Member States Expert Group on Ocean Observation

Third meeting

Brussels , April 7 2025

Ocean Pact

- In the mission letter of Commissioner Kadis
- Call for Evidence “need for a single reference framework for all ocean-related policies – both within the Commission and vis-a-vis stakeholders” “Healthy ocean, boost competitiveness, consolidate marine knowledge” closed on 17/2 – more than 900 contributions
- Will announce an EU Ocean Research and Innovation strategy (in the letter)
- 21/2 High-Level Fisheries and Ocean Dialogue
- 3-7 March: Ocean Days
- 21-23 May European Maritime Days in Cork

3

The Marine Knowledge Value Chain in the Ocean Pact – Ocean Observation

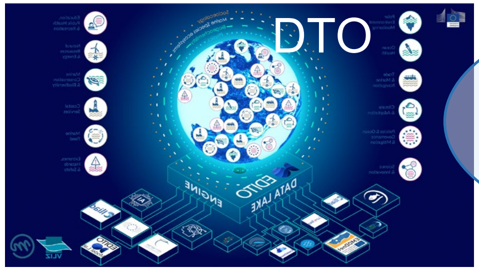
Marine knowledge value chain(s)

- Policies
- Businesses – Blue Economy sectors
- Models
- Science
- Knowledge – Information
- Data products, data services
- Data
- Ocean Observation

Data for policies

EIT Water

ICES CIEM



Digital Ocean

Data and science for Fisheries

Scientific Technical and Economic Committee for Fisheries (STECF)

EUMOFA European Market Observatory for Fisheries and Aquaculture Products

EMODnet

Copernicus Marine Service

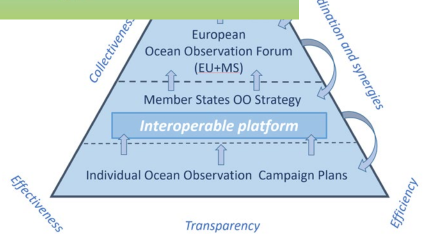
European MSP Platform

WISE MARINE MARINE WATER INFORMATION SYSTEM FOR EUROPE

DCF Platform

HORIZON EUROPE

Ocean Store



Ocean Observation

Agenda

9:30	All	**Registration and coffee**
10:00	DG MARE	**Welcome and opening**
10:15	DG MARE	**Digital Platform for Ocean Observation:** • Update on the state of play of the tender; • Documents shared by Germany with the group;
10:30	Experts	**Feedback and questions**
10:45	RSCs	**Role of Regional Sea Conventions in ocean observation** • OSPAR
11:15	Experts	**National Coordination on Ocean Observation** • Spain • Italy • Netherlands • Cyprus
12:45		**Lunch**
13:45	DG MARE and Experts	**Discussion on the National Charts previously presented by DE and EL** • **MARE**: Proposal of initial information collection from MSs to cover - Level 1 (Political Responsibility) - Level 2 (Legal frameworks, strategies & Programmes • Discussion, proposals and consensus
14:30	DG MARE and Experts	**Discussion on Ocean Observation in Europe** • Coordination and synergies
15:30	DG MARE and Experts	**Next meeting**
15:45	DG MARE and Experts	**AOB**
16:00	DG MARE and Experts	**Wrap up**

Update on the tenders:
IT platform
Coordination and synergies in OO

DG MARE

Third MSEG on OO meeting Brussels , April 7th 2025

Tender for the Development of a Digital Platform for Ocean Observation

- Will support the MS by providing the platform for the uploading of ocean observation campaign plans and their subsequent visualisation, processing and extraction
- Publication 20/01/2025 – Closing: 03/03/2025
- 1,500.00 kEur, 24 months
- Present status: eleven proposals are now under evaluation;
- Contract signature and KO not expected before Autumn 2025
    - Tasks 1 and 2: Build, test and maintain the submission module;
    - Task 3: Post-processing of reported data;
    - Tasks 4 and 5: Build, test and maintain the extraction module;
    - Task 6: Organization of on-line workshop or a WG for feedback collection;
    - Task 7: Ensuring performance and transferability of the digital platform

Tender on Coordination and synergies in OO

- Will support the work of the Group
- Publication 27/3/2025 – Closing: 2/6/2025
- 433 kEur 30 months
- Task 1: Providing structured overviews of the EU Ocean Observation system
- Task 2: Develop two use cases on how plans for Ocean Observation are approved (Permitting and licensing for coastal or offshore activities in the EU - Research campaigns in the context of UNCLOS)
- Task 3: Methodologies for potential collaborations and synergies
- Task 4: Potential obstacles - Updated approach
- Task 5: Workshops, Communication, Dissemination

By endorsement by the stakeholder community, notably in the workshops and meetings of the EU Member States Expert Group (Task 5), we mean that documents to
be endorsed shall be presented to them, comments shall be collected, to the possible extent taken into account in a revised version

Documents shared by Germany

- Guidance of BSH (Central Marine Authority in Germany) for investigations of environmental impacts of offshore energy farms (parameters sampled and analysed for the description of the seabed properties and biological components at the seabed and within the water column);

- **A compilation of German MSFD secretariat on the parameters reported to the EC;**

- **Global Climate Observing System (GCOS) - Essential Climate Variables for Germany** (Atmo-Ocean-Land observations)

