EuroGOOS
European Global Ocean Observing System

EuroGOOS Task Team Chairs' reports

EuroGOOS General Assembly
30-31 May 2023

Meeting document O7.1

EuroGOOS
European Global Ocean Observing System

FerryBox

EuroGOOS Task Team

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FerryBox Task Team

EuroGOOS General Assembly
30-31 May 2023

FerryBox
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European Global Ocean Observing System

FerryBox
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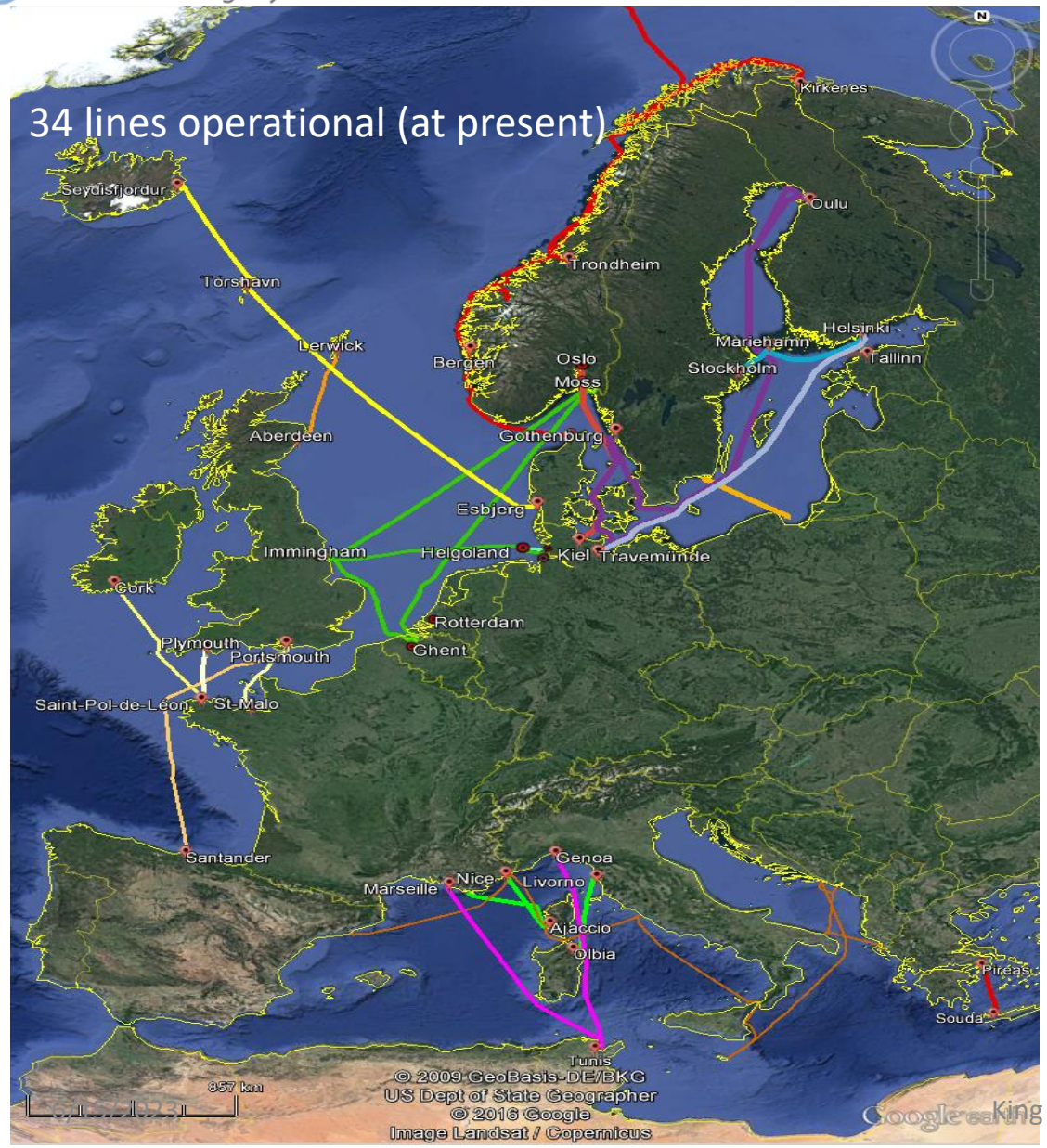
EuroGOOS FerryBox Task Team



www.ferrybox.org; eurogoos.eu/ferrybox-task-team/

Partners involved :

Norwegian Institute for Water Research, NIVA(Norway)
Helmholtz-Zentrum Hereon (Germany)
Institute for Marine Research, IMR (Norway)
EuroGOOS (Belgium)
Finnish Environment Institute, SYKE (Finland)
Swedish Meteorological & Hydrological Institute, SMHI (Sweden)
Tallinn University of Technology, TTU (Estonia)
Hellenic Centre for Marine Research, HCMR (Greece)
French Institute for Ocean Science, IFREMER (France)
Centre for Environment, Fisheries & Aquaculture Science, CEFAS (UK)
Dutch institute for Delta Technology, Deltares (Netherlands)
Flanders Marine Institute, VLIZ (Belgium)
Spanish Institute of Oceanography, IEO (Spain)
National Research Council Italy, Marine Sci. Institute, CNR-ISMAR (Italy)
Oceanic Platform of the Canary Islands, PLOCAN (Spain)

Recently joined members in red

Chairs: Andrew L. King (Norwegian Institute for Water Research; NIVA) & Yoana G. Voynova (Hereon)

FerryBox-TT Objectives

- Act as the European component of the global community using ships of opportunity
- Develop links with other EuroGOOS TT/WG/ROOS, GOOS, Ocean OPS, ICOS, and other complementary activities
- Ensure the integration of FerryBox networks in the European ocean observing efforts and contribute to the development of EOOS
- Operate and promote a common European FerryBox data portal
- Ensure and enable data availability via the EuroGOOS ROOS data portals including data quality procedures and links to CMEMS and EMODnet

Strategy 2030: main achievements & outlook

- Stimulate communities of practice:
  - Continued contribution to H2020 projects such as JERICO-S3/DS, EuroSea, CLAIM, NAUTILOS, MINKE
  - (Always) improving data flow/QC and feeding of data to CMEMS/EMODnet
  - Best practices and QC of underway autonomous carbonate system measurements and automated phytoplankton observations, long-time QC-ed datasets analysed & published
- Advocate for coordinated and integrated ocean observations
  - Built links with Ocean-OPS/SOT and GOOS SOOPIP, also with ICOS for FB pCO_2 observations, EuroGOOS BIO and OL WGs, ROOSs
- Strengthen/expand partnerships
  - Added new partner institutes to the FB-TT, several new members from existing partner institutes, election of new chair/co-chair planned for 2023, training new partner institutes
  - 11th FB workshop in Sept 2022 in Hamburg organized by Hereon, together with H2020 JERICO-S3 project meetings; 12th FB workshop planned for spring 2024, tentatively organized by SYKE/FMI in Helsinki, Finland
- Promote sustainability
  - Participation in proposals/projects that include FB in infrastructure projects; continued to look for ways for FB Task Team to contribute to EOOS
- Mobilise the public
  - Promote citizen science and ocean literacy through FB-TT activities and research and with OL WG

Recent notes from Task Team members

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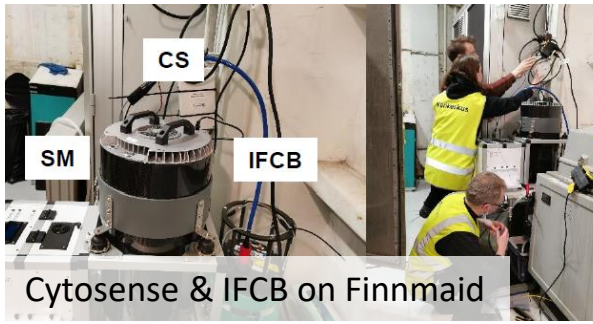
General notes:

