



# Brainstorming Session on EOOS Purpose, Structure, and Governance

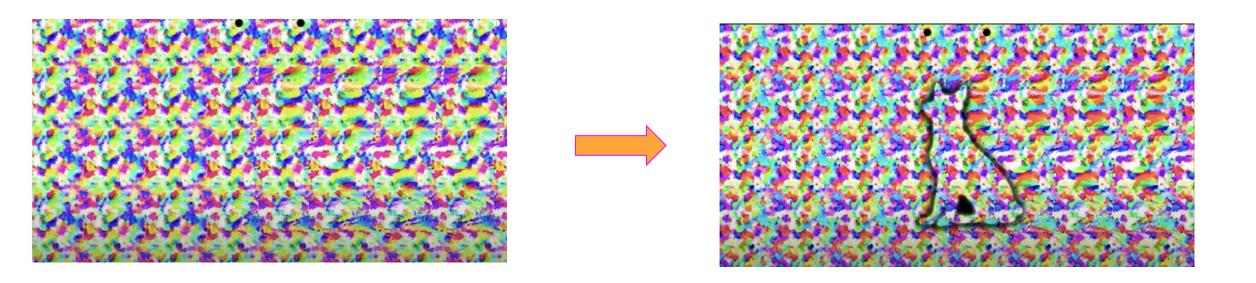
Lucie Cocquempot

EuroGOOS General Assembly 19-21 May 2025



### **Preliminary statement**

The same goes for EOOS as for stereograms...





**Preliminary concepts (1/2)** 



**Preliminary concepts (1/2)** 



COOPERATION

COLLABORATION



**Cooperative approach** 



**Cooperative approach** 

**Collaborative approach** 

= Each person carries out a part of the work, taking on a role according to his or her expertise.



#### **Cooperative approach**

**Collaborative approach** 

= Each person carries out a part of the work, taking on a role according to his or her expertise.

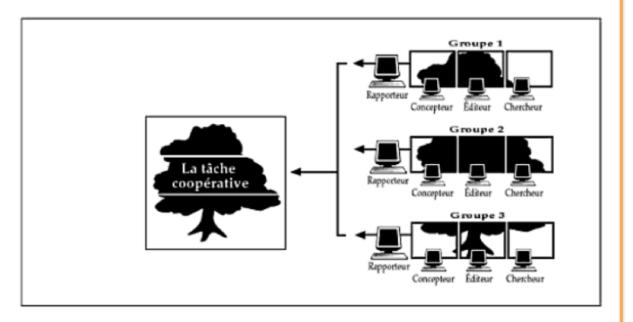
If the project was to design a tree....



#### **Cooperative approach**

= Each person carries out a part of the work, taking on a role according to his or her expertise.

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Each person carries out the task in his or her own way, playing all the roles alternately.



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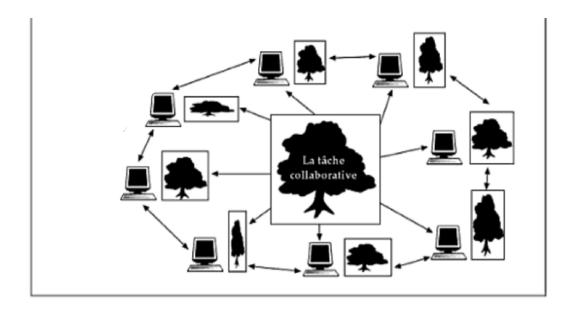


**Cooperative approach** 

#### **Collaborative approach**

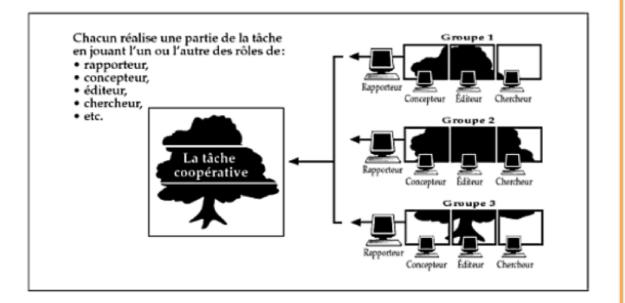
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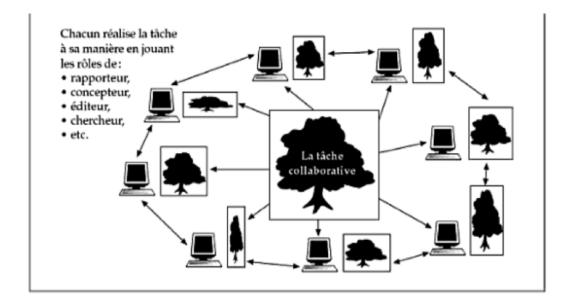
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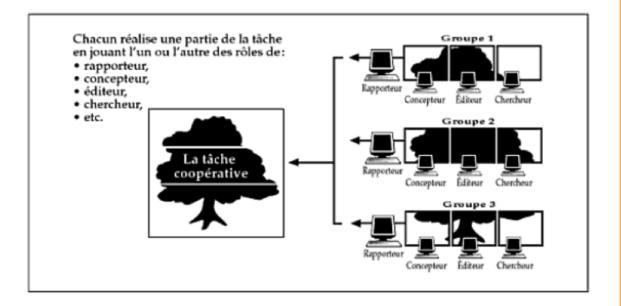
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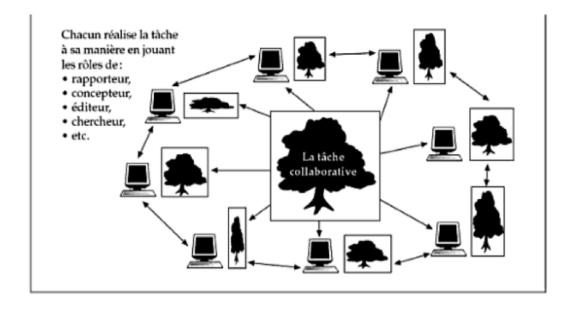




