EuroGOOS FerryBox Task Team
Terms of Reference

Table of Contents

1.   Background, Rationale, and Link with EuroGOOS Strategic Priorities

FerryBoxes are environmental sensor packages that are primarily installed on commercial ships (passenger ferries, container ships, etc.). The sensor package pumps seawater through a series of physical, chemical, and biological sensors that provide observations for a variety of essential ocean variables that are relevant for research and applied to observing requirements set forth by, e.g., the EU Marine Strategy Framework Directive. They provide cost-effective, high resolution ocean observations that are year-round and cover large regions that are socioeconomically and ecologically relevant. The EuroGOOS FerryBox Task Team provides organization of the European FerryBox network that officially began in 2002 through the FP5 European Commission Funding Framework (2002-2005). Following the completion of the FP5 project, the FerryBox community continued operations independently and gathered every 1.5 years for FerryBox Workshops. As of late 2017, the European FerryBox network consisted of 26 lines operated by partners from 14 universities and research institutes. The FerryBox network covers coastal and ocean water masses in the North Atlantic Ocean, the Arctic Ocean, the Baltic Sea, the North Sea, and the Mediterranean Sea.

The FerryBox Task Team provides a means of strengthening the partnerships between institutes that operate FerryBoxes and of standardising, promoting, and sustaining FerryBox operations, data management, and use and applications of FerryBox observations. These include establishing common procedures on operation, calibration, quality control, and handling of data from FerryBox systems (including best practices in EU projects and delivery of data to CMEMS and EMODnet), testing and implementation of new environmental sensor and sampling technologies, and cooperating and integrating with other European and global operational oceanographic technologies (including satellites, fixed platforms, gliders, numerical modelling). Because many FerryBoxes are operated on passenger vessels, the Task Team has a unique ability to use observing platforms to mobilise and promote ocean observing with the general public and in some cases citizen scientists.

2.   Target Audience and Expected Impact

The user and stakeholder community for FerryBox network is wide, including (but not limited to) the European and global ocean and atmosphere scientific communities (operational, research, modelling, remote sensing), European level water quality assessments, national environmental and monitoring agencies, local water quality officials, aquaculture and wild fisheries industries, environmental sensor developers, commercial ship operators, and the general public. The FerryBox Task Team intends to engage these users and stakeholders to provide new knowledge and solutions.

3.   Aim and Objectives

The task team will:

●   Act as the European component in the global community using ships of opportunity (e.g. OceanOPS-Ship Observation Team), and incorporate links with ICOS (Integrated Carbon Observation System), and GOOS (Global Oceanographic Observation System) through EuroGOOS.

● Ensure the integration of FerryBox networks in the European Operational Oceanographic Services and contribute to the development of the European Ocean Observing System (EOOS).

● Promote availability of data via the EuroGOOS ROOS data portals including data quality procedures, as well as the publication of FB Data through DOI; promote a common European FerryBox data portal.

● Foster dialog between task team members, other FerryBox operators, and end-users (National Oceanographic data centres, OSPAR, EEA, HELCOM, ICES, EMODNET, shipping companies, environmental agencies, universities, climate related institutions, etc.). This dialogue can cover themes like data structure/format/dissemination (interoperability of datasets), quality control procedures, validation procedures, technological solutions, incorporation into numerical models, and provide observations for long term trend analysis.

● Ensure that, where relevant, their activities are integrated with other EuroGOOS structures and will maintain a continuous dialogue and collaboration with them.

The task team will also be a framework for task team members by operating a common website, sharing success stories and difficulties through workshops, providing and exchanging open source tools (data analysis, application; and use of data portal), promoting scientific synergies for addressing key questions, filling operational gaps (i.e., geographical and temporal coverage), looking for opportunities to cooperate with other observational platforms (e.g., gliders, buoys) and other technologies or modelling products, promoting reports, white papers, peer-review publications and joint proposals through networking.

4. Composition and Operation

The task team is composed of a chair, a co-chair, and members. Co-chairs are supported by a dedicated officer at the EuroGOOS office.