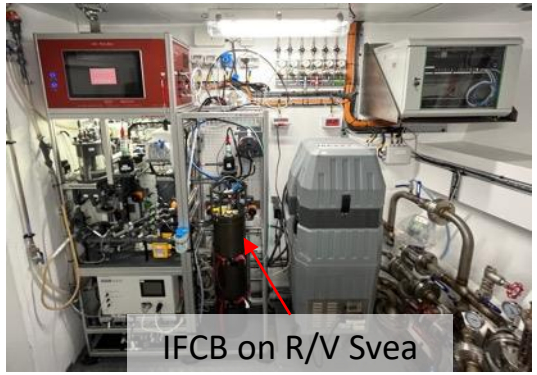
- **SYKE** is celebrating 30 years of observations on Silja Serenade (Helsinki-Stockholm) and Finnmaid (Helsinki-Travemunde)
- Tallinn-Helsinki FerryBox (Baltic Sea, **MSI/TTU**) not operational since September 2022 (COVID-19 and other difficulties), planned return to the normal route in July 2023.
- Baltic FerryBox calibration workshop in February 2023 (**SYKE, SMHI, NIVA**, Univ. Tarto, Univ. Helsinki)
- Operational plankton imaging systems onboard Finnmaid (Helsinki-Travemunde, **SYKE**) and R/V Svea (Baltic, Eastern North Sea, **SMHI**); in progress for M/S Color Fantasy (Oslo-Kiel, **NIVA**)



Cytosense & IFCB on Finnmaid

Recently added FerryBoxes:

- **Viking Octantis** and **Viking Polaris** (cruise ships, Arctic/Antarctic, **NIVA**)
- **M/S Connector** (cargo ship, Norway-Netherlands-UK, **NIVA/RWS (Deltares)**)
- **Poseidon FerryBox** (PFB) is back operational in Cretan Sea (Eastern Mediterranean; Heraklion-Piraeus; daily frequency, 170 nautical miles, **HCMR**); pCO_2 and automatic water sampling to be added in 2023
- **Tesperhude Station** (stationary, Elbe Estuary (Germany), **Hereon**)


IFCB on R/V Svea

Upgraded FerryBoxes:

- **M/S Tavastland** (new FerryBox; cargo ship, Baltic Sea, **SMHI**)
- **NIVA/IMR** still working on implementing NorSOOP sensors and samplers

Planned:

- **M/S Richard With** (passenger ship, coastal Norway, **NIVA**)


SC Connector, NIVA/RWS

FerryBox Task Team-ICOS cooperation:

- **M/S Tavastland** (cargo ship, Baltic Sea, **SMHI/SYKE**) and **M/S Trollfjord** (passenger ship, coastal Norway, **NIVA**) already involved in ICOS
- **M/S Silja Serenade** (passenger ship, Baltic Sea, **SYKE**) will join ICOS in 2023
- **Cuxhaven Station** (stationary, Elbe Estuary (Germany), **Hereon**), pilot ICOS-D estuarine station, 2023

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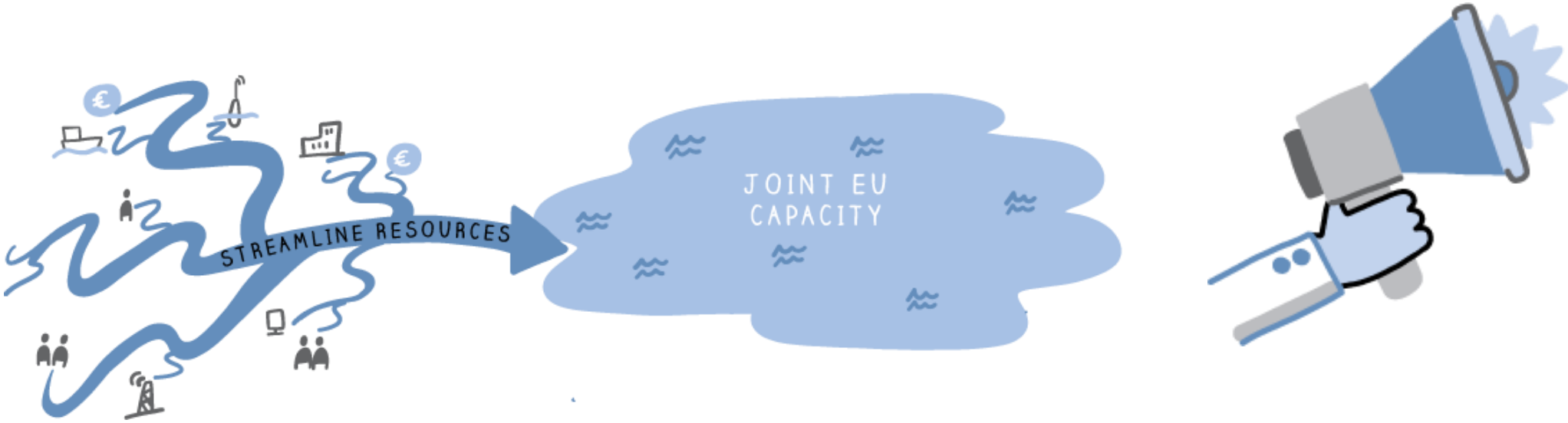

Henning Wehde (IMR/EuroGOOS) on behalf of
Andrew King (NIVA) & Yoana Voynova (Hereon)

andrew.king@niva.no;
yoana.voynova@hereon.de

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Fixed Platforms

EuroGOOS Task Team

EuroGOOS
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Fixed Platforms Task Team

