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21-23 May 2024 Lisbon, Portugal

Open session

Agenda Item O6: Working Group Reports

Document O6.1: Working Group Reports



Status Report for the EuroGOOS General Assembly 2024

Reporting period: May 2023-April 2024

EuroGOOS body: Working Group

Full title: Biological Observation Working Group

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Current members, affiliation and country

- *Klaas Deneudt Flemish Marine Institute Belgium
- *Nina Dzhembekova Institute of Oceanology-BAS Bulgaria
- *Hans H Jakobsen Aarhus University Denmark
- *Jun She Danish Meteorological Institute (DMI) Denmark
- *Sirje Sildever Tallinn University of Technology Estonia
- *Kaisa Kraft Finnish Environment Institute SYKE Finland
- *Lucie Cocquempot French Research Institute for Exploitation of the Sea (Ifremer) France
- *Lionel Guidi CNRS France
- *Ioulia Santi European Marine Biological Resource Centre (EMBRC) France
- *Julia Uitz CNRS:Laboratory of Villefranche France
- *Nicolas Pade European Marine Biological Research Centre (EMBRC) France, Pan-European
- *Pier Luigi Buttigieg GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel Germany
- *Klas Ove Moeller Helmholtz-Zentrum Hereon (Hereon) Germany
- *Costas Frangoulis Hellenic Centre for Marine Research (HCMR) Greece
- *Francis X O Beirn Marine Institute (MI) Ireland
- *Isabella Buttino Italian National Institute for Environmental Protection and Research Italy
- *Daniele Iudicone Stazione Zoologica Anton Dohrn Naples Italy
- *Antonio Cascella National Institute of Geophysics and Volcanology (INGV) Italy
- *Mauro Celussi National Institute of Oceanography and Experimental Geophysics (OGS) Italy
- *Iveta Jurgensone Latvian Institute of Aquatic Ecology Latvia
- *Wenche Eikrem Norwegian Institute for Water Research (NIVA) Norway
- *Helena Hauss Norwegian Research Centre (NORCE) Norway
- *Andreja Ramšak National Institute of Biology Slovenia
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- *Maite Louzao AZTI Spain
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- *Markus Lindh Swedish Meteorological and Hydrological Institute Sweden
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- *Veronique Creach Centre for Environment, Fisheries and Aquaculture Science (Cefas) United Kingdom
- *Susan Evans National Oceanographic Centre United Kingdom *Martin Edwards Plymouth Marine Laboratory United Kingdom
- *Vera Fonseca Centre for Environment, Fisheries and Aquaculture Science (Cefas) United Kingdom

Website

https://eurogoos.eu/biological-observations-working-group/

Objectives:

- 1. Agree on an initial set of SOPs and data standards for the observation of life via eDNA and multiomics protocols. Recommendations for their use will also be proposed, showing the strength of each and in which context they are the most useful. How these data may contribute the most effectively to EOVs and EBVs will also be evaluated and recommendations made for best practices.
- 2. Standardisation and SOPs for Imaging will be taken forward. Today, imaging sensors of all kinds are used to monitor changes of plankton community composition and biomass from coastal to open Ocean.
- 3. Recommendations for new sensor and autonomous platform development and integration with existing approaches will be formulated and implemented.
- 4. To ensure that the working group does not create a regional silo, we will continuously liaise with the Biological and Ecosystems EOV Panel (GOOS) and the EBV development groups (GEO BON). Endorsement of SOPs targeting these EVs will be sought, while the WG will propose advancements to the respective Panels, as they arise.
- 5. Frugal science approaches are promoted. Due to rapid innovation, biological observations are often expensive and rely on advanced technology.
- 6. The WG will develop a structured obsolescence and on-boarding process for all technologies, methods, and operational models. This is key to protecting the integrity of long-term data series while allowing the integration of novelty. All such processes will include overlapped phase-in phase-out processes to ensure the impact of each replacement is well characterised and acceptable.

