

About this document

This EuroGOOS activity was established upon the decision of the Board of Directors and subsequent call to the EuroGOOS member organizations to nominate experts from their institutions. In June 2019, the first terms of reference (ToR) were submitted to the EuroGOOS members together with the call for nominations. The activity was formed in the same month and since then has been operational.

The activity on ocean literacy was first established as a EuroGOOS expert group. In the first six months of the work, more organizations wished to join while the representation on the group has become not at the level of individual experts but rather at the level of the institute (with several representatives from the same organization sitting on the group). To reflect the institutional representativeness rather than individual, and the pan-European and inclusive remit of the activity, the group started to use the term 'network', rather than 'expert group'.

These ToR have been developed with a two-fold objective: (i) request EuroGOOS members to agree on the place of this activity in the structure of EuroGOOS; and (ii) develop the next stage of the group's work, since the objectives of the first ToR have been achieved. Following a discussion between the EuroGOOS Board of Directors and the members of this activity, it has been proposed to establish a EuroGOOS Working Group on Ocean Literacy.

In 2020, EuroGOOS responded to the IOC call for Decade Actions with a proposal on Ocean Literacy. The proposal was accepted as a Decade project. Once more details on the proposed links of this Decade project with the Decade programmes or other synergies are proposed by the IOC, the EuroGOOS Ocean Literacy work plan will be updated.

This document lays out the *raison d'être*, major objectives, and key deliverables of the activity for the coming three years. A detailed annual work plan will be delivered by the group to reflect how the objectives outlined in the ToR will be implemented.

The actions and successes of this activity between June 2019 and May 2021 are presented in annex 1. Particular attention should be given to the EuroGOOS policy brief 'Ocean Literacy in European Oceanographic Agencies: EuroGOOS recommendations for the UN Decade of Ocean Science for Sustainable Development 2021-2030' released on 5 May 2021 at the EuroGOOS Conference (please read a news piece [here](#)). This policy brief was developed from the work of the EuroGOOS Ocean Literacy Network, including the first known pan-European survey of the Ocean Literacy activities in oceanographic and met agencies. The first ToR of the activity (provided to the EuroGOOS members in June 2019) are enclosed in annex 2.

1. Rationale and link with EuroGOOS strategic priorities

‘The vast majority of humanity is unaware of the many benefits they derive from the ocean and its ecosystems, or how their actions affect ocean health and how changes in ocean health in turn affect their well-being and survival. As a result, ocean science is rarely funded at the level needed to adequately inform sustainable development decision-making.

The Decade will promote a programme of Ocean Literacy that will raise awareness of the services provided by a healthy ocean ecosystem, the ways in which those services are currently under threat, the science needed to redress those declines, and the ways in which stakeholders and citizens can act to improve the health of the ocean and the planet...’

Pendleton et al, May 2019, white paper by the Executive Planning Group of the UN Decade of Ocean Science for Sustainable Development (2021-2030)

The essence of Ocean Literacy is increasing the knowledge and understanding the ocean’s influence on us and our influence on the ocean, as a pivotal concept for living and acting sustainably. Ocean Literacy demonstrates the value of ocean science for sustainable economy and policy, helping to create a common baseline of understanding and a common set of values. This is critical for stakeholders who jointly address complex issues characterizing the marine environment and support decisions on responsible environmental management and sustainable blue economy.

The success of the United Nations Decade of Ocean Science for Sustainable Development 2021-2030 will rely on sustained and fit-for-purpose ocean observing and derived oceanographic information and services. Ocean Literacy tools and approaches are needed to increase societal and policy awareness of the needs, challenges, and opportunities of the ocean observing enterprise. Ocean Literacy is also important for achieving sustained operations and funding of the ocean observing systems maintained predominantly by public funding.

The EuroGOOS Ocean Literacy Network is supporting EuroGOOS 2030 strategic objectives, in particular objective 1 ‘Stimulate communities of practice’, 4 ‘Promote sustainability across the value chain of operational oceanography and ocean observing’, and 5 ‘Mobilise the public on the importance of the ocean and oceanographic services’. Furthermore, advocacy is a key objective in the Global Ocean Observing System 2030 Strategy with Ocean Literacy being part of this portfolio.