EuroGOOS General Assembly
30-31 May 2023

Main priority areas

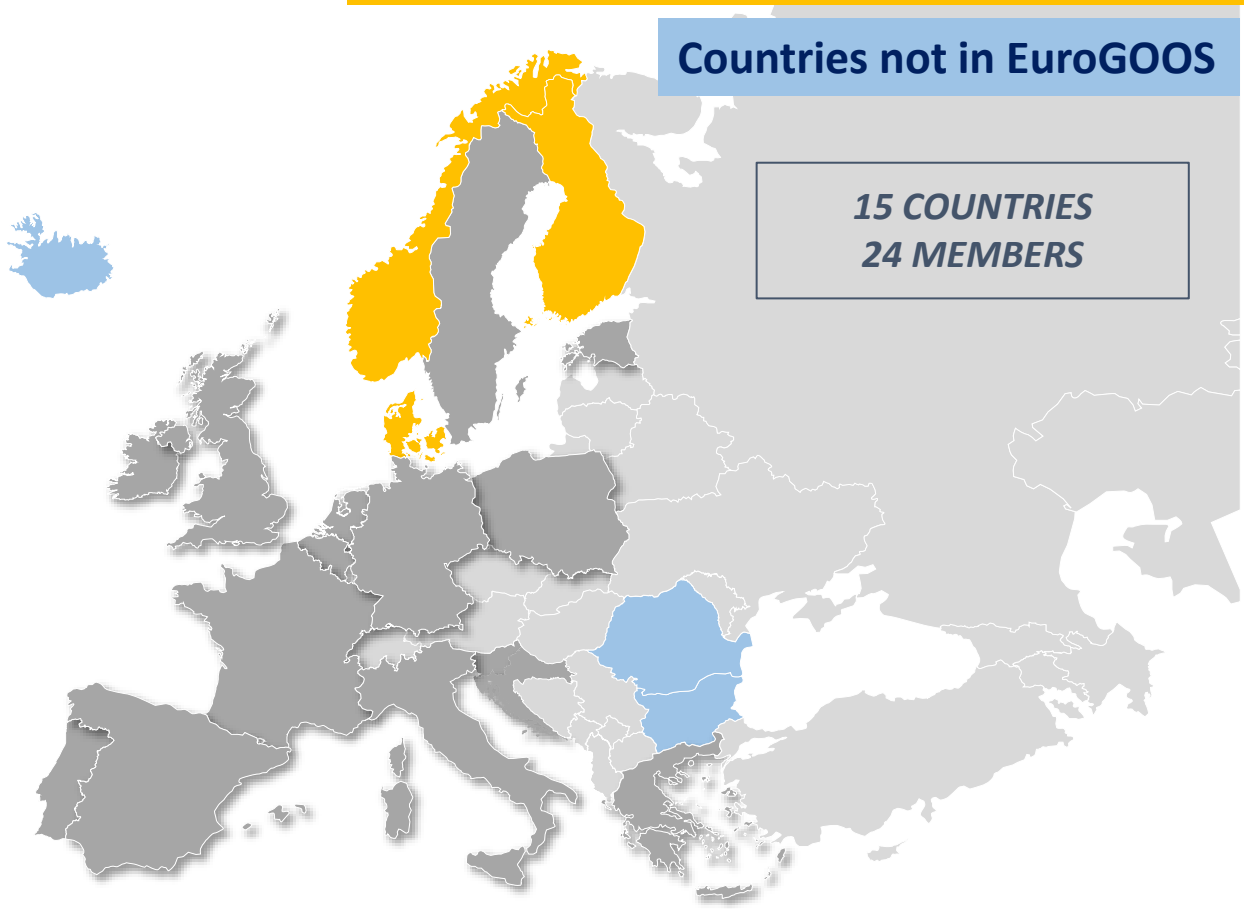
- **Sharing** of Experience, Knowledge, Expertise, Best Practices and Standards (design, operation, calibration, QC, data management, etc.)
- **Expanding** Observations in European Sea (EOVs, ECVs, bio/eco-logical)
- **Dealing** with Technological Issues
- **Delivering** Recommendations, Proposals and Solutions on Data/Metadata
- **Fostering** Links and Synergy inside and outside EuroGOOS
- **Contributing** to EOOS
- **Contributing** to SDGs/UN Decade
- **Developing** Joint Initiatives and Projects

Current membership

Country	Institution	Contact person
Belgium	Agency for Maritime and Coastal Services (MDK), Coastal Division	Pieter Gurdebeke
	Royal Belgian Institute of Natural Sciences (RBINS)	Michael Fettweis
Croatia	Croatian Meteorological and Hydrological Service (DHMZ)	Dijana Klavic
Estonia	Tallinn University of Technology, Marine Systems Institute (MSI)	Urmas Lips
France	French Research Institute for Exploitation of the Sea (IFREMER)	Michel Repecaud
	French National Centre for Scientific Research (CNRS)	Laurent Coppola
Germany	Federal Maritime and Hydrographic Agency (BSH)	Kai Herklotz
	Institute of Carbon Cycles (CCI)	Holger Brix
Greece	Hellenic Centre for Marine Research Institute of Oceanography (HCMR)	Paris Pagonis
Ireland	Marine Institute (MI)	Conall O' Malley
Italy	National Research Council of Italy (CNR)	Marcello Magaldi
	European Multidisciplinary Seafloor and water column Observatory (EMSO ERIC	Paolo Favali
	National Institute of Geophysics and Volcanology (INGV)	Giuditta Marinaro
	National Institute of Oceanography and Experimental Geophysics (OGS)	Vanessa Cardin
	Italian National Institute for Environmental Protection and Research (ISPRA)	Arianna Orasi
The Netherlands	Royal Netherlands Meteorological Institute (KNMI)	Jitze P. van der Meulen
Poland	Institute of Oceanology Polish Academy of Sciences (IOPAN)	Agnieszka Beszczynska-Möller
Portugal	Instituto Hidrográfico (IH)	Nuno Gonçalo Rufino Zacarias
Slovenia	National Institute of Biology (NIB)	Branko Čermelj
Spain	Puertos del Estado (PdE)	Marta de Alfonso Alonso-Muñoyerro
	Spanish Institute of Oceanography (IEO)	Raquel Somavilla
	Basque Research & Technology Alliance (AZTI)	Julian Mader
Sweden	Swedish Meteorological and Hydrological Institute (SMHI)	Carl Johan Andersson
UK	National Oceanography Centre (NOC)	Andrew Gates

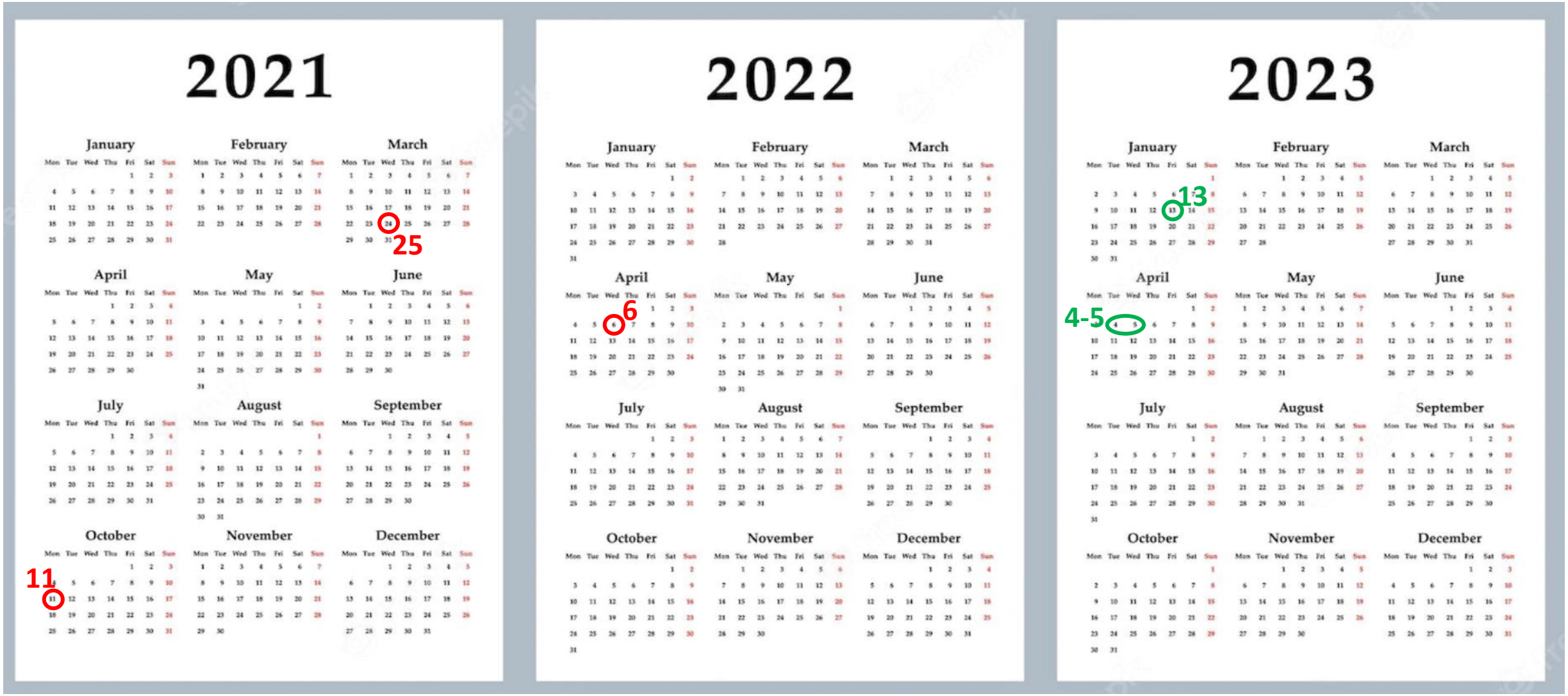
EuroGOOS Countries not represented at all