Germany was not able to attend today, but they are happy to provide and update, present and discuss these documents during the next meeting

9

Simplified national charts and Best Practices for the future

DG MARE

Third MSEG on OO meeting Brussels , April 7th 2025

As a reminder from the last meeting

- During the second meeting in Tallin Germany and Greece presented the ***National Charts on Ocean Observing and Monitoring*** of their respective countries;
- This is a joint activity with JPI(*) Oceans in the framework of EOOS (European Ocean Observation System);
- The ***incomplete knowledge of national ocean observing setups and general organization*** is identified to be one of the most relevant ***obstacles for coordination*** efficiency, streamlining efforts and abatement of deficiencies in Ocean Observations

JPI Oceans is a **pan-European platform aiming to increase efficiency and impact of research and innovation for sustainably healthy and productive seas and oceans. Our member states' national strategies and priorities are the main building blocks for a joint Strategy Framework to address marine and maritime issues.*

As a reminder from the last meeting

- **The National Charts:**
  - Are meant to integrate national responsibilities and workflows for Essential Ocean Variables (EOV) measurements into a ***structured mapping concept at the country level***;
  - Aim to provide a ***basis to improve coordination, identify gaps, learn from other countries, and implement best practice approaches into national systems by recognizing synergy potential in ocean observing***.

As a reminder from the last meeting

- We don’t want to re-invent the wheel;

- The outcome of this activity can be a useful basis to start a ***mapping exercise of the Ocean Observation Landscape*** at the Expert Group level;

- Germany National Chart

- Greece National Chart

As a start….

- **Upon Agreement of the MSEG,** we propose a simplified excel file in order to start to collect the information at MS level on:

  - **LEVEL 1: Political Responsibility** (who are the Institutions/Organizations in charge);

  - **LEVEL 2: Legal frameworks, strategies and programs** (EU and National legislations and funding)

  - Simplified National Charts

Emerging outcomes

Starting from the meetings we have had so far, a **general overview of the organization, coordination, gaps and needs of the present state of play is emerging**

Come of the messages to smooth the landscape and optimize Ocean Observation

- Need to have a clear view of the structure of OO in each country (responsibilities, purposes, legal frameworks, funding, etc..)
- Need for sharing assets and information (a common dashboard/platform to share calendars and general information on the future campaigns)
- Need for interfacing different levels of purpose of the campaigns (mainly interconnection between statutory and research)
- Need of harmonization practices and guidleines

In the view of all this…

Would it be desirable for the group if the Commission started to develop a short document on examples of coordination of ocean observation at national level from what was presented and shared so far?