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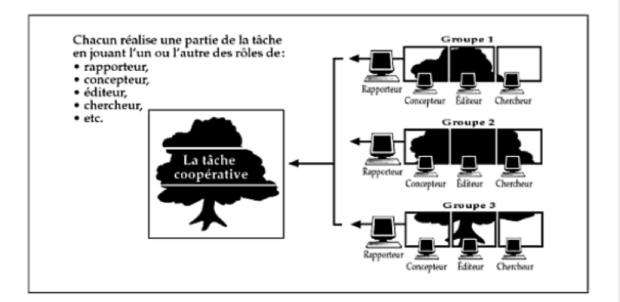


A streamlined and pragmatic approach



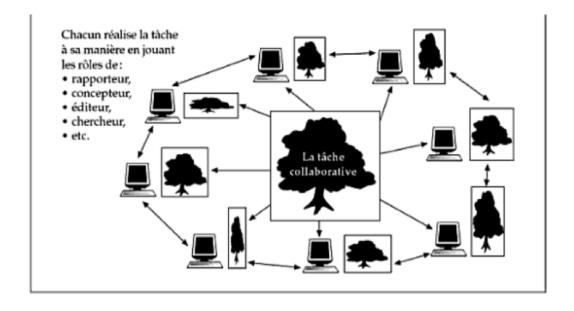


#### **Cooperative approach**



A streamlined and pragmatic approach

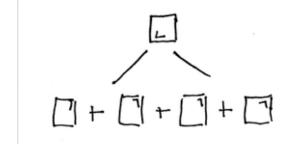
#### **Collaborative approach**



THINK TANK



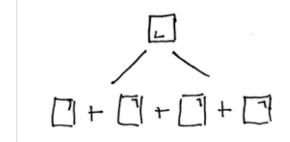
#### **Cooperative approach**



Functional body



#### **Cooperative approach**

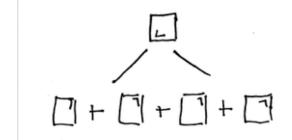


Functional body

Top-down



#### **Cooperative approach**



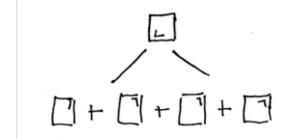
Functional body

Top-down

Shared objectives



#### **Cooperative approach**



Functional body

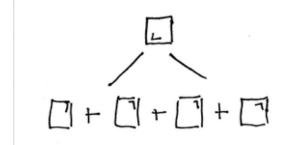
Top-down

Shared objectives

To decide on the orientations



#### **Cooperative approach**



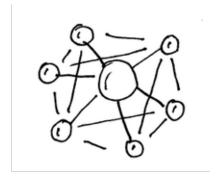
Functional body

Top-down

Shared objectives

To decide on the orientations

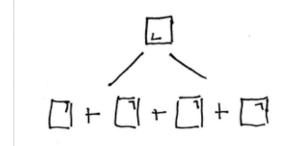
independent and dependent (multidisciplinary)



Ecosystem approach



#### **Cooperative approach**



**Functional body** 

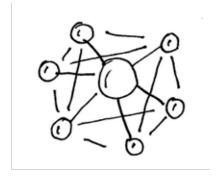
Top-down

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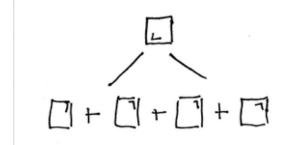


Ecosystem approach

Bottom-up



#### **Cooperative approach**



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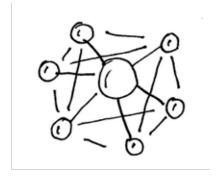
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#### **Collaborative approach**



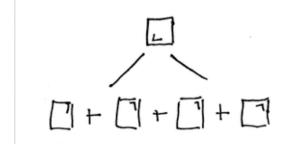
Ecosystem approach

Bottom-up

Shared vision and values



#### **Cooperative approach**



**Functional body** 

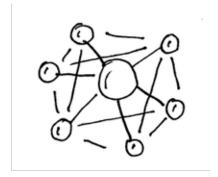
Top-down

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#### **Collaborative approach**



Ecosystem approach

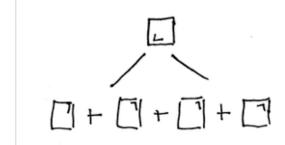
Bottom-up

Shared vision and values

To Explore, co-construct, document



#### **Cooperative approach**



**Functional body** 

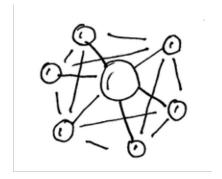
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Shared objectives

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independent and dependent (multidisciplinary)

#### **Collaborative approach**



Ecosystem approach

Bottom-up

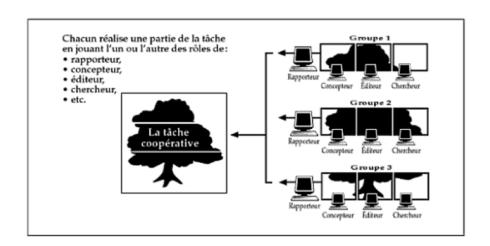
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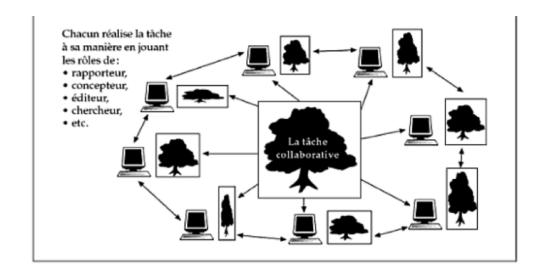
interdependent (transdisciplinary)