2. Aim and Objectives

The EuroGOOS Ocean Literacy Working Group will continue fulfilling the objectives of the ToR for the Ocean Literacy Expert Group (June 2019). The Working Group will realise the Ocean Decade project objectives while being aligned with other relevant initiatives in Europe and worldwide and engage more fully with the other EuroGOOS bodies, namely, the ROOS, task teams and working groups, towards a more comprehensive and integrated EuroGOOS collaboration on ocean literacy.

The main objectives of the EuroGOOS Ocean Literacy Working Group are to:

- 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 on 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 on the website (<http://eurogoos.eu/ocean-literacy-resources/>).

3. Expected Impact and Target Audience

The following key actions are proposed, while a detailed and comprehensive annual working plan will reflect the full list of actions and the roles in the working group to realise these actions. The working group will monitor the implementation of the actions through regular meetings and report progress to the EuroGOOS General Assembly.

The work will include the following key actions:

- Implement the Ocean Literacy EuroGOOS platform (<http://eurogoos.eu/ocean-literacy-resources/>) with new contributions from the EuroGOOS Ocean Literacy Working Group and other relevant sources.
- Embed citizen science more fully in the activities of the EuroGOOS Ocean Literacy Working Group aligned with the EuroGOOS 2030 Strategy Implementation Plan, under objective 5.
- Make available publicly information about the Ocean Literacy activities, events, and new outputs in the EuroGOOS community.
- Develop a Decade project on Ocean Literacy, further to the proposal submitted to the IOC.
- Develop guidelines for monitoring and evaluation of Ocean Literacy activities which can be used as best practices among the working group's members and beyond.
- Continue being a member of the EU4Ocean Ocean Literacy coalition, support their work developing a European network of Blue Schools, and strengthen European regional cooperation on Ocean Literacy.
- Promote national, regional, and pan-European cooperation in Ocean Literacy and participate in local, regional, European, and international events.
- Continue to survey the Ocean Literacy activities in European oceanographic and met agencies to include more agencies and countries and help these agencies compare, analyse, and improve their work, leveraging the pan-European added value of cooperation, experience sharing, and best practices.
- Stimulate a community of practice among the Ocean Literacy practitioners in the framework of oceanographic and met institutes, sharing experience and transferring knowledge.

The following target audiences have been identified:

- Ocean Literacy practitioners in the EuroGOOS community and beyond;
- EuroGOOS members (all levels including heads of institutes), other working groups, task teams, and regions (ROOS);
- Research centres, institutes, universities, and other scientific institutions;
- National, regional, and international Ocean Literacy programmes, networks, or projects;
- Marine science education associations (EMSEA, NMEA, COSEE, etc);
- Media and mediators;
- Science communicators;
- Opinion leaders or influencers;
- Government and inter-governmental institutions (local, national and international) and environmental management experts;
- Educational institutions;
- European Union institutions (Commission, Parliament, agencies);
- NGOs, associations and other organizations dedicated to the promotion, development and diffusion of scientific research and raising the public awareness of the challenges and opportunities of the ocean;

- Sectors that can enrich Ocean Literacy work in the oceanographic and met agencies, e.g. art and creative sector, aquaria networks, recreation sectors, citizen scientists;
- Companies in the blue economy;
- General public.

4. Composition and Operation

Members:

- Nominated through a call to EuroGOOS members;
- Other organizations can join via invitation by the working group co-chairs and EuroGOOS Office;
- Meet twice a year – Spring and Autumn (with more intersessional meetings if needed);
- Virtual co-working to deliver on tasks defined in the work plan.

2 Co-Chairs:

- Nominated from the list of working group members, co-chairs should be from EuroGOOS member organizations;
- Share responsibility for chairing;
- Elected by the members at the 2nd meeting (after the 1st meeting when the ToR and working plan are approved);
- Mandate: 3 years renewable once, upon re-election for a two-year term.

Support:

- EuroGOOS Office will provide a dedicated support to the working group.

5. Mode of Operation

Upon approval of these ToR by the EuroGOOS General Assembly, a call to EuroGOOS members will be issued to expand the group by including more EuroGOOS member institutes (currently, 17 EuroGOOS members are already part of the activity, out of 44 in total). EuroGOOS ROOS members will also be invited to join.

The members of the working group will commit to:

- Participate in the working group activities;
- Attend working group meetings;
- Deliver outputs as required, orally or in writing, in a timely manner;
- Represent the working group at external meetings, if needed and as agreed by the working group;
- Follow-up on the developments related to the working group's activities, to ensure the work is timely, topical, and cognisant of the broader landscape.