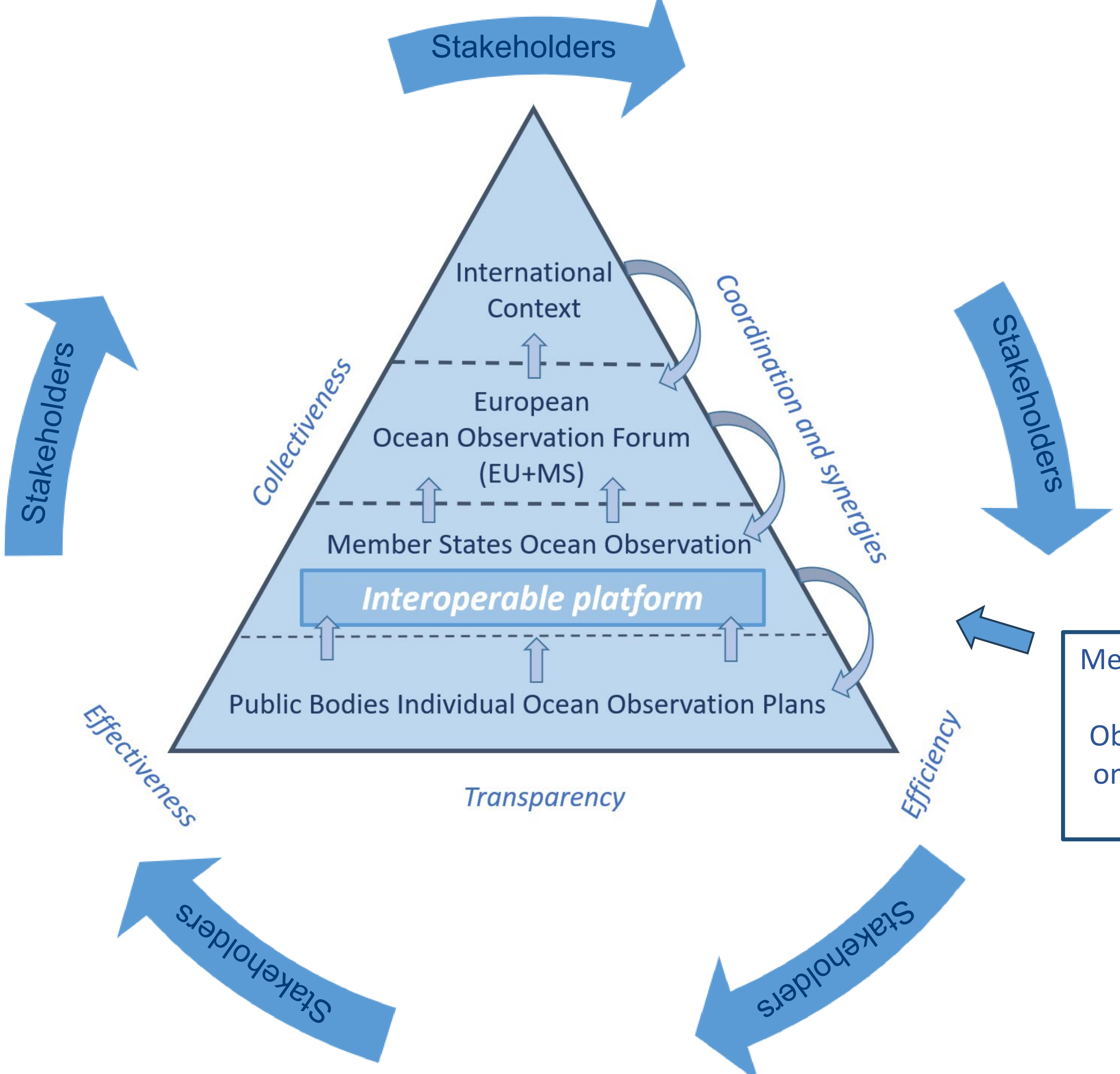
Coordination and synergies

How to interact with the stakeholder’s community

Member States Expert Group on Ocean Observation
7/4/2025

DG MARE
Unit A1 Maritime innovation, Marine Knowledge and Investment

European Commission



Member States Expert Group on Ocean Observation advising on the development of the platform

Stakeholder’s communities

National

Discussion started at the first meeting

Regional

OSPAR (Joint Monitoring Programmes)

ICES Joint monitoring,

HELCOM,

UNEP-MAP, Black Sea Convention

European

EMB
EUROGOOS
EUROCEAN
EOOS
MBON
JPI Oceans
Sustainable Blue Economy Partnership
…

International

GOOS
…

Discussion

- Are you aware of examples of functioning in other contexts (the Meteorology context is clearer because there is one clear goal)?
- Do you have recommendations on how to interact with the entities representing OO stakeholders ?
- Do you have advice on how we could better structure / simplify this landscape and what should be the role of the Commission in this ?

The Global Ocean Observing System

OUR VISION

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

OEVs: Ocean Essential Variables

Physics	Biochemistry	Biology and Ecosystems
• Sea state • Ocean surface stress • Sea ice • Sea surface height • Sea surface temperature • Subsurface temperature • Surface currents • Subsurface currents • Sea surface salinity • Subsurface salinity • Ocean surface heat flux	• Oxygen • Nutrients • Inorganic carbon • Transient tracers • Particulate matter • Nitrous oxide • Stable carbon isotopes • Dissolved organic carbon	• Phytoplankton biomass and diversity • Zooplankton biomass and diversity • Fish abundance and distribution • Marine turtles, birds, mammals abundance and distribution • Hard coral cover and composition • Seagrass cover and composition • Macroalgal canopy cover and composition • Mangrove cover and composition • Microbe biomass and diversity (*emerging) • Invertebrate abundance and distribution (*emerging)
Cross-disciplinary (including human impact)		
	• Ocean colour • Marine debris (*emerging)	• Ocean sound

GOOS focal points

1. Argentina National Focal Points Nominations
Focal Points received from Argentina for GOOS. These focal points have been received through official channels and approved.

2. Australia Focal Points Nominations
Focal Points received from Australia for GOOS, JCOMM, DBCP, GLOSS, SOT and Argo. These focal points have been received through official channels and approved. (updated in March 2023)

3. Belgium Focal Points Nominations
Focal Points received from Belgium for GOOS, JCOMM, DBCP, GLOSS, SOT and Argo. These focal points have been received through official channels and approved. (updated in March 2023)

4. Benin Focal Points Nominations
Focal Points received from Benin for GOOS, JCOMM, DBCP, GLOSS, SOT and Argo. These focal points have been received through official channels and approved.

5. Brazil Focal Points Nominations
Focal Points received from Brazil for GOOS, JCOMM, DBCP, GLOSS, SOT and Argo. These focal points have been received through official channels and approved. (updated in August 2023)

...

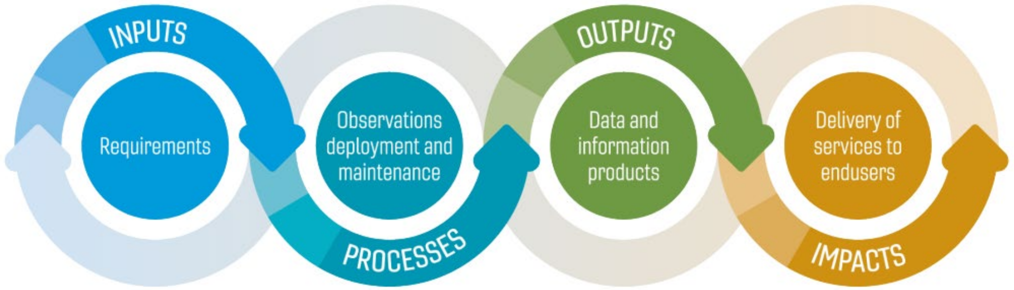
Expert Team on Operational Ocean Forecasting Systems (ETOOFS)