### **Ocean Observations Systems**



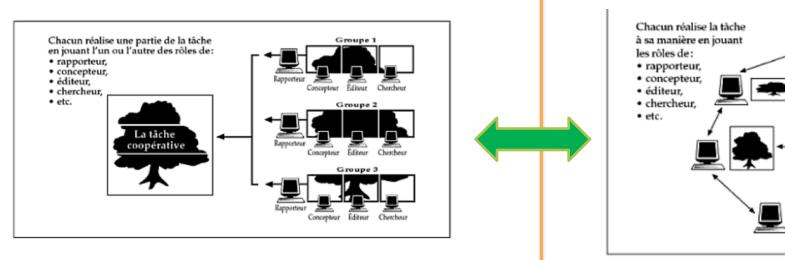
A streamlined and pragmatic approach



#### THINK TANK



### **Ocean Observations Systems**



Chacun réalise la tâche
à sa manière en jouant
les rôles de:
• rapporteur,
• concepteur,
• éditeur,
• chercheur,
• etc.

La tâche
collaborative

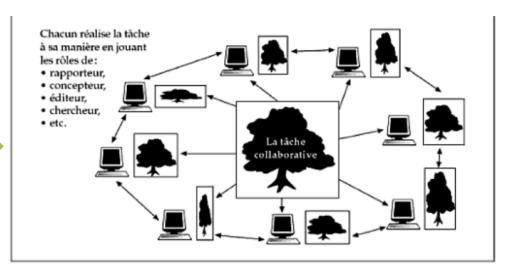
A streamlined and pragmatic approach

THINK TANK



### **Ocean Observations Systems**



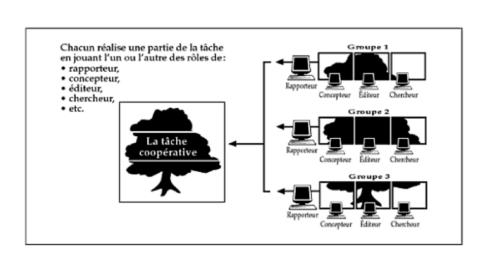


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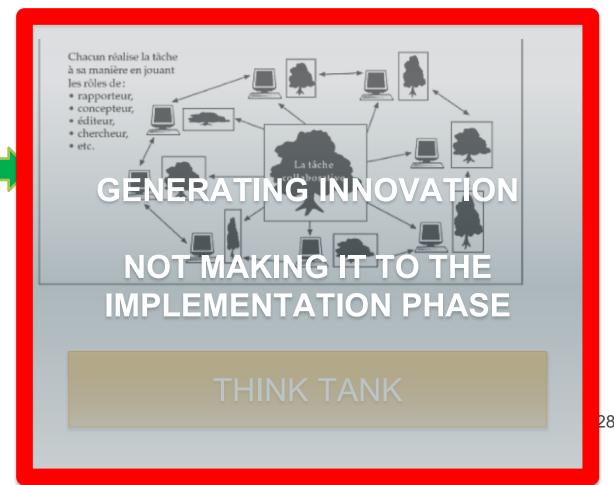
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### **Ocean Observations Systems**

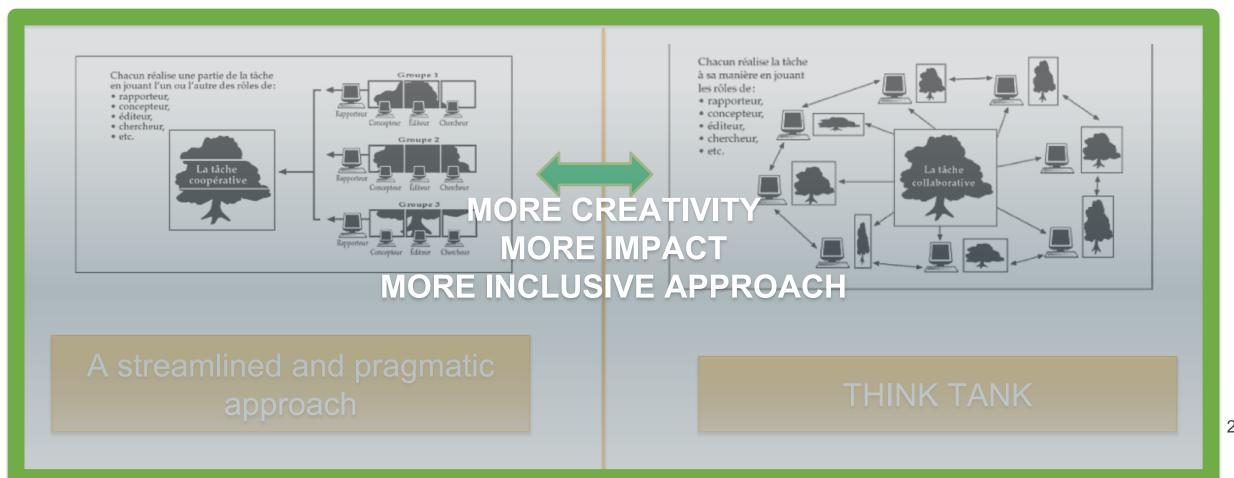


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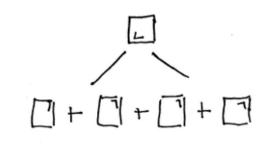


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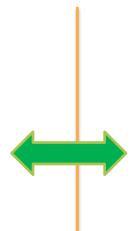