All members of the working group will meet twice a year. The members meeting will develop annual work plans with targets, outputs, and impact monitoring matrix identified, and follow up on the status of work plans.

As any other activity of EuroGOOS, the Ocean Literacy group has been reporting to the EuroGOOS General Assembly since its establishment in 2019, who has been reviewing their work at their annual meetings. The EuroGOOS Ocean Literacy Working Group will continue to report to the EuroGOOS General Assembly.

6. Deliverables

The deliverables have been outlined in the list of key actions under the impact session above. Each year a new work plan will be developed based on the ToR. Outputs and impacts will be tracked according to the following key indicators:

- Number of activities organised or to which the working group has contributed;
- Number of resources produced or displayed through the EuroGOOS activities;
- Number of views and downloads from the EuroGOOS Ocean Literacy web pages;
- Number of synergies and collaborations established.

7. Indicative Timetable (Gantt chart)

The below chart outlines the key milestones for the duration of the first year. Each annual work plan will include updated Gantt charts.

	May 2021	Aug 2021	Sept 2021	Oct 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022	April 2022	May 2022
New Terms of Reference	X									
Approval by EuroGOOS General Assembly			X							
Call for new member nominations			X							
Members' meeting				X						
Decade project plan				X						
Survey (two months)				X						
Members' meeting									X	
Survey results analysed							X			
Updated resource library									X	
Report at EuroGOOS GA										X

As outlined in the Gantt chart, the 1st meeting of the group as a EuroGOOS Ocean Literacy Working Group, is foreseen as a virtual event in September 2021. It will be held to bring together all representatives of this group, approve the new ToR, and introduce new members to the activities of the working group. The 2nd meeting is tentatively foreseen as a presential event hosted by the IEO, Spain, in Malaga in October 2021. At this meeting it is foreseen to hold elections for the working group co-chairs.

Annex 1 Results and projects of the EuroGOOS Ocean Literacy Network, June 2019 – May 2021

Some images are hyperlinked to open the resource



Ocean Literacy demonstration at the OceanObs'19 exhibition by EuroGOOS Ocean Literacy Network member AZTI, Spain



EuroGOOS Ocean Literacy poster at OceanObs'19 Ocean Literacy resources library on EuroGOOS website



Contribution of materials for the resource pages of the 1st UNESCO Ocean Literacy Virtual Summit (EuroGOOS was co-organizer of the Summit)

Our #OceanLiteracy experts have united to make your #homeschooling more fun!



Follow #EuroGOOS_OL to dive into our multi-lingual resources!



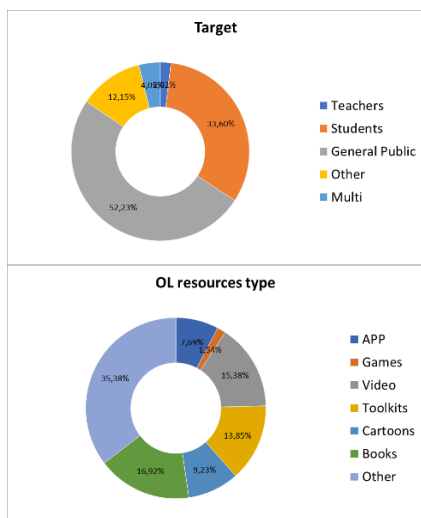
Inclusive communication – How can Ocean Literacy be Accessible to All?

2 December 2020 at 14:00 CET

Programme

1. **Setting the scene and sharing experiences:**
 - o *Vociamo in Poeditto* Paola Agoslini
 - o *Alfabetarim - The Ocean in Senegal* Angèle Pomaro
2. **Hearing from accessibility expert – keynote:**
 - o Valeria Bottalico, TBA21-Academy's Ocean Space

(above) Home-schooling Ocean Literacy Twitter campaign during the Corona-19 pandemic lockdown in Spring 2020



Examples of results of the survey of 11 organizational responses on European Ocean Literacy in oceanography as of December 2020



Quotes from EuroGOOS Ocean Literacy Network members

“Explaining my research in simple terms and answering questions from non-experts actually give me some new insights.” Yolanda Koulouri, Hellenic Centre for Marine Research (HCMR), Greece