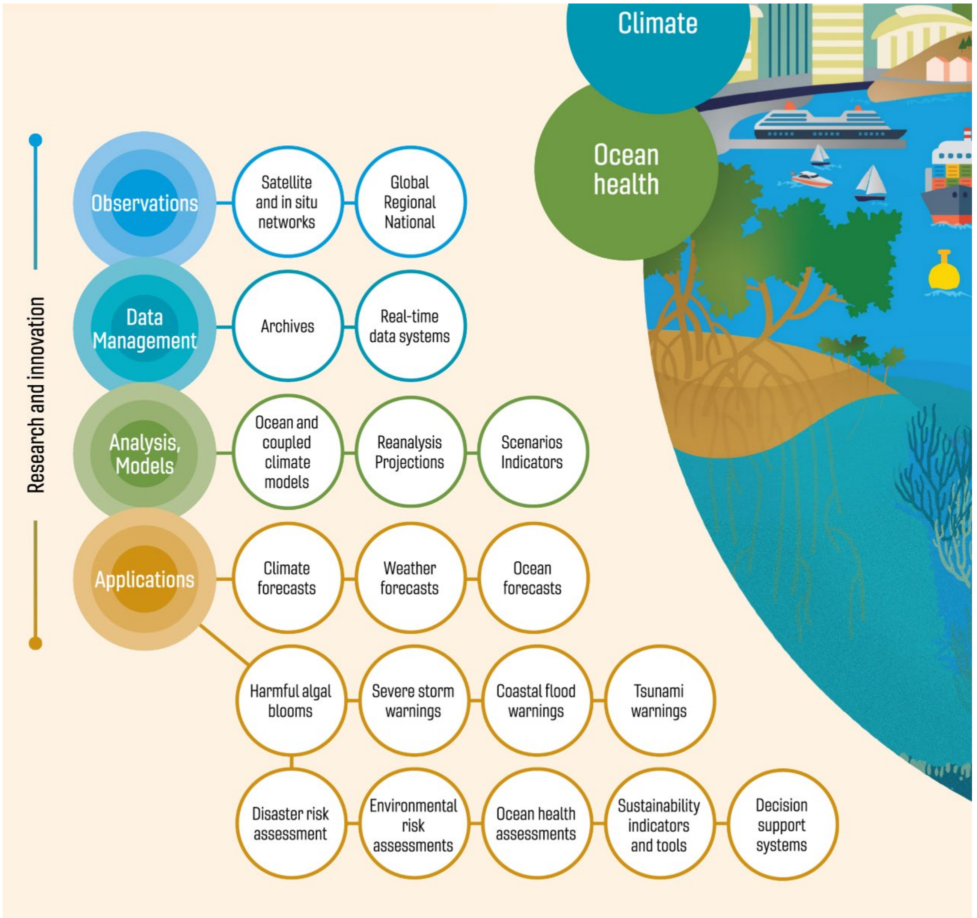
ETOOFS guides initiatives to improve capacity, quality and interoperability of ocean model forecast products.