Countries not in EuroGOOS



All 5 EuroGOOS ROOSes represented (BOOS, NOOS, IBI, MONGOOS and Arctic ROOS)

Meetings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4-5

Main achievements (May 2022 - April 2023)

- FP TT website updates (FP TT membership, presentations, recordings and minutes of the meetings)
- Call for nominations for the third co-Chair of the FP TT
- Review of FP TT membership to have onboard EuroGOOS members still missing in the FP TT:
  - New members from Croatia, Germany and Spain
  - Invited members from Denmark, Norway, Finland, Iceland, Romania and Bulgaria
- **EuroGOOS FP TT SWOT Analysis and action plan for the next year**
- Survey to list/map FP represented in the TT (country, operating Institution, station name, location – lat. e long. – type, WMO code, depth and remark)
- **Advanced design of a FP TT Information leaflet**
- Evaluation of link between the FP TT and ongoing initiatives inside and outside the EuroGOOS framework
- Abstract submitted at the 10th EuroGOOS International Conference

SWOT Analysis

- ✓ Wide coverage (geographical, technologies, experience, knowledge)
- ✓ Linking networks and initiatives
- ✓ Sharing information, expertise and best practices

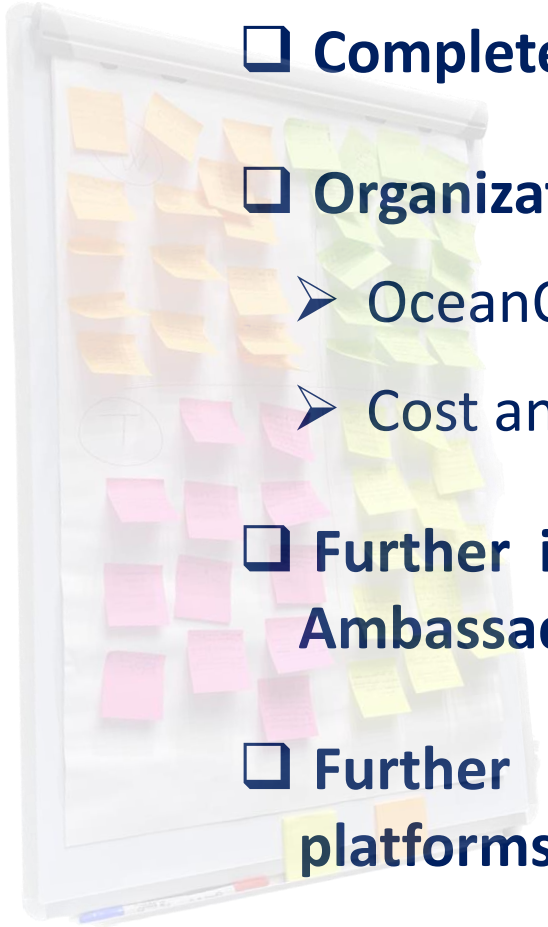
- ✓ Diversity in organizational and management approach, in national agenda
- ✓ Risk of duplication of activities
- ✓ Low external visibility
- ✓ Lack of funds

- ✓ Growing demand of ocean marine data (climate change, blue economy and regional approach)
- ✓ Taking advantage from emerging and mature research infrastructure communities
- ✓ Fostering a coordination at national level
- ✓ Lobbing to the sensor manufactories'
- ✓ Applying to funding opportunities

- ✓ Growing CAPEX and OPEX of the facilities
- ✓ Competition for funding with other platform/communities
- ✓ Low influence at decision-level

FP TT Information leaflet

Action plan for the next year



- ❑ **Complete Mapping of FP facilities (121 FP listed so far)**
- ❑ **Organization of "internal" webinars on:**
  - ➢ OceanOPS
  - ➢ Cost and value of multidisciplinary fixed-point ocean observatories
- ❑ **Further integration action with EuroGOOS ROOSes, WGs and TTs (FP TT Ambassadors)**
- ❑ **Further networking action with ongoing initiatives dealing with fixed platforms**
- ❑ **Further elaboration of SWOT analysis**

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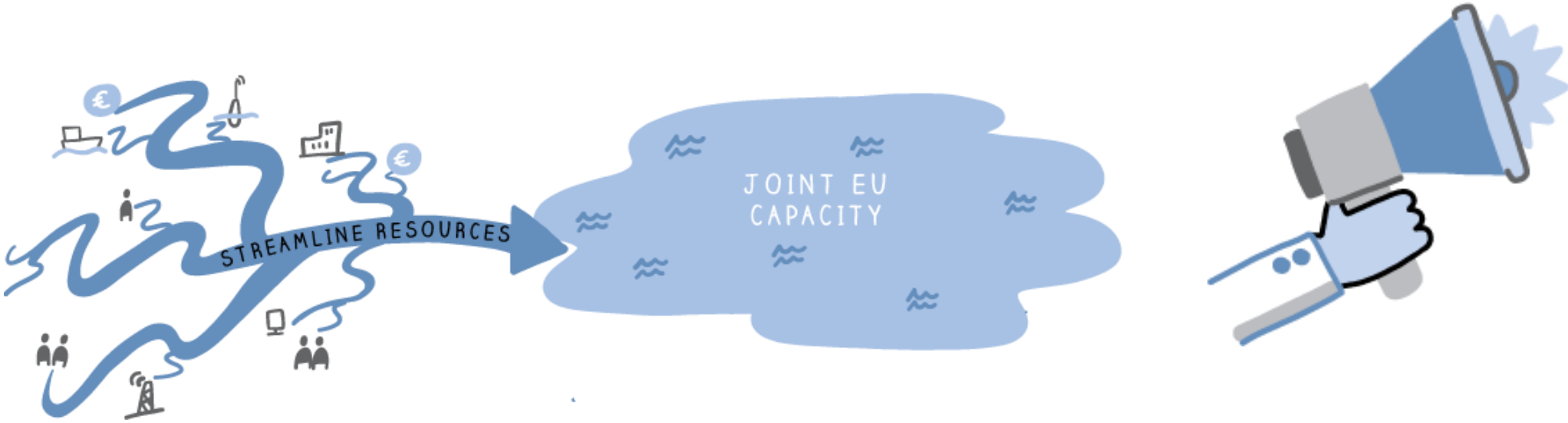

Giuseppe Magnifico (CNR), Paolo Favali (EMSO ERIC)

giuseppe.magnifico@cnr.it, paolo.favali@emso-eu.org

Discussion points

- What is the role of the Task Teams in the European landscape of marine Research Infrastructures and European initiatives?

  The EuroGOOS Fixed Platforms Task Team aims at integrating the European fixed-point observatories, both in the open and coastal ocean.

- How do task teams link to the development of European Research Infrastructures?

  Benefitting of the involvement of FP TT members in European Research Infrastructures the following initiatives will be implemented to avoid duplication/overlap and find synergies: *Nomination of FP TT Ambassadors, Promotion of Webinars Series and Special Events with thematic focus, Participation in workshops, etc.*

Discussion points

- How are Task Teams linking up with EOOS over its current Strategy period and related Activities?

  1. Promoting best practices and open data sharing – **Being a reference point for the EU FP community sharing information, expertise and best practices on facility management, maintenance and data management; Establishing a link with DBCP (Data Buoy Cooperation Panel) and E-SURFMAR in order to coordinate best practices.**
  2. Fostering innovation in ocean observing - **Lobbing to the sensor/system manufactories.**
  3. Advancing the transition to a well-connected, coordination ocean observing system - **Providing European input to the OceanSites community and other relevant initiatives.**

- How can Office/Board better support the Task Teams?