### **Ocean Observations Systems**

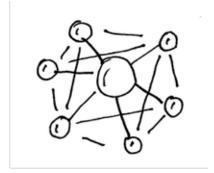
#### **Cooperative approach**







#### **Collaborative approach**



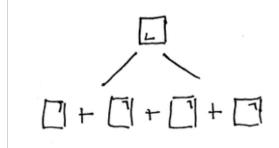
EuroGOOS > EuroGOOS Argo Task Team

### **EuroGOOS Argo Task Team**



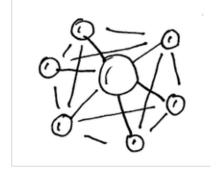
### **Ocean Observations Systems**

#### **Cooperative approach**





#### **Collaborative approach**



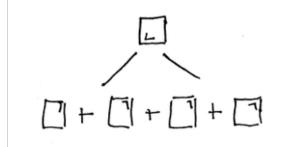
EuroGOOS > Coastal Working Group

### **Coastal Working Group**

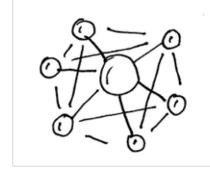


### **Ocean Observations Systems**

#### **Cooperative approach**











### **Ocean Observations Systems**



#### Centralized/harmonized actions

This is an opportunity to focus on added value to meet the needs of users and funders and for this to engage nations is strategic.

In this context, it is important:

- To establish a dialogue with funders and users,
- o To identify efforts to be shared at the European
- To Identify the people who can commit on operational resources
- To be visible at the international scene
   ......towards a legal structure



### **Ocean Observations Systems**

**Cooperative approach** 

**Collaborative approach** 



Decentralized actions
 Community- driven initiative

#### This is an opportunity:

- to keep the community informed /involved /interactive at european level
- to integrate external actors (potential new members)
- to explore new technologies
- to deal with unfinished lists of Scientific and Societal Challenges, never ending EOV lists
- To Stimulate To Engage To Mobilise To Promote



**Preliminary concepts (2/2)** 



**Preliminary concepts (2/2)** 

**Science of complexity** 



#### Preliminary concepts (2/2)

#### **Science of complexity**



Kurt Gödel was a mathematician and logician who discovered in 1931 that mathematics could not be **both complete and consistent**. More precisely, he highlighted two theorems of incompleteness and bounded consistency:



#### Preliminary concepts (2/2)

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When a system exceeds a certain threshold of <u>complexity</u>, it cannot be both <u>complete</u> and <u>consistent</u>.



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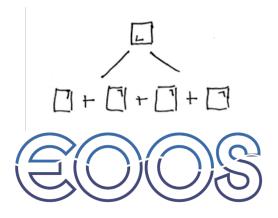


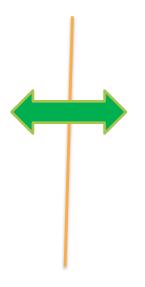
### **Preliminary concepts (2/2)**

### Science of complexity

The 3C tragedy calls for Complementarity of "collaborative" and "cooperative" approaches to address complex issues.

#### complete & consistent





#### complete & complex







The European Ocean Observing System (EOOS) is the infrastructures, platforms, sensors and people that gather this essential data and information about Europe's ocean, seas and coastal waters.



#### **KEY PARTNERS**

the entities/individuals involved in activities

**COST STRUCTURE** 

all the expenses including payroll, rent, etc.

#### **KEY**

for being profitable

#### KEY RESOURCES

the assets in demand to keep the business

#### ACTIVITIES

the practical relevance for customers

**VALUE** 

**PROPOSITION** 

#### CUSTOMER RELATIONSHIPS

#### **CHANNELS**

channels with clients

#### CUSTOMER **SEGMENTS**

target users/buyers of your product/service

communication

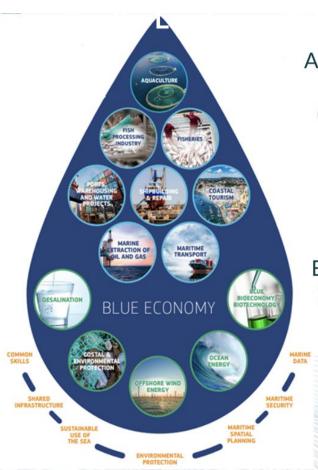
#### **REVENUE STREAMS**

the income-generating model, e.g., subscription plans, direct sales, etc.

#### **EOOS Business Model Canvas**



#### European needs



Adequate ocean observations underpin Europe's ambitions for sustainable development, protection of the marine environment, and preservation of its resources and services

Current fragmentation in ocean observing priorities and reporting requires a collective European strategy

Coordinating ocean observing efforts ensures a consistent, Europe-wide system for monitoring and understanding shifts in the marine environment and providing policymakers with the data necessary to plan for adaptation and mitigation strategies, and develop the Sustainable Blue Economy

The European Oceans Pact may provide a high-level policy umbrella for such coordination

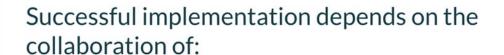


#### **EOOS Value Proposition**

The European Ocean Observing System (EOOS) aims to enhance coordination and collaboration in Europe's ocean observing efforts.