Relevance to the EuroGOOS Strategy:

- 1. Stimulate communities of practice: The creation of a biological observation working group will create an observatory-grade rallying point for the fragmented biological observation community and connecting it to oceanography;
- 2. Advocate for coordinated and integrated European ocean observing and operational oceanography: through workshops and discussions standards, best practices, and standard operating procedures (SOPs) will be defined and submitted to IOC-UNESCO Ocean Best Practices System, creating a coordinated robust and standardised framework to systematically advance continental biological observation in an operational context. The integration of BIOWG will also contribute to EuroGOOS capacity to observe and predict biodiversity, climate change, biological resource management and Blue Bioeconomy sectors;
- 3. Strengthen and expand partnerships: BIOWG will enhance EuroGOOS partnerships by engaging new community of users and partners that will potentially bring new members to the organisation, while greatly expanding on the current activities and areas of impact.;
- 4. Promote sustainability across the value chain of operational oceanography and ocean observing: BIOWG will identify new value chains in biologically focused operational oceanography and observing not previously considered, expanding the remit and impact of EuroGOOS. Secondly, BIOWG will promote sustainable delivery across these chains by operationalising and coordinating the currently scattered efforts in European biodiversity observation, creating a strong European biological observation network and community.
- 5. Mobilise the public on the importance of the ocean and oceanographic services: The long-term aspect of biological observatories offers an opportunity to engage in activities that go beyond the traditional project lifetimes. It has long been the ambition of biological observatories to be integrated into school and university curricula, as well as develop community-focused outreach programmes by building relationships over time. Furthermore, the "frugal science" approach that the working group will explore will also lend themselves well to citizen science and school project initiatives. This will provide additional tools to engage citizens in understanding the importance of life in the ocean and its relevance to them.

Key achievements in the reporting period (May 2023-April 2024):

The biological observation working group (BIOWG) have struggled to gather people for meetings and contribute to the planned documents. The recommendation on use of the genomic and imaging tools (Reports 1 and 2) have been outlined and the genomics tools recommendations are about 50% complete. It was collectively decided to combine the two document to produce one single, document to provide a coherent set of recommentations for the structuring of imaging and DNA-based biological observation.

Bottlenecks or obstacles during the reporting period (May 2023-April 2024):

The biological working group has encountered consistent difficulties in mobilising and bringing people together to effectively contribute to the WG. The BIOWG lost considerable momentum between the

departure of the previous EuroGOOS Science Officer and the arrival of a new person in that position. It is clear that the group was highly dependent on the Science Officer as an effective facilitator of meetings. Things were further complicated by the departure of the BIOWG Vice-Chair due to health issues. A new vice-chair was subsequently elected but after a considerable gap and with a single candidate presenting themselves for the position. The term has now ended for the original chair of the BIOWG. A second vice-chair has been elected but again, with a single candidate who was invited to take up the position. There is very poor involvement in the group and only about 25% of the group membership is active. There is a chronic lack of human resources in marine science in Europe at the moment, meaning there is no spare capacity to take on extra roles and responsibilities by the WG membership. This pattern is being seen across many initiatives relying on input from researchers in their spare time.

Main priority areas (2024-2025):

The main priorities for the next 12 months will be to remobilise the BIOWG and finalise the document on Recommendations for Implementation of Genomics and Imaging technologies in marine observation. The group is aiming to finish this document by September, though progress is slow.

Other major activities (2024-2025):

Two further reports are planned for the perio 2024-2025:

- 1) Recommendations for new sensors for biological observation
- 2) Barriers to use of biological data in Modelling of marine systems

Meetings during the reporting period (May 2023-April 2024):

One meeting was held from 25-26 March, 2024. Several attempts were made to find a suitable date. Finally the meeting was very poorly attended with only 8 participants in person and up to 4 online.

Next planned meetings (2024-2025):

A series of online meetings are now scheduled every month online to work on the current report.

Links and synergies with other EuroGOOS ROOS/Working Groups/Task Teams:

Links to the Data and Technology working groups are foreseen.

Links and synergies with non-EuroGOOS initiatives:

None planned at this time.