4.1 Chair's nomination process, mandate, responsibilities

Chair must be a representative of a EuroGOOS member organization[1]. A chair can be supported by a co-chair. In this case, the mandate and role and responsibilities are the same as for the chair. Co-chair takes on the role of chair if the chair is unable to act. The chair is nominated by the EuroGOOS Executive Directors Board and approved by the EuroGOOS General Assembly. The chair's mandate is for three years, renewable once, upon re-election for a two-year term.

Chair is responsible for:

● Oversight of the task team;
● Alignment of the task team's work with its terms of reference and with the EuroGOOS strategy;
● Developing the working group yearly implementation plan in line with the above;
● Reporting to the EuroGOOS General Assembly and EuroGOOS Executive Directors Board (including both at physical/virtual meetings and in writing);
● Regularly reviewing the membership of the task team (e.g. once a year);

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[1] http://eurogoos.eu/about-eurogoos/members

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Observing System

- Regularly liaise with the EuroGOOS Office to follow up on the task team's alignment with the other EuroGOOS activities (at least monthly);
- Represent the task team at external meetings.

4.2 Members nomination and selection process, mandates, responsibilities

Members are selected based on a call for nominations to the EuroGOOS members. If there is not enough expertise within the EuroGOOS member organizations, task team members can be selected through an external call for expression of interest or direct invitation.

Members are selected based on the pool of nominations by the chair and the EuroGOOS Office, keeping in mind the spread and representativeness in expertise, geographical representation and the gender balance of the group.

Members do not have an established mandate. However, membership is reviewed by the chair and the EuroGOOS Office on a regular basis and can be terminated if the member does not fulfil the below responsibilities.

Members' responsibilities are to:

- Participate in the task team activities;
- Deliver outputs as required, orally or in writing, in a timely manner;
- Represent the activity at external meetings, upon agreement with the chair and the EuroGOOS Office;
- Attend task team meetings;
- Follow-up on the developments related to the task team's activity, to ensure the task team's work is timely and topical.

5. Mode of Operation

The terms of reference for the task team are developed by the EuroGOOS Office in liaison with the chair, and submitted first to the EuroGOOS Directors Board and then to the EuroGOOS General Assembly for approval.

Once approved at the EuroGOOS General Assembly, the task team chair and the EuroGOOS Office launch a call for member nominations (see item 3.2).

When the membership of the task team is established, the task team is regarded as operational. EuroGOOS Office oversees the communication related to the task team activities. To this end, the task team implementation plan should be cognisant of the EuroGOOS communication strategy.

The team operates based on its terms of reference and annual implementation plans. Its activities are reviewed at the EuroGOOS Executive Directors Board meetings (three times a year) and the EuroGOOS General Assembly (annually).

6. Deliverables

The task team provides a platform for exchange of expertise, relevant scientific publications, and generation of strategic advice in the area of the task teams's consideration. The task team contributes data, publications, and relevant information to the common FB TT website. The FB TT organizes regular workshops, establishing interfaces with communities outside of those of the task team, delivering strategic publications and reports. A list of envisaged deliverables is prepared at the task team kick-off meeting and is updated as the activity develops.

7. Indicative Timetable (Gantt chart)

The below template is indicative. It will be prepared based on the above guidelines and the implementation plan.

	01/18	7/18	1/19	7/19	1/20	7/20	1/21	7/21
Terms of Reference	X							X
Selection of Chair / co-Chair	X							
Approval by Exec. Board	X							
Approval by General Assembly	X							
Call for member nominations	X							X
EMODnet Phase 3: promoting FerryBox activities in the context of coordination, to fill gaps in key areas, supporting funding of existing systems	X	X	X				X	
Seek funding for joint/coordination activities	X	X	X	X	X	X	X	X
Identify other funding possibilities for network activities	X	X						
FerryBox workshops every 1.5 years			X				X	
Other participation in between (for example in JCOMM, EGU, ICES, EEA, HELCOM, OSPAR, …)	X	X	X	X	X	X	X	X
Template for key research questions around the use of FerryBox systems	X	X						
Identify specific added value of FerryBox products that can be useful for specific stakeholders	X	X	X	X	X	X	X	X
How to coordinate FerryBox activities/measurements to address long-term environmental change	X	X	X	X	X	X	X	X