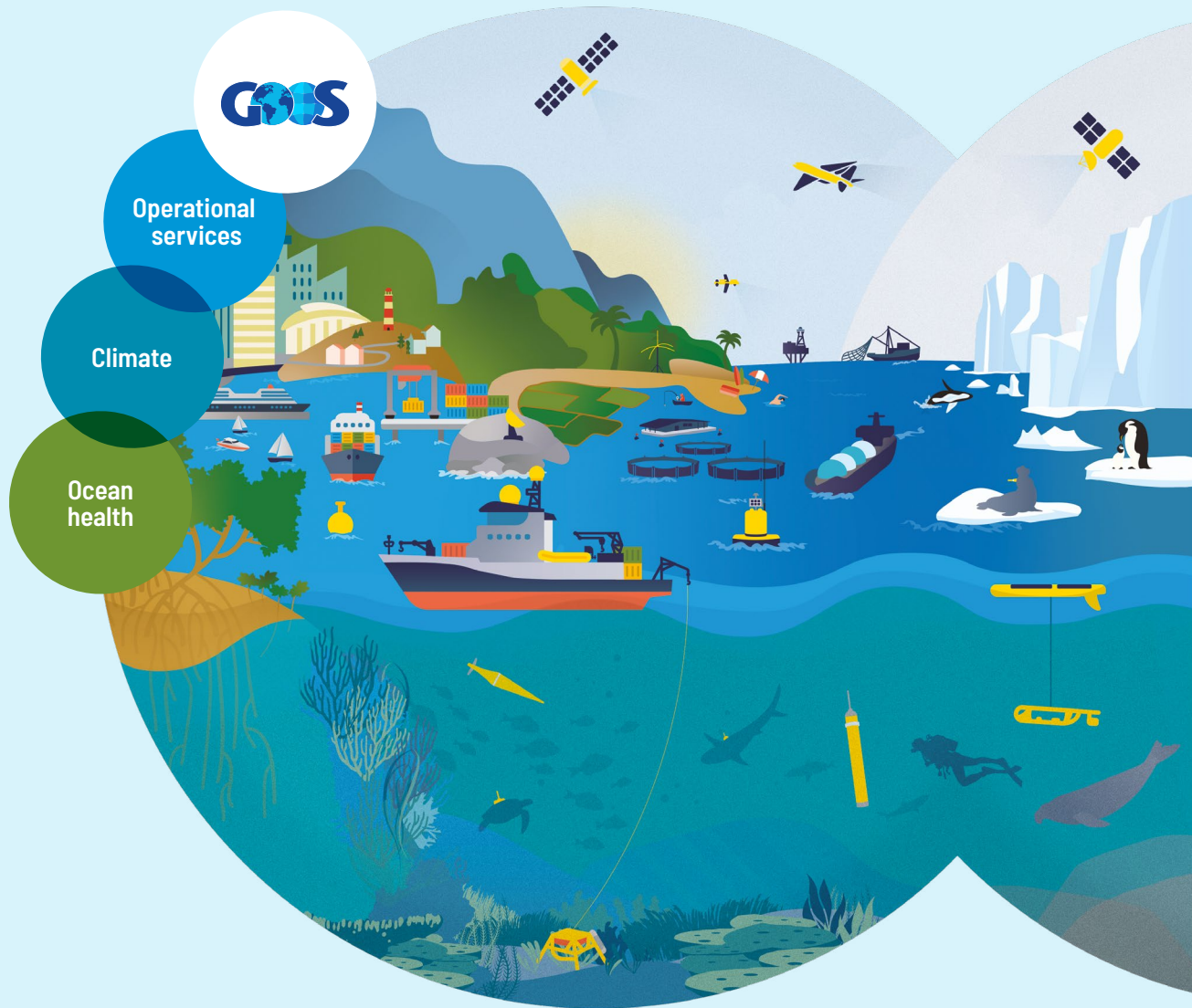
— Get involved

The Ocean Observing Co-Design programme will make vital, real and lasting change.

Please get in touch to start the conversation about how you can help us and what your contribution will enable us to achieve together.

If you're a **potential investor and supporter**, talk to us about how this exciting programme will help you make the best possible use of your investment in generating ocean observing knowledge. We invite **all members of the ocean observing and modelling communities** along with other key stakeholders to find out more about the transformational Ocean Observing Co-Design programme.

goosocean.org →

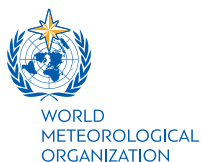


GOOS | At the heart of the Ocean Decade

Our work is at the heart of every activity carried out by the Ocean Decade. We observe the ocean to increase our knowledge, help keep humanity and our planet safe, while playing our part in enabling environmental regeneration and economic growth for the future.



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GOOS is sponsored by the **Intergovernmental Oceanographic Commission of UNESCO**, the **World Meteorological Organization**, the **UN Environment Programme**, and the **International Science Council**.