Suggestions:

In the case of the BIOWG, there was a noticible difference in our ability to organise and meet with a regular support from the EuroGOOS office. The time and effort required to find dates, organise meeting, and all the practicalities around it are very time consuming and this is often where the attempts to meet fail. A continuous, engaging, and proactive support from EuroGOOS office is crucial to make the working groups a success. Scientific and technical input, including a proactive linking to other working groups and task teams, initiatives of particular interest to EuroGOOS, or strategic priorities would be welcome, especially as it is much more effective when this is coordinated centrally.



Status Report for the EuroGOOS General Assembly 2024

Reporting period: May 2023-April 2024

EuroGOOS body:	Working Group
Full title:	Ocean Literacy Working Group (OLWG)
Co-Chair 1:	Yolanda Koulouri, HCMR, Greece
Co-Chair 2:	Angela Pomaro, CNR, Italy
Co-Chair 3:	Dina Eparkhina, EuroGOOS (ex officio)

Members

The EuroGOOS Ocean Literacy Working Group brings together experts from 25 organizations in 11 countries and 4 organizations with a pan-European or global remit.

Pan-European/International

- Joint Centre for Oceanography and Marine Meteorology in situ Observations Programmes Support (OceanOPS) / Ocean Observers Working Group – Emanuela Rusciano
- Euro-Argo ERIC / Ocean Observers Working Group Claire Gourcuff
- Mercator Ocean International Gratianne Quade
- EuroGOOS UN Ocean Decade Action 'Scientists for Ocean Literacy' Dina Eparkhina Action Coordinator

Belgium

• Royal Belgian Institute of Natural Sciences (RBINS), Belgium – Kelle Moreau

Croatia

• Institute of Oceanography & Fisheries (IZOR), Croatia – Daria Ezgeta Balic

Greece

• Hellenic Centre for Marine Research (HCMR), Greece – Panayota (Yolanda) Koulouri

France

- French Research Institute for Exploitation of the Sea (Ifremer) Lucie Cocquempot
- Sailing Hirondelle Louise Ras

Ireland

- Irish Ocean Literacy Network, Ireland Noirin Burke
- Marine Institute, Ireland Rachael Brown
- Camden Education Trust, on behalf of Marine Institute, Ireland (Explorers Education programme) – Cushla Dromgool-Regan

Italy

- National Research Council (CNR), Italy Angela Pomaro
- Euro-Mediterranean Center on Climate Change (CMCC), Italy Paola Agostini
- Institute for Environmental Protection and Research (ISPRA), Italy Elena Giusta and Marta Mancazeichen
- National Institute of Oceanography and Applied Geophysics (OGS), Italy Donata Canu and Flisa Banchi
- National Institute of Geophysics and Volcanology (INGV), Italy Marina Locritani

Norway

• Norwegian Institute for Water Research (NIVA), Norway – Louise Valestrand, Kai Sørensen, and Andrew King

Portugal

+ATLANTIC CoLAB, Portugal – Tiago Garcia

Spain

- AZTI tecnalia, Spain Carolina Alonso and Maria Calvo Uyarra
- Institute of Oceanography (IEO), Spain Mari Carmen García, Pablo Lozano
- Balearic Islands Coastal Ocean Observing and Forecasting System (SOCIB), Spain Veronica Ortiz, Llúcia Ribot, and Rosa Rodríguez

Sweden

• Swedish Institute for the Marine Environment – Kajsa Tönnesson

UK

- Met Office, United Kingdom Ana Aguiar
- National Oceanography Centre (NOC), UK Peter Ryde

Web page

https://eurogoos.eu/ocean-literacy-wg/

Objectives

- Upscale the national efforts in Europe and contribute to broader Ocean Literacy efforts globally, providing visibility and recognition of the Ocean Literacy activities by the EuroGOOS members and community, at national, European, and global levels;
- Raise awareness about the ocean observing and forecasting needs, challenges, and opportunities through public and policy engagement;
- Contribute to international Ocean Literacy in link with the UN Ocean Decade and its Ocean Literacy Framework and realise the EuroGOOS Ocean Decade project "Scientists for Ocean Literacy";
- Join efforts in collaborative projects or initiatives and help foster international partnerships;
- Deliver an improved Ocean Literacy resources platform, expanding the existing EuroGOOS
 Ocean Literacy resource library.