It strives for a systematic and efficient approach to collecting high-quality information on the state and variability of the marine

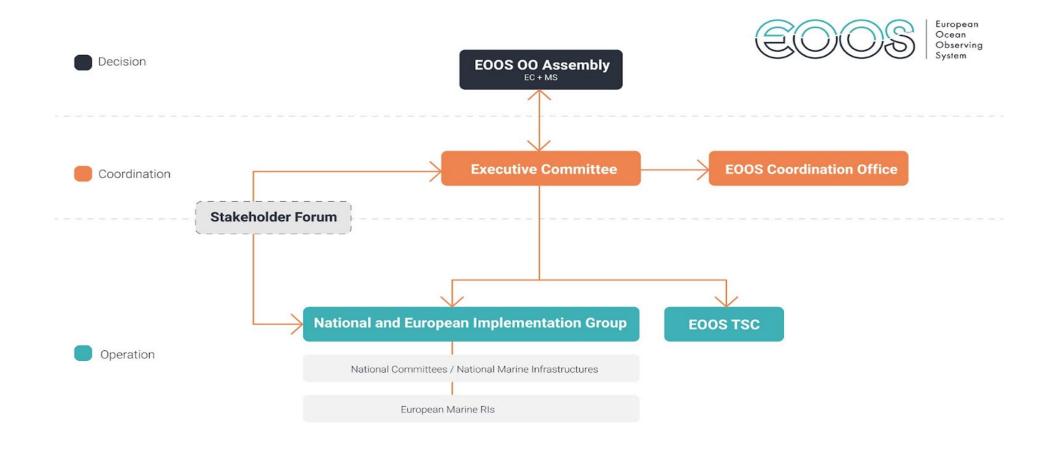




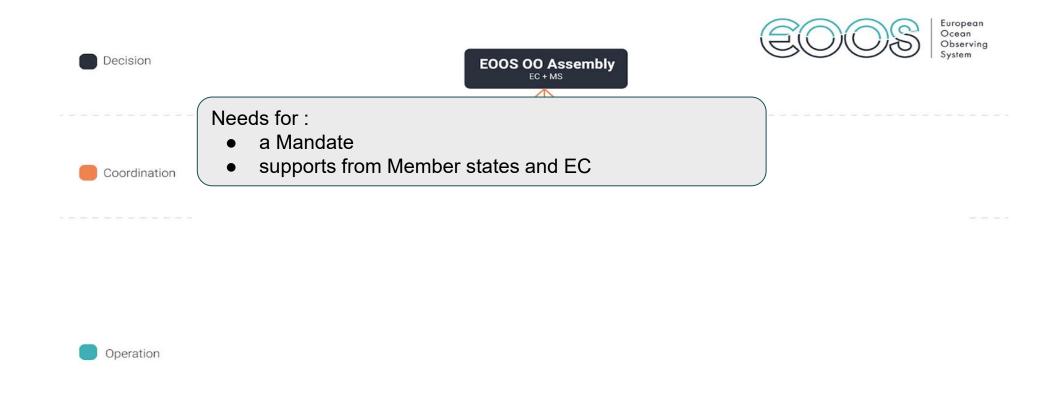
Member States
European Commission
Ocean observing community
Broad stakeholder group