Ocean best practices

European Commission

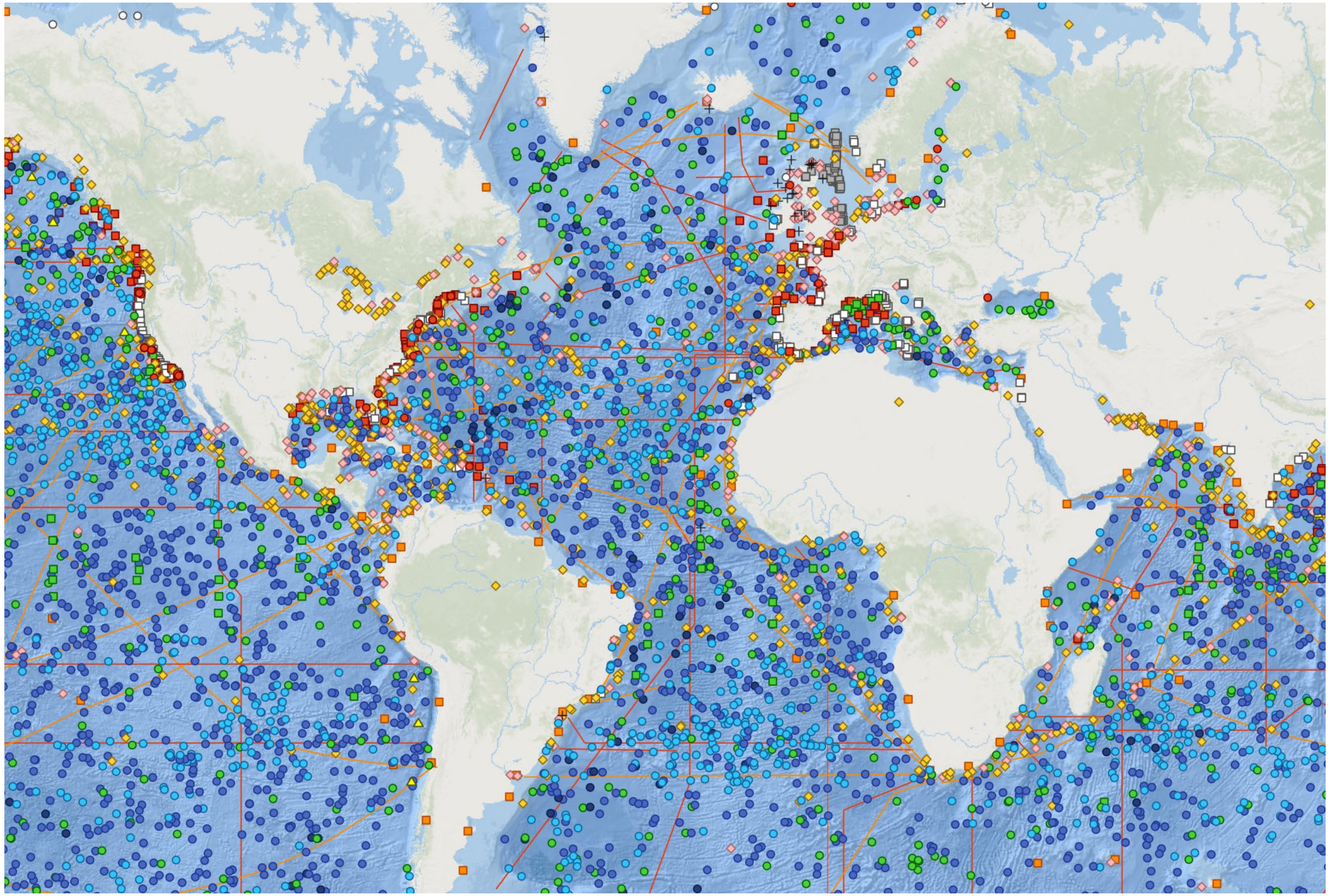
2030 Strategy





OceanOPS

OceanOPS acts as a focal point for implementation and operation of relevant observing platforms. The Centre which is located in Brest (France) is funded thanks to voluntary contributions from IOC/UNESCO and WMO Member States, through the marine observing programmes and panels such as Argo, DBCP, OceanSITES, GO-SHIP, SOT, GLOSS, OceanGliders.



Hosted by Ifremer

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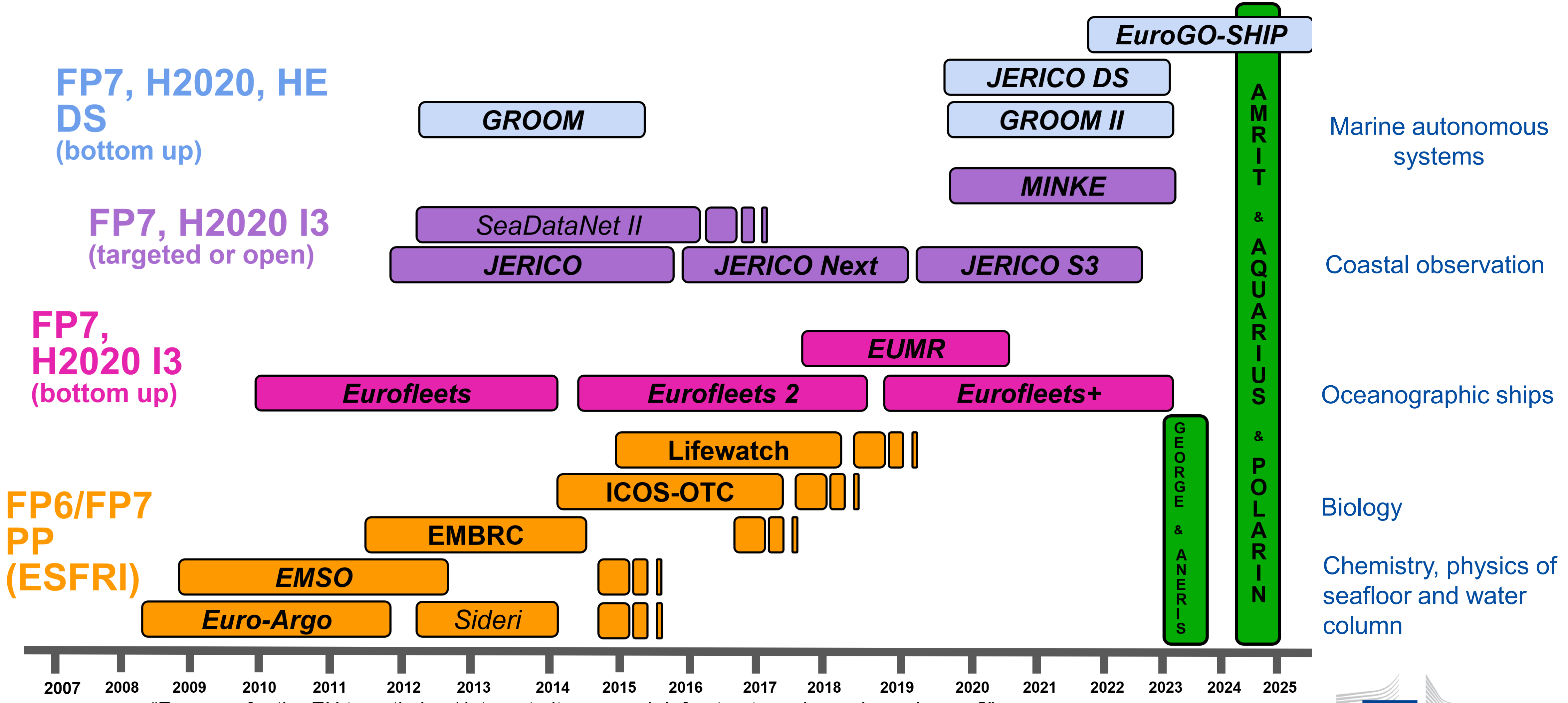
NOAA · World Meteorological Organization · Horizon 2020 · EMODnet · EUMETNET · Ifremer · CLS · SOA · unesco · Environment and Climate Change Canada / Environnement et Changement climatique Canada · Met Office · CSIRO · ESSO · JAMSTEC · Euro-Argo · IMOS Integrated Marine Observing System · South African Weather Service · GEOMAR