Relevance to the EuroGOOS Strategy

OLWG underpins all strategic objectives of EuroGOOS, specifically, the OLWG:

- Advances the communities of practice on ocean literacy and unites and enhances the work
 of marine scientists and oceanographers as ocean advocates to society (EuroGOOS Strategy
 Objective 1);
- Supports advocacy for support and coordination of European ocean observing and operational oceanography, connecting with other EuroGOOS WG and Task Teams (EuroGOOS Strategy Objective 2);
- Strengthens and expands partnerships, for example through the EU4Ocean coalition and EU projects such as DOORS, and collaborates regularly with UNESCO, in addition EuroGOOS
 Ocean Decade project Scientists for Ocean Literacy is an avenue to expand partnerships in
 Europe and globally (EuroGOOS Strategy Objective 3);
- Promotes sustainability in ocean observing and operational oceanography emphasizing them as key societal services, for example, through policy brief Ocean Literacy in European Oceanographic Agencies in the UN Decade of Ocean Science for Sustainable Development 2021-2030 (2021) (EuroGOOS Strategy Objective 4);
- Mobilizes the public on the importance of the ocean and ocean knowledge and services through events with adults and children implemented by the OLWG members and their joint efforts leveraged at pan-European and international levels (EuroGOOS Strategy Objective 5).

Key achievements in the reporting period (May 2023-April 2024)

- Presentation at the Ocean Race Grand Finale, June 2023 news piece
- Presentation at the IUGG 2023, July 2023 news piece
- Ocean Literacy session and special event at the Galway Aquarium, at the 10th EuroGOOS International Conference, October 2023 – news piece
- Development of survey on ocean literacy in European oceanographic agencies to be launched in May 2024, March-May 2024
- Co-organisation of side event of the UN Ocean Decade Conference 'Diving from local to global ocean literacy', April 2024
- Acceptance of OLWG chapter in the upcoming two-book series, "Ocean Literacy: The Foundation for the Success of the Ocean Decade," to be published by Springer Nature (May 2024)

Bottlenecks or obstacles during the reporting period (May 2023-April 2024)

Some members are not responsive.

Main priority areas (2024-2025)

- Co-organize session at UN Ocean Conference 2024 (completed)
- Develop and launch survey on societal engagement (OL) activities in European oceanographic agencies (developed; launch pending)
- Attend the global OL conference (UNESCO), June 2024
- Develop a paper with the results of the abovementioned study
- Develop a training for scientists to engage in OL (through the EU4Ocean project)
- Youth Engagement on Oceanography (EU4Ocean)
- Session / side-event at EMSEA 2024

- Book chapter for Springer Nature
- Report to EuroGOOS Board and GA as required
- Submit report on Scientists for OL project to the IOC

Meetings during the reporting period (May 2023-April 2024)

Several shorter (below 1 hour) and longer (2 hours) meetings depending on the agenda items, throughout the year.

Next planned meetings (2024-2025)

Online meetings will be held approximately quarterly. An on-site meeting is considered in 2024 (group has never met fully in person since the establishment of the EuroGOOS OL Network (predecessor of OLWG) in 2019.

Links and synergies with other EuroGOOS ROOS/Working Groups/Task Teams

OLWG members engaged within their organisations with experts from other EuroGOOS groups. This allowed informing each other of the EuroGOOS activities and raising the visibility of EuroGOOS within these organisations.

Links and synergies with non-EuroGOOS initiatives

Close links exist with UNESCO IOC (several activities co-organised in the past), European Commission's EU4Ocean, DOORS Black Sea project (establishment of the DOORS OL Network).

Suggestions

As suggested in the last GA report, OLWG would like to see an easy to find page and a simple URL address for its general public-oriented activities on the new EuroGOOS website – notably the OL resources page: https://eurogoos.eu/ocean-literacy-resources/