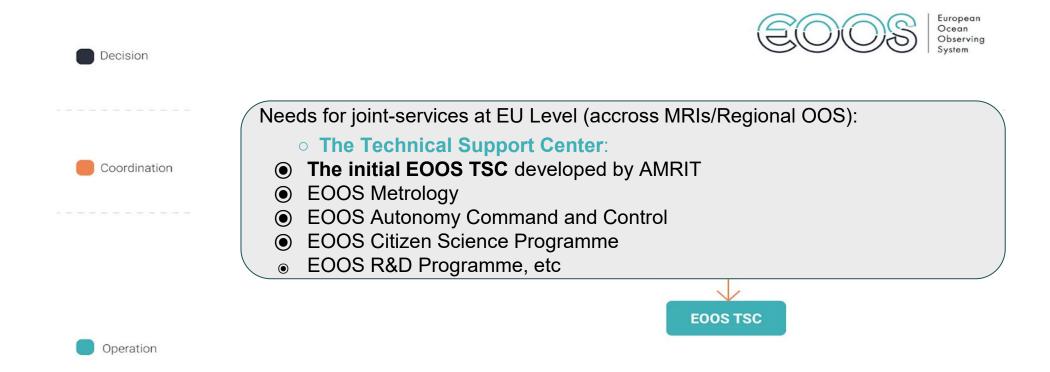




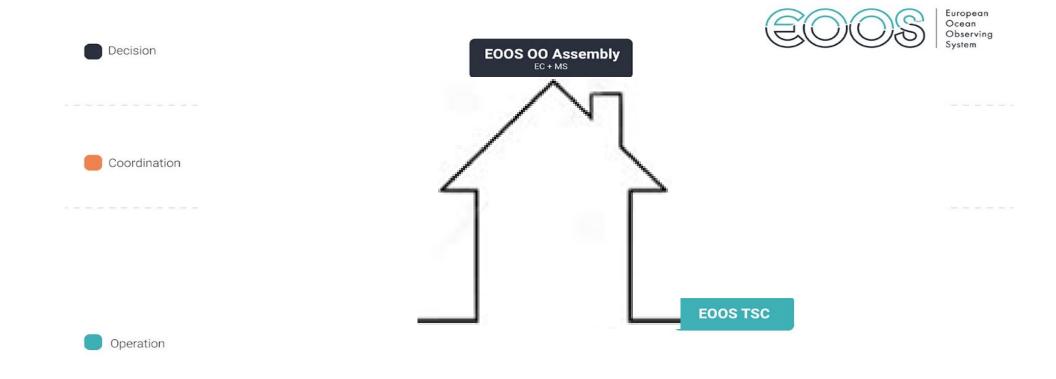






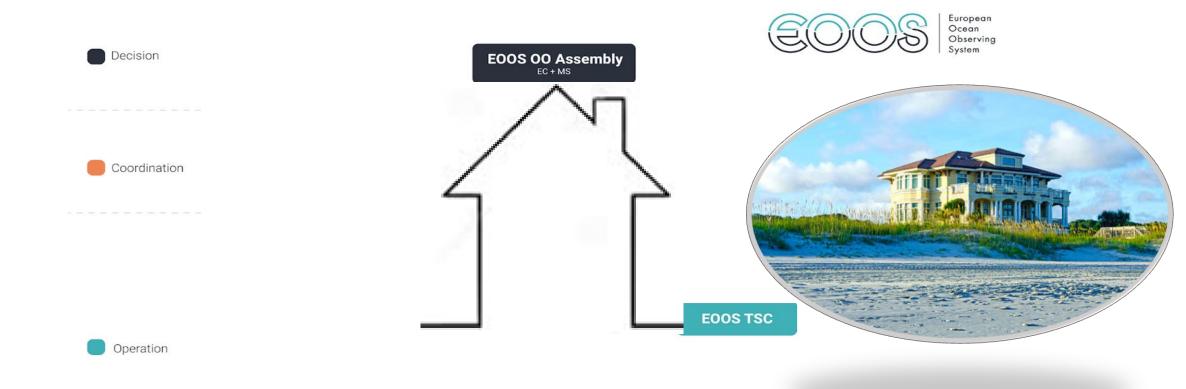








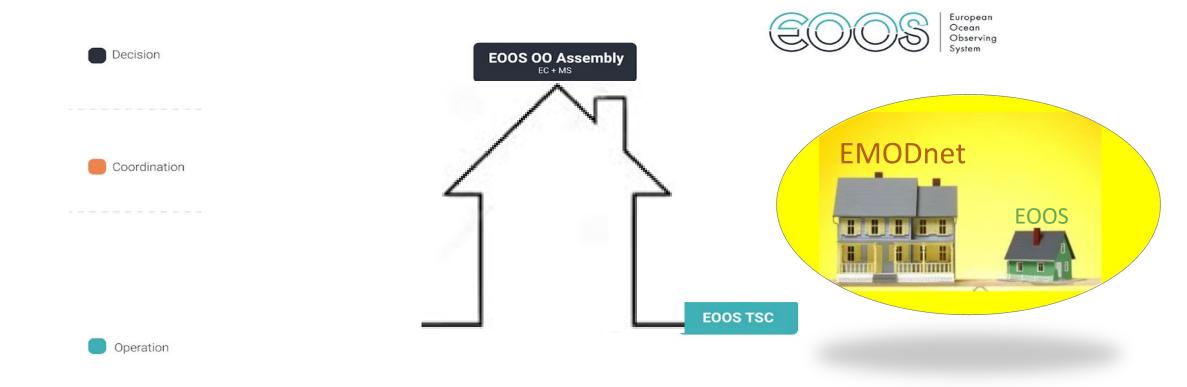
#### Preliminary brainstorming exercise on EOOS Governance v2



A stand alone initiative?



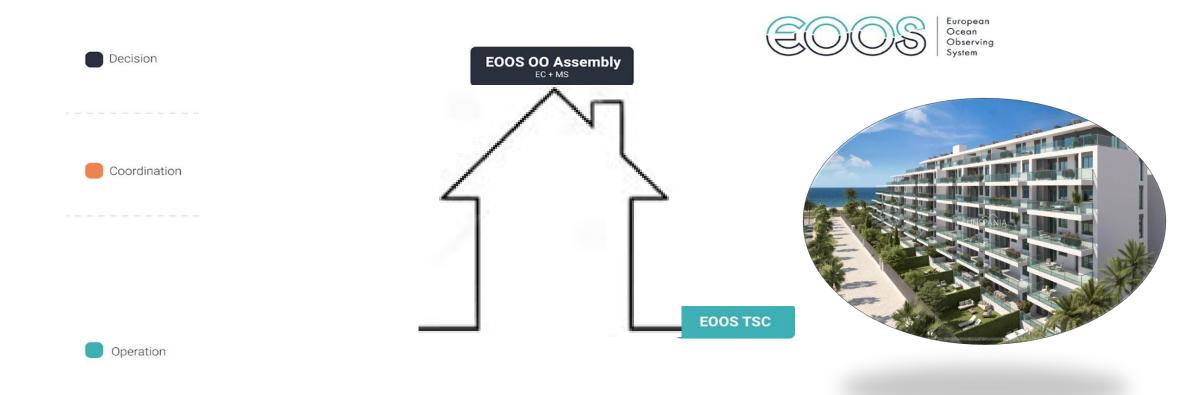
#### Preliminary brainstorming exercise on EOOS Governance v2



An add-on to data aggregator?

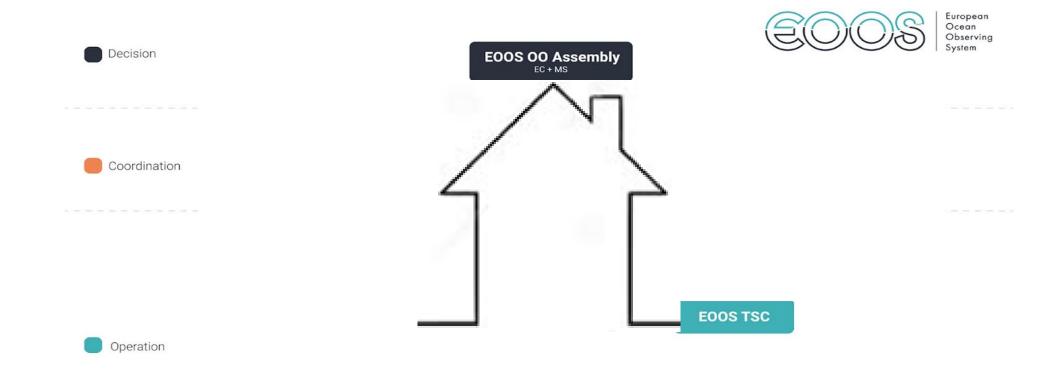


#### Preliminary brainstorming exercise on EOOS Governance v2



Joint-ownership by several nations?