EU

The Marine Research Infra Landscape after AMRIT

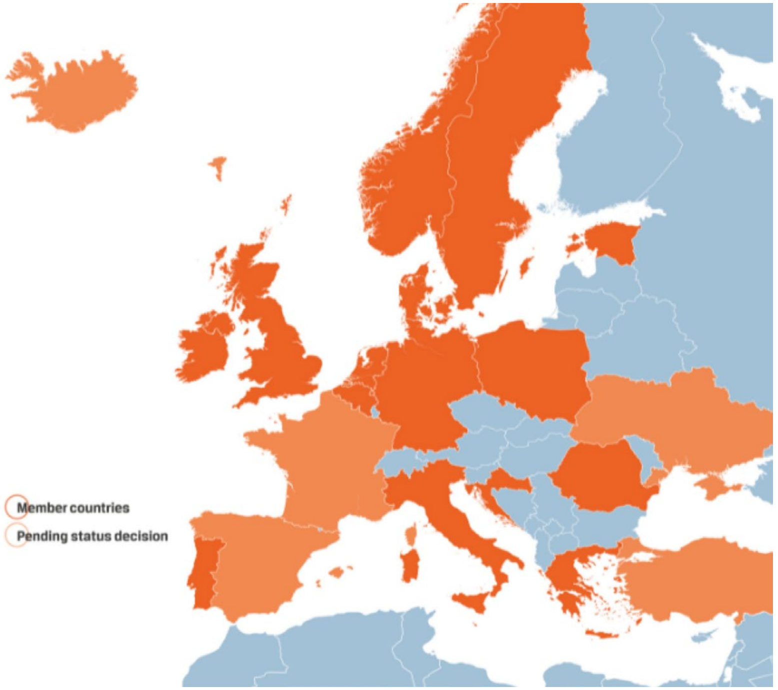


Adapted from"Reasons for the EU to optimize / integrate its research infrastructures in marine sciences?" *Hervé Péro, INFRA/DGRI/EC, 2011*

European Commission

JPI Ocean

- Basis are Member States
- Have their own financial resources programme work and studies (e.g on Blue Carbon)
- Coordination of Ocean Observation is one of their Topic
- Invite next time to present their country fiche ?



15 Member countries + 5 pending

European MARINE BOARD
Advancing Seas & Ocean Science

The European Marine Board (EMB) is the leading European think tank in marine science policy. It provides a platform to advance marine research and to bridge the gap between science and policy.

belspo
fnrs LA LIBERTÉ DE CHERCHER
fwo Research Foundation Flanders Opening new horizons
RB
INSTITUTE OF OCEANOGRAPHY AND FISHERIES SPLIT
CYPRUS MARINE & MARITIME INSTITUTE
DTU Aqua National Institute of Aquatic Resources
Academia Scientiarum Estoniae
cnrs
Ifremer
UNIVERSITÉS MARINES
KDM Konsortium Deutsche Meeresforschung German Marine Research Consortium
GEOMAR Helmholtz Centre for Ocean Research Kiel
hcmr
Irish Marine Universities Consortium
Foras na Mara Marine Institute
CoNISMa Consorzio Nazionale Interuniversitario per le Scienze del Mare
National Research Council of Italy
OGS National Institute of Oceanography and Applied Geophysics
Stazione Zoologica Anton Dohrn SZN
NIOZ
Deltares
NMU NORSK MARINT UNIVERSITETSKONSORTIUM NORWEGIAN MARINE UNIVERSITY CONSORTIUM
Institute of Marine Research
The Research Council of Norway
SINTEF
NORCE
CIIMAR Associate Laboratory
fct Fundação para a Ciência e a Tecnologia
ROMANIAN BLACK SEA RESEARCH CONSORTIUM
CSIC
INSTITUTO ESPAÑOL DE OCEANOGRAFÍA
CETMAR CENTRO TECNOLÓGICO DEL MAR
UNIVERSITY OF GOTHENBURG
TÜBİTAK
Marine Alliance for Science and Technology for Scotland
UKRI Natural Environment Research Council
National Oceanography Centre