  Exchange of information within the FP TT via Chairs and EuroGOOS Office and Outreach of the activities via EuroGOOS FP TT website (webinars, leaflet, etc.).

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Glider

EuroGOOS Task Team

EuroGOOS
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HFRadar

EuroGOOS Task Team

EuroGOOS
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HF Radar Task Team

EuroGOOS General Assembly
30-31 May 2023

Main activities highlights

EuroGOOS
European Global Ocean Observing System

Global

Network Operator

Integration

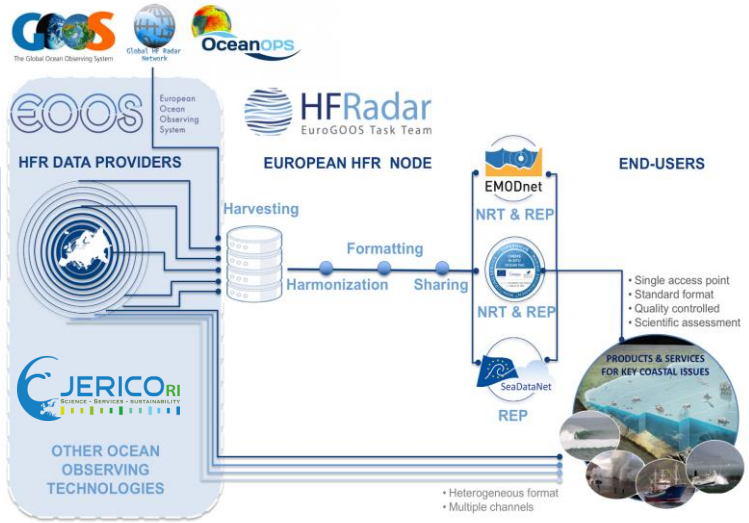
Stakeholder

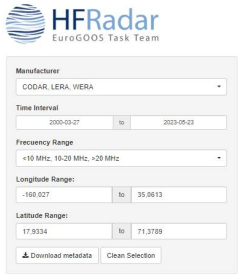
Best Practice

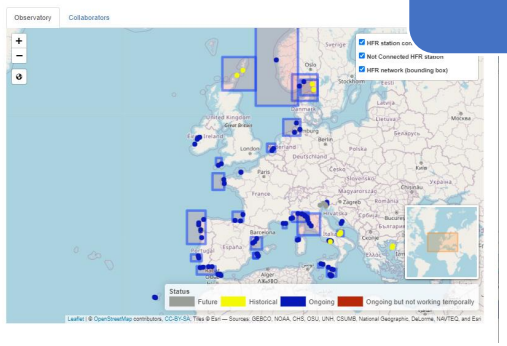
Impact

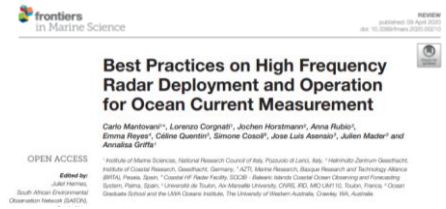
HFRadar
EuroGOOS Task Team

Sustainable European HFR Network

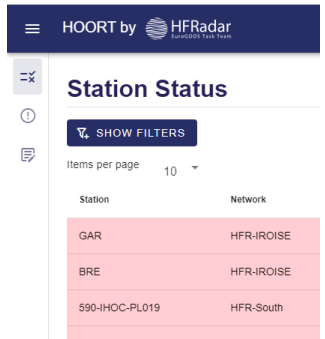








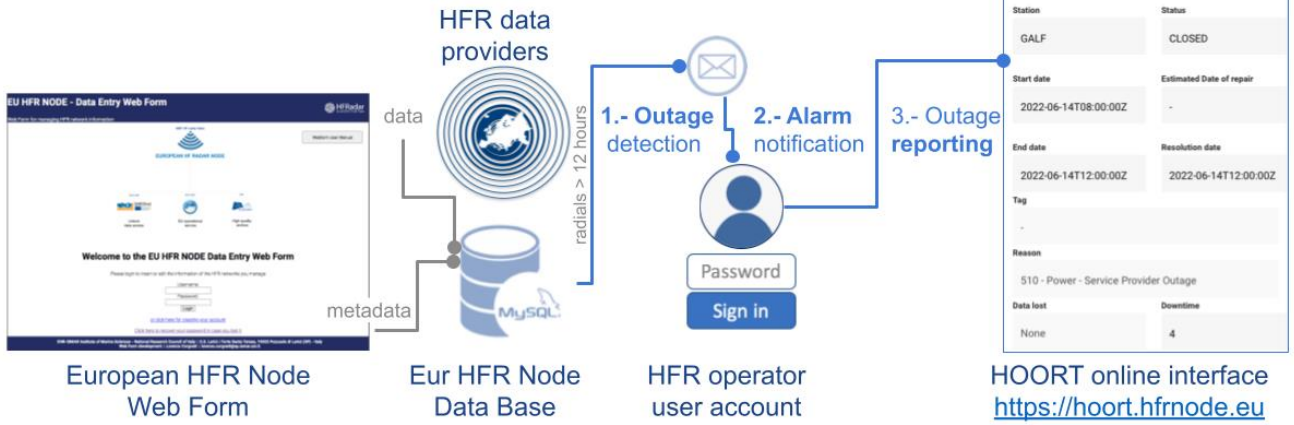
Ocean best practices



BEST PRACTICE

HOORT: HFR Online Outage Reporting Tool

What is HOORT?	• An application to **aid HFR O&M** • A tool to **report** outages • A **database** of outages • A **forum** for troubleshooting
What is HOORT for?	• **D**etect: the outage automatically • **A**lert: the operator automatically • **R**eport: the outage manually
Targets?	• Primarily, HFR **operators** • Managers, general public, users.