## Questions?



## Brainstorming exercise



## Brainstorming exercise

- Introduction by the session host
- 5 thematic tables set up with topics
- Participants assigned to a table (around 6 people/table)
- Each table has a moderator and rapporteur
- Each round lasts 15 minutes; participants rotate tables after each round (total of 5 rounds
- 10 minutes break free discussion
- Reports by moderators/rapporteurs 15 minutes

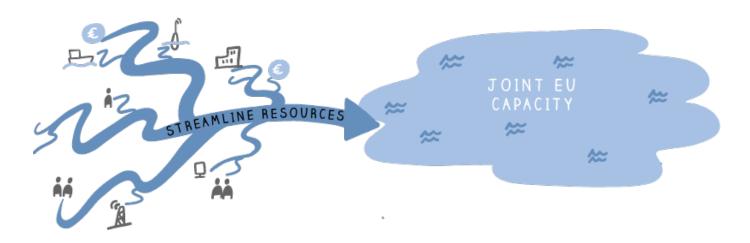


# Brainstorming questions:

- 1. What is the positioning of EOOS and EuroGOOS vis-a-vis GOOS? Which one is the European contribution to GOOS?
- 2. What is the 'System' in EuroGOOS and EOOS?
- 3. What should be EuroGOOS's institutional role within EOOS implementer, contributor, secretariat, advisor, co-funder? What specific actions should EuroGOOS take to strengthen its role within EOOS governance?
- 4. Should EOOS or EuroGOOS (or neither) engage with national governments to secure long-term funding and policy support? What about the EU policymakers and funders?
- 5. Should EuroGOOS act as a formal programming body for operational oceanography in EOOS?
- 6. How should EOOS avoid duplication with other European and international initiatives?
- 7. Should EOOS evolve into a more structured governance body, or should it remain a flexible framework?
- 8. What are the key challenges in aligning EuroGOOS priorities with EOOS developments?
- 9. Should EOOS accommodate emerging observing technologies and data platforms?







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# Mid-term Strategy Evaluation and Evolution

Holger Brix

EuroGOOS General Assembly 19-21 May 2025

#### Objectives of this session



- Identify future directions, priorities, and new areas of development for EuroGOOS Strategy 2030 and beyond
- Foster Member engagement in co-designing the next EuroGOOS Strategic goals and methods

### **EuroGOOS Strategy 2030**





Strengthen internal partnership
Facilitate linkages
Enhance cooperation
Boost synergies

Provide guidance



for coordinated and integrated European ocean observing and operational oceanography. Strengthen science-policy dialogue
Lead EOOS
Guide system design
Integrate observing and forecasting systems



Stimulate knowledge transfer Facilitate cooperation among broader community

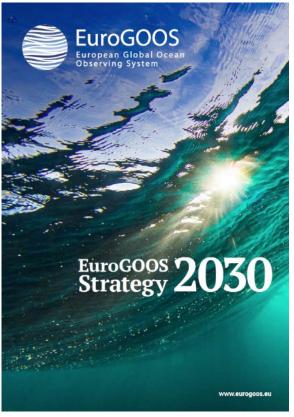
#### **PROMOTE**

sustainability across the value chain of operational oceanography and ocean observing. Establish links with national funders
Support national coordination
Demonstrate value of observations
Advocate long-term commitment



the public on the importance of the ocean and oceanographic services.

Co-design promotion materials
Organise events to engage with
policymakers



#### World Café



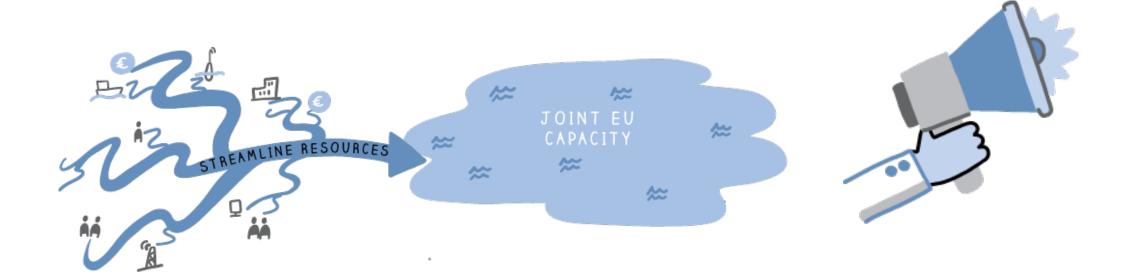
Six discussion tables with the following (possible) themes:

- Strategic alignment with European and global initiatives, providing guidance and lobbying
- Innovation in ocean observing
- EuroGOOS's impact & pathways to reach it
- Data valorisation
- Stakeholders & engagement (EU institutions, national governance, industry, co-design...)
- Internal governance

Participants engage in 20-minute discussions per table (4 rounds total), rotating each time

Final wrap-up with 5-minute highlights from each table (30 minutes total), followed by plenary reflections (10 minutes)





#### 1. What should be coordinated by the EC?

- Advocate to DG MARE a EuroGOOS call for a Regulation going beyond a Digital Platform on future plans
- EuroGOOS to design the different phases for such coordination (conceptual, detailed, final design) sort of TRLs
- We want EU coordination to press national governments on sustainable obs
- National commitments and accountability are needed decadal plans, periodic plans
- Model of combined national and EU funding 20% EU + 80% MS

#### **EuroGOOS's unique competence and transformation**

- EuroGOOS should broaden the spectrum from research and environmental to blue tech, industrial, ...
   EuroGOOS should show the added value of the collective vision and role (private companies, public bodies, others who jointly provide observations for a range of needs)
- EuroGOOS can be like JPI Oceans? like COST?
- EuroGOOS plans should be accepted by the Member Organisations (not only the Delegates)

#### The idea of EOOS

- "Hyper RI" with overarching coordiantion of all RIs
- An umbrella

#### Do you think EOOS is a dead horse?

#### Been around for +10 years, but too good to let go.

- No mandates to establish a structure like EOOS. Lag of legislation, no support for an ISBL, still a push
- EMODNet is not doing the coordination, GOOS is not an alternative
- EOOS can be modified to fit what DG-MARE is seeking (?)
- If we gain momentum in implementing the roadmap we will gain the visibility, waiting for funding is not constructive.

