EuroGOOS statement to the 2022 UN Ocean Conference

EuroGOOS is a Regional Alliance of the Global Ocean Observing System (GOOS) of UNESCO’s Intergovernmental Oceanographic Commission. EuroGOOS advocates for sustained ocean observing and fit-for-purpose ocean knowledge and information from the coast to the open and deep ocean. EuroGOOS represents 44 organisations - Europe’s national oceanographic institutes, hydrographic agencies, and meteorological offices, in 18 countries. EuroGOOS activities are developed in close collaboration with over 100 additional organisations in all spheres of ocean science, technology, and infrastructures.

We have a responsibility to respond to the challenges addressed in the Agenda 2030 with the help of science, technology, innovation, and responsible decision and policy-making. Europe can provide solutions through its extensive capability in ocean observing, monitoring, and operational services. However, this can only be effective with a coordinated approach and integration, as well as continued support.

In this statement, EuroGOOS is emphasising its commitment to lead the development and implementation of sustained and coordinated operational oceanography in Europe and further an integrated framework for the European Ocean Observing System. The benefits of this work have global implications, improving the delivery of ocean information and services internationally.

It is critical for the ocean sustainability and the provision of the needed solutions towards the Sustainable Development Goals, to enhance and sustain ocean observing and oceanographic services, across the globe. Operational oceanography holds the science and technological solutions required to help us to manage human actions sustainably and address the threats to the marine environments which challenge the humanity’s very existence.

Sustained and integrated ocean observing

Ocean is humanity’s largest shared natural resource. However, as recognised by the international ocean science community, our knowledge of the ocean and capacity to predict it are still limited, despite a considerable progress in oceanography and ocean observing capabilities in the last decades. Among the biggest concerns are the spatial and temporal gaps in ocean observations, which hinder our knowledge and information about the state of the ocean as well as the prediction of future scenarios. The drivers for an enhanced ocean observing capacity are mentioned in numerous international science policy outputs, spanning the G7 ministerial communiques, the IPCC reports, or the environmental agendas of the European Union.
The European Global Ocean Observing System (EuroGOOS), representing Europe’s national oceanographic institutes, hydrographic agencies, and meteorological offices which deliver operational oceanographic services, calls for action in the following key areas:

- Increase support for sustained ocean observing and operational oceanography service provision;
- Develop a digital twin of the ocean building on the existing ocean observing and forecasting systems;
- Promote global standards and interoperability in ocean data according to the FAIR, CAIR, and TRUST principles, and promote the integration of ocean observing with metrology;
- Close North-South ocean observing and science capability gaps;
- Promote blue careers with a cross and trans-disciplinary approach, engaging natural sciences, humanities, and social sciences, while recognizing a growing need in informatics and data curation specialists;
- Promote societal engagement and public awareness of the importance of the ocean and ocean science (Ocean Literacy).

The importance of partnerships

Partnerships across countries and different sectors are recognized as a key strategy for more effective resource use and increased participation in ocean science, reinforcing its application in policy (Global Ocean Science Report, IOC, 2020). As stated in the EuroGOOS 2030 Strategy, partnerships are paramount in achieving common objectives and gaining the added value in the co-production of oceanographic services and information. Moreover, partnerships are critical to ensure these services are user-focused and the ocean information underpinned by our work can support decision-making.

We believe that partnerships on the following topics require priority attention:

- Shared use of infrastructures to optimise resources and avoid duplication of costly oceanographic efforts;
- Strengthened and more efficient science-policy interfaces to enable a rapid uptake of scientific advice in policy and decision-making;
- Training exchange and capacity enhancement among the oceanographic institutions;
- Citizen science to fill the data gaps and promote public engagement;
- Public-private engagement to gain support for the UN Decade of Ocean Science for Sustainable Development 2021-2030;
- Co-design with social sciences and humanities for a more holistic understanding of the ocean and human systems.