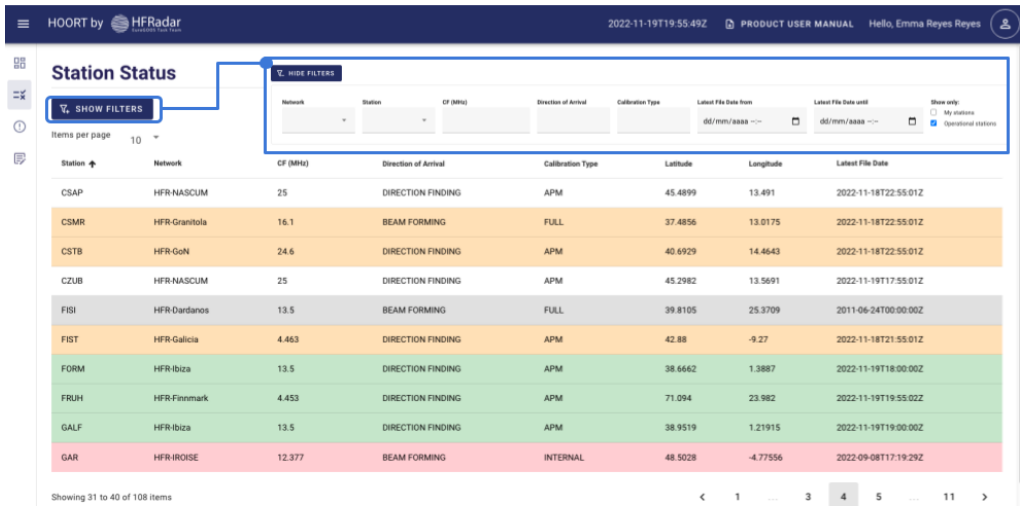


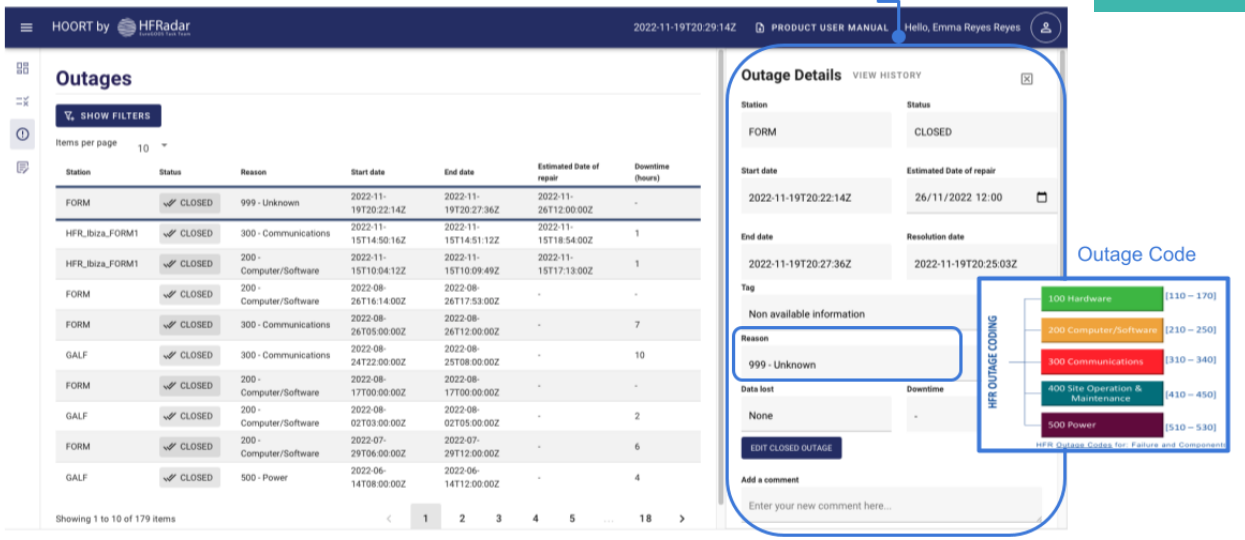
European HFR Node Web Form | Eur HFR Node Data Base | HFR operator user account | HOORT online interface https://hoort.hfrnode.eu

1 STIMULATE communities of practice

3 STRENGTHEN and expand partnerships

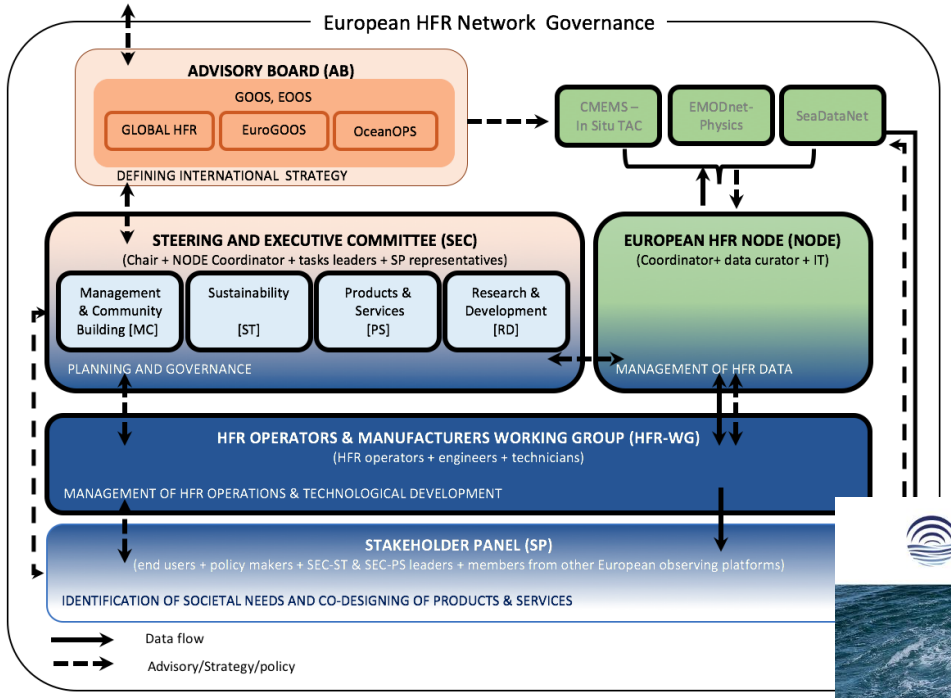
Outage Details (side-by-side

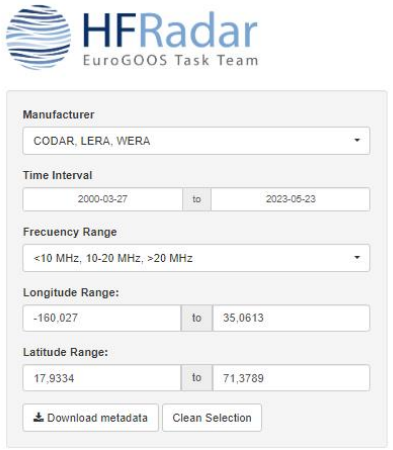


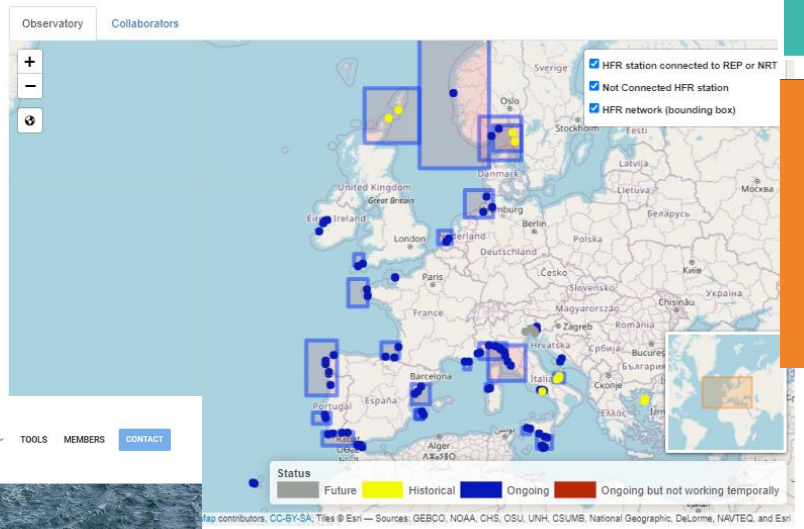


Up-to-date information of the network
Coordinated and integrated

EuroGOOS
European Global Ocean Observing System







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

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

Partnership

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European Global Ocean Observing System

Partnership and collaboration in the Ocean Observing Network

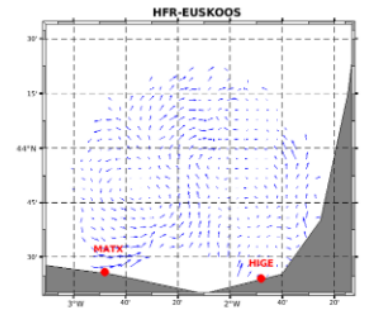
- DOI strategy at network level
- Supporting and integrating new actors

European HFRadar Node

HOME | ABOUT HFR | INDIVIDUAL NETWORKS | TOOLS | MEMBERS | CONTACT

HFR-EUSKOOS

HFR system name:	**HFR-EUSKOOS**
Spatial location:	Bay of Biscay (Spain)
Sites (frequency):	MATX (4.46 MHz), HIGE (4.46 MHz)
Manufacturer:	CODAR
Owning institution:	**Basque Goverment**
Operating institution:	AZTI
EDMO code:	1623
Contact names:	Julien Mader, Anna Rubio, Lohitzune Solabarrieta
Contact emails:	jmader@azti.es; arubio@azti.es; lsolabarrieta@azti.es
DOI:	10.57762/N22G-WQ86
Time coverage:	2009 - present
Description:	The EuskOOS HFR network is a CODAR Seasonde HF Radar system, retrieving hourly surface currents and waves in the southeastern Bay of Biscay. It is composed by two long range antennas, both emitting at a central frequency of 4.46 MHz, with a 30 kHz bandwidth. They offer hourly radial data, with 5km radial resolutiona and a radial coverage close to 180 km.