Current activities


Foresight

Navigating the Future


Forum


EurOCEAN


EMB Plenary Meetings


cience Policy facilitation


Projects


Science webinars

EMB and the Ocean Decade


EMB and the EU Mission

EuroGOOS
European Global Ocean Observing System

EuroGOOS member org

Belgium

Agency for Maritime and Coastal Services, Coastal Division (MDK)
Koen Vanstaen

Royal Belgian Institute of Natural Sciences (RBINS)
Sébastien Legrand

Croatia

Croatian Meteorological and Hydrological Service (DHMZ)
Dijana Klaric

Institute of Oceanography and Fisheries (IOR)
Hrvoje Mihanovic

Denmark

Danish Meteorological Institute (DMI)
Steffen Olsen

Defence Centre for Operational Oceanography (FCOO)
Niels Holt

Estonia

Tallinn University of Technology (TalTech)
Urmas Lips

Finland

Finnish Meteorological Institute (FMI)
Jari Haapala

France

French Naval Hydrographic and Oceanographic Service (SHOM)
Corine Lochet

French Research Institute for Exploitation of the Sea (Ifremer)
Lucie Cocquempot

Mercator Ocean International (MOi)
Pierre Bahurel

Germany

Federal Maritime and Hydrographic Agency (BSH)
Kerstin Jochumsen

Helmholtz-Zentrum Hereon
Emil Stanev

Greece

Hellenic Centre for Marine Research (HCMR)
George Petihakis

Ireland

Marine Institute (MI)
Caroline Cusack

Italy

Euro-Mediterranean Center on Climate Change (CMCC)
Giovanni Coppini

National Research Council of Italy (CNR)
Rosalia Santoleri

Italian National Agency for new technologies, energy and sustainable economic development (ENEA)
Gianmaria Sannino

National Institute of Geophysics and Volcanology (INGV)
Simona Simoncelli

Italian National Institute for Environmental Protection and Research (ISPRA)
Maurizio Ferla

National Institute of Oceanography and Experimental Geophysics (OGS)
Vanessa Cardin

Netherlands

Deltares
Ghada El Serafy

Royal Netherlands Meteorological Institute (KNMI)
Jitze P. van der Meulen

Rijkswaterstaat
J.C. (Kees) Borst

Norway

Norwegian Institute for Water Research (NIVA)
Andrew King

Institute of Marine Research (IMR)
Henning Wehde

Norwegian Meteorological Institute (MET Norway)
Øyvind Sætra

Nansen Environmental and Remote Sensing Center (NERSC)
Stein Sandven

Poland

Institute of Meteorology and Water Management (IMGW-PIB)
Tamara Zalewska

Institute of Oceanology, Polish Academy of Sciences (IO PAN)
Agnieszka Beszczyńska-Moeller

Gdynia Maritime University, Maritime Institute
Juliusz Gajewski

Portugal

Hydrographic Institute (IH)
Carlos Santos Fernandes

Portuguese Institute for the Ocean and Atmosphere (IPMA)
Maria Ana Martins

Slovenia

Slovenian Environment Agency (ARSO)
Maja Jeromel

National Institute of Biology (NIB)
Branko Čermelj

Spain

Oceanic Platform of the Canary Islands (PLOCAN)
Eric Delory

Balearic Islands Coastal Observing and Forecasting System (SOCIB)
Joaquín Tintoré

AZTI
Julien Mader

Spanish Institute of Oceanography (IEO)
Manuel Ruiz

Puertos del Estado
Susana Pérez Rubio

Sweden

Swedish Meteorological and Hydrological Institute (SMHI)
Patrick Gorringe

United Kingdom

Centre for Environment, Fisheries and Aquaculture Science (Cefas)
Veronique Creach

National Oceanography Centre (NOC)
Angela Hibbert

UK Met Office
Andrew Saulter

EuroGOOS 2030 OBJECTIVES

To achieve our mission 2030, we defined five strategic objectives. These objectives were developed by reflecting on experiences gained through the implementation of past EuroGOOS strategies, as well as surveys and thought-mapping sessions with our members, task teams, working groups, and ROOS, and the stakeholder engagement activities during the development of the EOOS framework.

The EuroGOOS members, ROOS, task teams, working groups, and networks, share a set of values that will help us navigate towards our 2030 mission with integrity. We value the trust of the organisations involved in EuroGOOS, we believe that to advance we must work together, and ensure we strengthen inclusiveness and diversity in all our efforts.

1 **STIMULATE**
communities of practice

2 **ADVOCATE**
for coordinated and integrated European ocean observing and operational oceanography.

3 **STRENGTHEN**
and expand partnerships

4 **PROMOTE**
sustainability across the value chain of operational oceanography and ocean observing

5 **MOBILISE**
the public on the importance of the ocean and oceanographic services

European Ocean Observing System

EOOS brings Europe's diverse ocean observing communities together.

Supporters and partners

EuroGOOS European Global Ocean Observing System

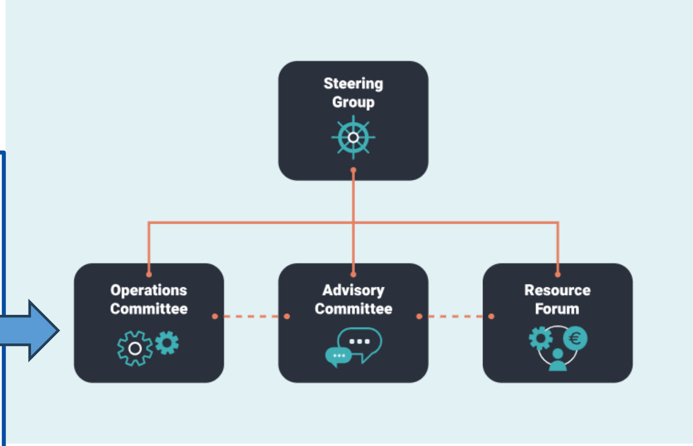
European Marine Board Advancing Seas & Ocean Science

JPI Oceans

EuroSea

EuroSea project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 862626

GOOs National Focal Points
EuroGOOS
EuroFleet
EuroArgo
. . .