#### **Work ahead**

- The structure is a dead horse but not the process. The way EOOS is set up is no-go
- Do we want to be connected to a specific DG. This is not necessarily ideal. EOOS should serve different DG's, private actors, industry.
- Is the implementation plan part of the problem, can it be updated?
- Can EOOS be imbedded in other structures (WMO/ECMWV/ICES/...)

# QUESTION 3. How to improve coordination and synergies at national level (including key ingredients):

- 1. All countries should have a National Coordination Body (not all currently do). Who should drive this effort—EOOS, EuroGOOS, or the European Commission?
- FrOOS began as a bottom-up initiative and now has government support and a formal mandate.
- ITOOS. National effort coordinated by CNR, which is bringing together the organisations to build a national body (Research Infrastructures)
- CEOO operates without policies or government support.
- In Portugal, ocean observing organisations are not connected or working together.
- 2. Key national-level players are not connected to EOOS/EuroGOOS. How can this connection be established and maintained over time?
- 3. National Ocean Observing Charts could help promote coordination and policy development to secure government support. Are white papers sufficient to gain the support of the European Commission and national governments?

# What is the level of traction for EOOS at member state level currently?

- Limited to date: some examples at MS level e.g. PT national meetings
- Mandated work takes preference. OOS often established due to extreme event e.g. floods. Regional Conventions important.
- Defence situation is major topic and may curtail other activities and limit/divert OO funding.
- Building blocks nearly in place to make EOOS case nationally e.g. Estonia, Germany, Italy. Ris also critical contributor.
- Questions around how to interface with EOOS.
- Some major players not in the community.

# How can we increase uptake/recognition of EOOS?

- Take advantage of US drop in OO support to demonstrate European leadership
- Utilise use cases and demonstrators to convey impact of EOOS and OO more generally
- Member State Expert Group (MSEG)/ JPI national charts already have EOOS branding.
- Tenders e.g. CINEA and others that can demonstrate EOOS capacity and expertise to EC and member states.
- Can EOOS provide guidelines for 3<sup>rd</sup> party operators in terms of data collection and ingestion linked to licence conditions e.g. ORE?

#### Title: Enhancing EUROGOOS's Impact on EU Policy, Stakeholder Engagement, and National Governance through Strategic Pathways and Partnerships

#### **Key Strategic Pathways:**

#### 1. Showcasing Value and Impact

- Combine EUROGOOS products and success stories into targeted communication campaigns, tailored for national-level stakeholders.
- Highlight past impacts and success cases to demonstrate EUROGOOS's added value to policy and decision-making processes.

#### 2. Strengthening Engagement with Policy and Governance Actors

- Actively engage with EU institutions and national authorities, including visits to relevant agencies such as DG MARE and other European Commission departments.
- Leverage EUROGOOS's strategic location in Brussels to build and maintain close relationships with EU policymakers.
- Ensure regular ROOS meetings include invitations to EU and national officials to foster direct dialogue and collaboration.

#### 3. Innovation and Internal Development

- Develop new flagship initiatives or products directly from the EUROGOOS
   Secretariat to serve as high-visibility contributions to EU marine strategy and innovation agendas.
- Facilitate co-design with industry to ensure that EUROGOOS products and services address operational needs and stimulate innovation.

#### 4. Promoting Inclusivity and Knowledge Sharing

- Emphasize equitable access to data, expertise, and capacity-building, particularly for countries with limited marine observation infrastructure.
- Support knowledge transfer and training programs to reduce disparities in marine observing capabilities across Europe.
- Continue contributing to best practices and data validation frameworks, ensuring high-quality and interoperable marine data.

#### 5. Enhancing Regional Cooperation

 Strengthen cooperation among ROOSes to align regional priorities with broader EU goals and enhance the collective voice of regional observing systems.





# **EuroGOOS Membership Expansion or Consolidation**

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#### Objective:

Expand and enhance EUROGOOS membership and engagement through ROOS, Task Teams, and Working Groups.

- Rationale:
- Strengthen EuroGOOS's operational and scientific role.
- Improve coordination and visibility in European and global ocean governance.
  - Strategic Components:
- 1. ROOS-driven regional engagement.
- 2. TTs and WGs as entry points for non-members.
- 3. Targeted outreach to key countries, sectors, and private actors.
- 4. Alignment with UN Decade, All-Atlantic, and EU frameworks.

- Engagement Tools:
- Integration workshops & webinars
- Strategic networking events
- Enhanced communication & Member Benefits documents
- Policy engagement and partnerships
- Key Considerations:
- Balance between expansion and Secretariat capacity
- National representation limits and voting fairness
- Flexible membership models (e.g., reduced fees)
- Expected Outcomes:
- Broader, more diverse and active membership
- Stronger coordination and regional engagement
- Greater visibility in EU and global frameworks



"With that background in mind, let's now reflect on four specific questions we aim to address today:"

"Representation: How representative is EuroGOOS currently in speaking for the operational oceanography community? Who might still be missing?"

"ROOS Integration: Why are many ROOS participants still not EuroGOOS members, and how can we better integrate them?"

"Strategy Alignment: Given our new strategic direction towards biology, climate, and emerging technologies, how should our membership evolve to underpin this?"

"**Limits to Expansion**: Should we consider explicit limits to our membership growth for practical reasons? Could EuroGOOS play a stronger role coordinating national voices?"



"The concept note emphasized targeted expansion—has this happened? If not, why?"

"What practical measures might we now consider, given earlier intentions regarding ROOS involvement and global alignment?"