HFR-EUSKOOS

Citation:

HFR-EUSKOOS, AZTI, Euskalmet – Basque Meteorological Agency, & Basque Government Security Department. https://doi.org/10.57762/T4WH-DQ48

VIEW DATA CATALOGUE HERE

Operating Institution:

In progress…

3 STRENGTHEN and expand partnerships

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

Partnership

EuroGOOS
European Global Ocean Observing System

Co-producing services and information

- Data gap filling & Wave WGs: Advanced products
- Coastal R&D Services
- Coastal Upwelling Index from HFR (OSR#7)

JERICO RI
Science - Services - Sustainability

EuroSea

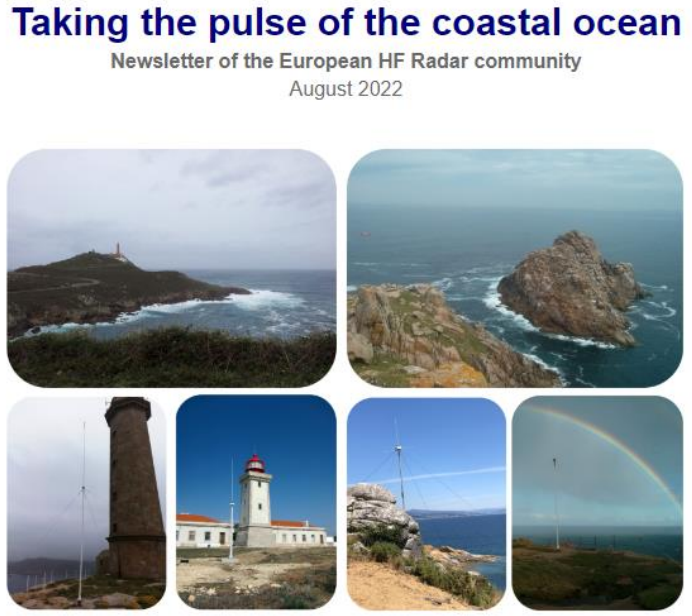
3 STRENGTHEN and expand partnerships

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

➢ Training Workshop Florence
21-22 Nov 2022

HFRadar
EuroGOOS Task Team

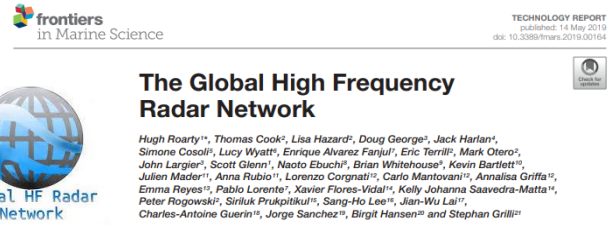


➢ Newsletters “Taking the pulse of the coastal ocean”

Main activities highlights

EuroGOOS
European Global Ocean Observing System

Coordinated and active in Global Community



Global HF Radar Network

Global

Network Operator

Integration

Stakeholder

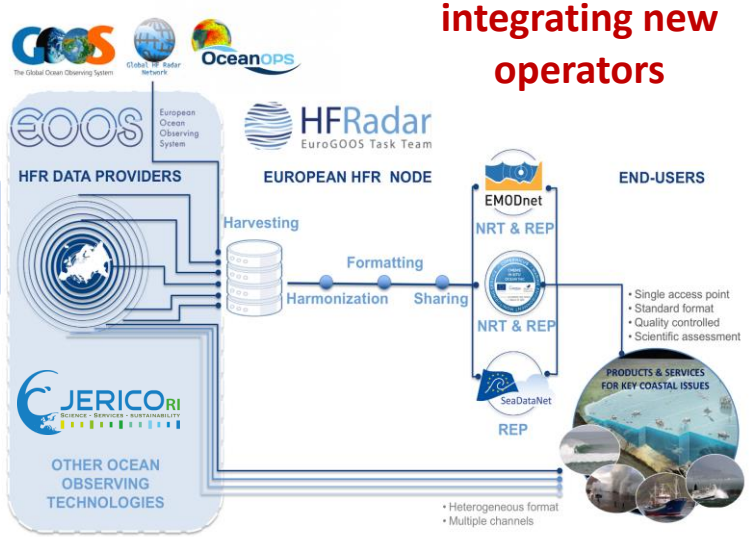
Best Practice

Impact

HFRadar
EuroGOOS Task Team

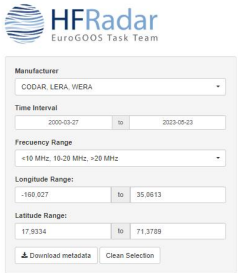
Sustainable European HFR Network

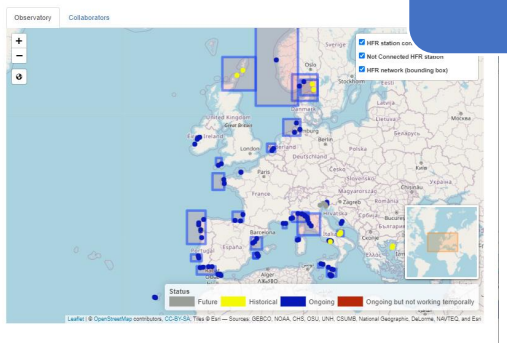
Supporting and integrating new operators



