

Ocean observation – sharing responsibility

European Commission Inception Impact Assessment

EuroGOOS feedback

EuroGOOS welcomes the opportunity to react to the European Commission Inception Impact Assessment, Ocean Observation – Sharing Responsibility.

EuroGOOS¹ is an association of national governmental agencies, research organizations, and private companies committed to oceanography, operating within the Global Ocean Observing System coordinated by the Intergovernmental Oceanographic Commission of UNESCO (IOC GOOS). A European component of GOOS, EuroGOOS was founded in 1994 as an association of core members with open regional and thematic collaboration mechanisms going well beyond the direct membership of the association. Today, EuroGOOS has 44 members from 18 European countries providing oceanographic, hydrographic, and met services, and carrying out marine research. Five regional oceanographic systems operate within EuroGOOS: in the Arctic (Arctic ROOS), the Baltic (BOOS), the North West Shelf (NOOS), the Ireland-Biscay-Iberian area (IBI-ROOS) and the Mediterranean (MONGOOS). Between the EuroGOOS association members and the members of the EuroGOOS regions, the EuroGOOS direct community counts about 100 oceanographic organizations in Europe.

EuroGOOS is a unique voice of European oceanography representing national and regional interests, well established in the Global Ocean Observing System as one of the most developed GOOS Regional Alliances, along with the US IOOS² and the Australian IMOS³. EuroGOOS has played a key role in identifying priorities, promoting sustained and fit for purpose ocean observing, fostering cooperation, facilitating co-production of oceanographic products and services, and raising awareness of the ocean's value for society. The development of the Copernicus Marine Environment Monitoring Service and EMODnet Physics were largely built on the partnership frameworks of the EuroGOOS regions (ROOS) and infrastructure networks (Task Teams). EuroGOOS is fostering a framework for the European Ocean Observing System (EOOS) working with a range of partners, which among others will reinforce the GOOS national focal points implementing ocean observing in the European states.

- ¹ http://eurogoos.eu/
- ² https://ioos.noaa.gov/

³ https://imos.org.au/

EuroGOOS stands ready to deliver a coordinated support to the European Commission's ocean observation initiative, supporting joint planning of ocean observing activities and a framework for collaboration on a national and EU scale.

Our community has stated in many documents the need for better coordination, optimization, joint planning, and improved co-design of downstream ocean observing services in Europe.

Europe has gone a very long way in setting up some of the core ocean services we have today. Yet, policy, research, technology, economy, and societal drivers call for a stronger and more consolidated effort of the European states and the European Union in securing sustainability and fitness for purpose of ocean observations for the benefit of their many users. Those drivers are well covered in the EOOS Consultation Document⁴ presented at the EOOS Event at the European Parliament in 2016. At the international level, drivers for an enhanced ocean observing capacity are mentioned, among others, in the G7 Science and Technology Ministers Tsukuba communique⁵ and G7 Charlevoix blueprint for healthy oceans, seas and resilient coastal communities⁶, the IPCC SROCC report⁷, the UN Decade of Ocean Science for Sustainable Development implementation plan⁸, the international ocean governance agenda by the European Commission⁹, as well as the Mission Starfish proposal¹⁰.

Bottom up, the EuroGOOS community has been contributing to the integration and optimization of the fragmented ocean observing capacity across the European nations through a series of initiatives and EU projects (see the EuroGOOS 2017 conference proceedings¹¹). A focal point to capitalize on these advancements has been the vision for EOOS refined via two stakeholder consultations followed by engagement events through a Forum¹² and a Conference in 2018¹³. The stakeholder messages from the EOOS Conference are well reflected in the inception note.

The European Commission initiative supporting national and European contributions to sustained ocean observing will have numerous benefits. Among others, this will significantly improve the Copernicus core services including, but not limited to, the domains of ocean, climate, atmosphere, and security, therefore benefiting the expanding Copernicus userbase (see the EuroGOOS sustainability study for the EEA Copernicus In Situ Coordination project¹⁴). Such initiative will also have a significant impact on reducing duplication of the efforts by the member states for a common European benefit (see the EuroSea project report 2020 showing the fragmentation of legal and policy frameworks as well as the ocean observing implementation in Europe¹⁵). This initiative will

¹⁴ https://insitu.copernicus.eu/library/reports/Sustainabilitysurveyupdatedreportfinal.pdf

⁴http://www.eoos-ocean.eu/download/promotional_materials/EOOS_ConsultationDocument_02.12.2016.pdf ⁵ https://www8.cao.go.jp/cstp/english/others/20160517communique.pdf

⁶ https://www.international.gc.ca/world-monde/international_relations-

relations_internationales/g7/documents/2018-06-09-healthy_oceans-sante_oceans.aspx?lang=eng

⁷http://eurogoos.eu/2019/09/26/the-ipcc-special-report-on-the-ocean-and-cryosphere-in-a-changing-climate-released/

⁸ https://www.oceandecade.org/news/72/Version-20-of-the-Ocean-Decade-Implementation-Plan-submitted-for-presentation-to-the-United-Nations-General-Assembly