Staffing

EOOS is staffed by EuroGOOS, EMB and JPI Oceans.

EOOS' Vision is of a **European Ocean Observing System that is sustained and meets the specific needs of users**. The Strategy 2023-2027 sets out the direction of EOOS' development towards this in the coming period as it transitions from a successful initiation stage of networking and structuring towards a sustained operational phase with concerted implementation activities.

European Commission

EUROSEA project

H2020
2019-2023
12,2 MEur EU funding
56 Partners

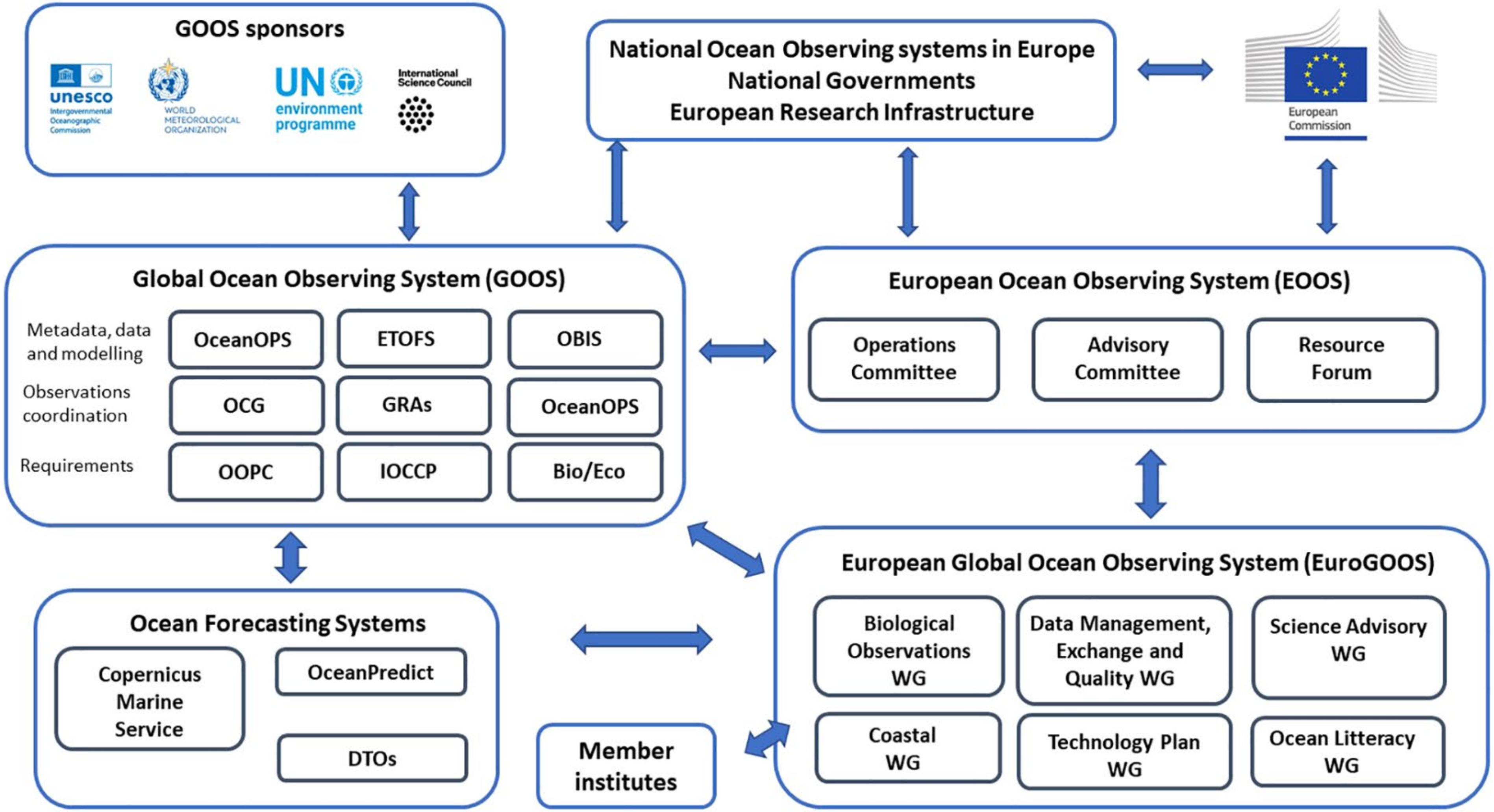


FIGURE 4
Sketch of the main elements of the governance of the Ocean Observing and Forecasting System in Europe and globally.

European Commission

Discussion

- Are you aware of examples of functioning in other contexts (the Meteorology context is clearer because there is one clear goal)
- Do you have recommendations on how to interact with the entities representing OO stakeholders
- Do you have advice on how we could better structure / simplify this landscape and what should be the role of the Commission in this ?

Next Meeting

- Meeting potentially late September/October 2025?
- Any needs or specific topics of discussion?
- Is it OK to fix the next meeting as a deadline for the initial collection of Level1 and Level 2 information (if we agree to go on)?
- Common EC space to share files and working documents
  - Is it fine with MSs?
  - MSs to provide a list of the people to be included (preferentially operational people)