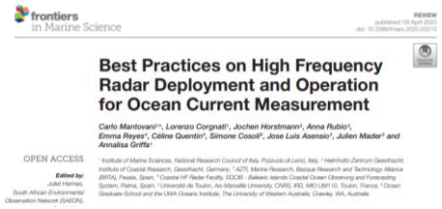
DOI strategy at network level

Operational update of network metadata

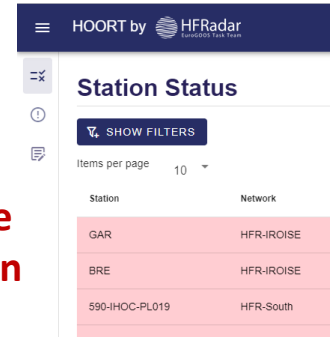




Data gap filling & Wave WGs, CUI

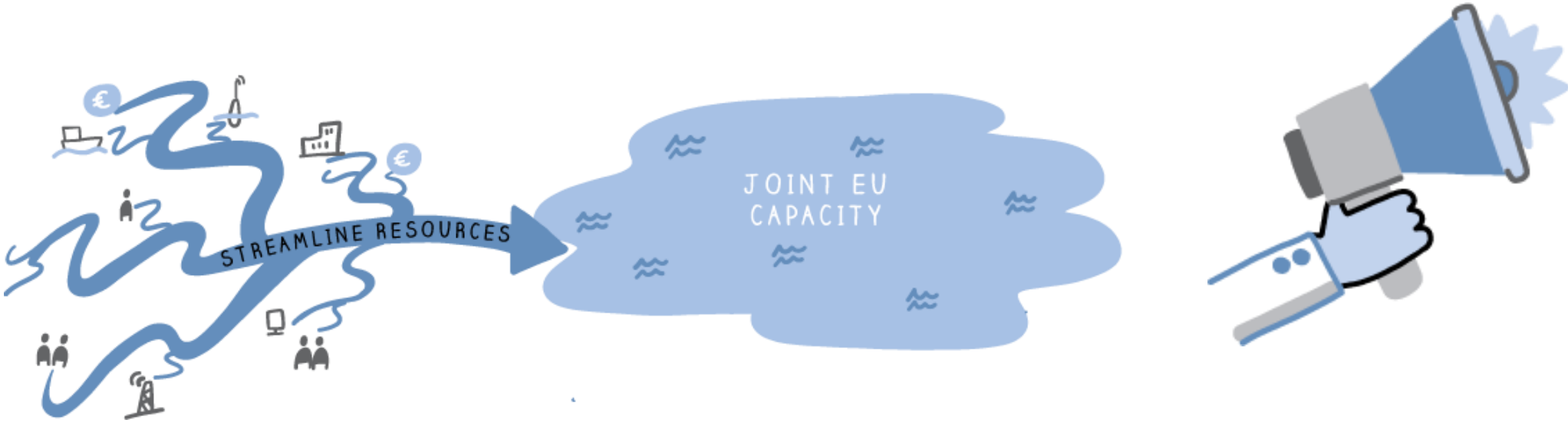


Ocean best practices



Supporting the implementation of HOORT

EuroGOOS
European Global Ocean Observing System



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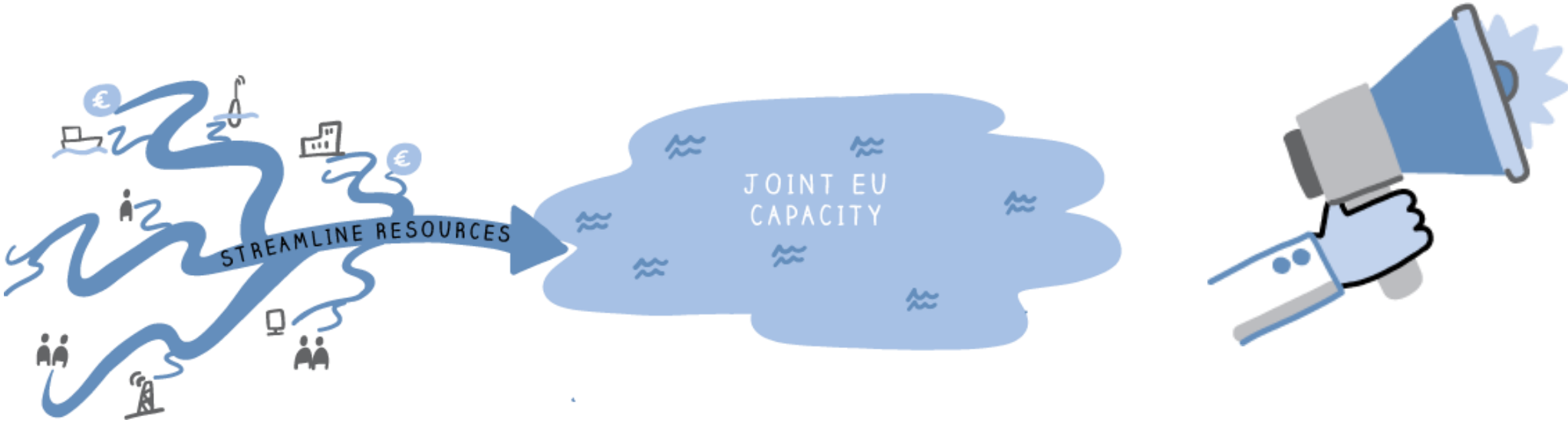
EuroGOOS
European Global Ocean Observing System

Tide Gauge

EuroGOOS Task Team

EuroGOOS
European Global Ocean Observing System



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ARGO

EuroGOOS Task Team

Euro Argo Task Team

EuroGOOS General Assembly
30-31 May 2023

Co-chairs: A. Miguel P. Santos (IPMA, PT) and
Griet Neukermans (UGent, BE)

Main objective

Facilitate interactions between non-Euro-Argo ERIC institutes/ countries and the Euro-Argo ERIC governance structure, especially the Management Board (MB).

Renewed in 2022

- 2 co-chairs, 11 members (from 6 countries: PT, UK, BE, CY, TR, IT + Argo MB+Office)
- ToR renewed in 2022, approved by EuroGOOS Exec. Board of Directors
- Kickoff meeting (virtual) held in February 2023
- Web: https://eurogoos.eu/eurogoos-argo-task-team/ updated

Planned activities

- Organize workshops/training on Argo data (e.g., DM, QC)
- Develop a plan for Argo float deployment
- Collaborate in the development of BGC and Deep Argo program
- Participate in EuroGOOS Conference – Argo session/OneArgo side event

Specific objectives

- Meet regularly with the Euro-Argo ERIC MB, at least once a year
- Support and facilitate the process of Euro-Argo ERIC membership of present non-Euro-Argo ERIC countries;
- Collaborate in the organization of events with the Euro-Argo ERIC (e.g., Science Meeting and Users Meeting);
- Prepare, in collaboration with the Euro-Argo ERIC, the participation to the Argo Steering Team (AST) and Argo Data Management Team (ADMT) meetings;
- Develop the collaboration with users and stakeholder communities in non-ERIC EU member countries, and facilitate the recruitment of new members;
- Link with EuroGOOS Regional Operational Observing Systems (ROOSs), Working Groups, Task Teams and relevant ongoing observational programmes/projects;
- Report annually to the EuroGOOS General Assembly.

EuroGOOS
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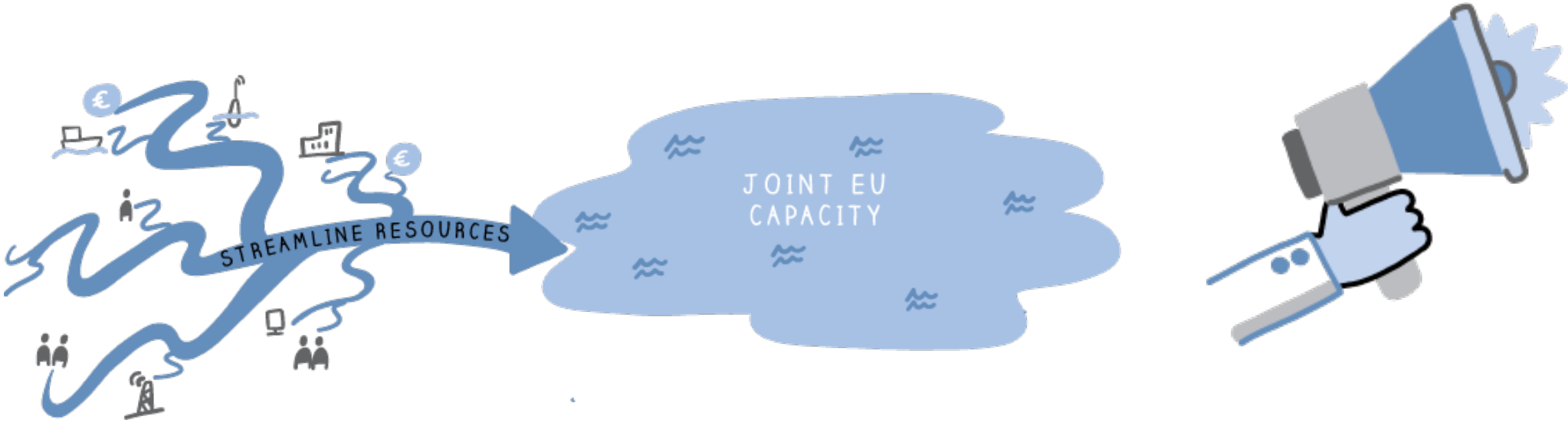

Co-chairs: A. Miguel P. Santos (IPMA, PT) and
Griet Neukermans (UGent, BE)

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