⁹ https://ec.europa.eu/maritimeaffairs/policy/ocean-governance_en

¹⁰ https://ec.europa.eu/info/publications/mission-starfish-2030-restore-our-ocean-and-waters_en

¹¹ http://eurogoos.eu/download/publications/EuroGOOS-2017-Conference-Proceedings.pdf

¹² http://www.eoos-ocean.eu/eoos-forum-was-a-critical-step-to-move-forward-an-overview/

¹³ https://www.emodnet.eu/conference/eoos2018/index.html

https://eurosea.eu/download/outputs_and_reports/deliverables/EuroSea_Deliverable_1.1_Policies_Foresight.pdf

also help share the existing infrastructure resources as well as foster European market propositions for ocean technology research and innovation (some examples of technology challenges are presented in the summary of the 1st EOOS Technology Forum¹⁶). There will be a great benefit of addressing the fundamental gaps in our knowledge and understanding of the ocean processes and ecosystems, as well as operationalizing ocean information for a wide range of uses (see EuroGOOS policy brief European operational oceanography: Delivering services for Blue Growth and ecosystem-based management¹⁷).

Ocean observing has multiple European benefits and EuroGOOS welcomes the EU support towards sustained and integrated ocean observing system in Europe according to the EU subsidiary principle. Such support should go hand in hand with a framework designed for the EU Member States to jointly plan ocean observing activities, share infrastructures and data, tackle common problems (for example, at the level of coastlines and sea basins), support better modelling and forecasting products, and co-develop oceanographic services. Often the same coastline or basin shares the users of the oceanographic services and products, and those users will be much better served through a better synergy in the oceanographic community efforts. The EuroGOOS coastal modelling capacity study showed a significant duplication in the ocean modelling efforts across the European sea basins¹⁸. Better information about national observation and monitoring plans will improve co-design of oceanographic products and services at cross-country level, while having a significant positive impact on the monitoring and assessment under the Marine Strategy Framework Directive, Water Framework Directive, Maritime Spatial Planning Directive, as well as supporting a broad range of blue economy applications.

Ocean is the largest shared natural resource of the European Union and stronger collaboration between atmosphere, land, marine, and social research communities is critical to homogenize and enhance the quality of operational products at the interfaces of those domains. The European Commission's support towards better planning of the ocean observing activities will have positive influence on other environment monitoring areas as well as security.

EuroGOOS supports, in view of the arguments mentioned above, a European Union initiative to bring together all Member States' public bodies responsible for ocean observation to develop priorities and realise opportunities for sharing effort, as well as stronger EU funding support towards observations of common benefit. We believe this will help addressing the current lack of long-term sustainability of ocean observing efforts and the unbalance between the member states efforts, as well as improve synergy between the EU ocean observing support tools. It should be recognised that common European and global ocean observing needs should be served by centrally supported infrastructures, while the national capacities should be better coordinated across the agencies and authorities responsible for various parts of the ocean observing enterprise. A combination of EU and member states support towards ocean observing sustainability will help achieve policy coherence, support dialogue towards common solutions and identification of synergies and trade-offs, shed light on potential or perceived barriers, and sustain ocean observing efforts over time beyond research, funding, or electoral cycles.

- ¹⁷ http://eurogoos.eu/download/publications/EuroGOOS-Policy-Brief-2016.pdf
- ¹⁸ http://eurogoos.eu/2020/03/03/eurogoos-operational-modelling-capacities-inventory-in-european-seas/

¹⁶ http://www.eoos-ocean.eu/download/EOOS-Technology-Forum_13-October_2020_Full-Report.pdf

Impacts of such actions are well presented in the inception note. EuroGOOS community would like to emphasise the importance of sustained and coordinated ocean observing for accurate forecasts of the ocean state and conditions vital for maritime economy (both traditional and emerging blue economy sectors), human health, and security. This will also boost European competitiveness in ocean technologies, including infrastructures, sensors, or e-infrastructures. Societal impacts of a strong integrated European ocean observing capacity will include better addressing the Agenda 2030 targets among others in terms of adapting and mitigating to the impacts the climate breakdown and reaching the ambitions of the EU Green Deal and Biodiversity Strategy. Sharing ocean observing capacity and joint planning of activities will contribute to better equity in science, technology, and innovation, making ocean observations a public utility. Such initiative will continue putting Europe at the forefront of international science diplomacy, ocean governance, and evidence-based policymaking. The scientific advancements allowed through a better coordination of European ocean observing and data collection efforts will underpin the implementation of the UN Decade of Ocean Science for Sustainable Development.

EuroGOOS, representing its member organizations and five Regional Operational Oceanographic Systems, is ready to provide further feedback to the European Commission's ocean observation initiative and will contribute with a joint response to the online consultation foreseen later in 2020.

The EuroGOOS Office coordinating this feedback with the EuroGOOS community is available for further information at <u>eurogoos@eurogoos.eu</u>.