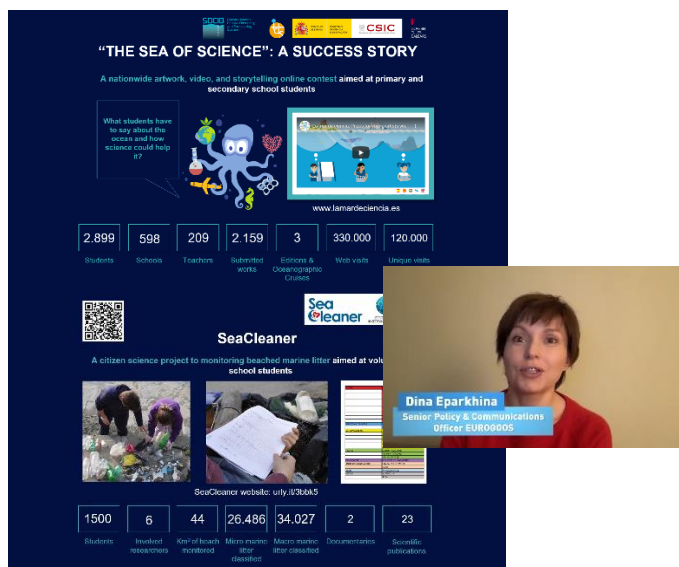
“It is so rewarding to hear the participants of our event tell us how important they found the scientific work.” Kai Sørensen, Norwegian Institute for Water Research (NIVA), Norway

“As scientists, we are best at science. We love to work with artists and communicators through ocean literacy. This gives new dimensions to our research.” Angela Pomaro, National Research Council (CNR), Italy

“It is fantastic that EuroGOOS gave a voice to this diversity of ocean literacy activities in national oceanographic research.” Lucy Cox, National Oceanography Centre (NOC), UK

Website: <https://eurogoos.eu/ocean-literacy/>

(above) Workshop on Ocean Literacy Accessibility to All at international ocean science communication conference CommOCEAN, Dec. 2020 with keynote from TBA-21-Academy’s Ocean Space



EuroGOOS contribution to the IOC training on Ocean Literacy via the OceanTeacher Global Academy, February 2021

This new policy brief, approved by the EuroGOOS members and launched on 5 May 2021, gives recommendations on how to enhance Ocean Literacy activities in oceanographic agencies. The brief was developed from the work of the EuroGOOS Ocean Literacy Network and a survey the network conducted across 11 organizations in Europe. The survey unveiled an outstanding diversity of activities, demonstrating that Europe is advancing towards making Ocean Literacy part of the mandate of oceanographic agencies and meteorological offices.

Annex 2: First ToR of the EuroGOOS Ocean Literacy Activity (June 2019)



Terms of Reference for EuroGOOS Ocean Literacy Members' Expert Group and Sharing Platform

About this document

These terms of reference outline the objectives and work plan for a EuroGOOS activity on Ocean Literacy (OL), aiming to display the EuroGOOS member organizations' OL activities in a common website, connect the efforts through sharing information, and investigate synergies, reuse or repurposing of materials as well as joint actions.

It is proposed that the activity is operated by EuroGOOS office and a group of experts from the EuroGOOS member institutes. This EuroGOOS OL expert group will act as the main strategic body of the activity, whereas all EuroGOOS members will be involved in a transparent and open basis. EuroGOOS Board of Directors and General Assembly will regularly review the expert group's activities.

1. Background, Rationale, and Link with EuroGOOS strategic priorities

Ocean Literacy has been recognized as a strategic enabler to engaging with policy and society on the topics of ocean sustainability, ocean observations, and the use of oceanographic products and services. Ocean Literacy is a cross-cutting priority area in the UN Ocean Decade 2021-2030.

As stated in the white paper by the UN Ocean Decade Executive Planning Group: 'The vast majority of humanity is unaware of the many benefits they derive from the ocean and its ecosystems, or how their actions affect ocean health and how changes in ocean health in turn affect their well-being and survival. As a result, ocean science is rarely funded at the level needed to adequately inform sustainable development decision-making. The Decade will promote a programme of Ocean Literacy that will raise awareness of the services provided by a healthy ocean ecosystem, the ways in which those services are currently under threat, the science needed to redress those declines, and the ways in which stakeholders and citizens can act to improve the health of the ocean and the planet...' (Pendleton et al, May 2019).

EuroGOOS has been involved in Ocean Literacy (OL) among others through the activities by the IOC-UNESCO, the US Consortium for Ocean Science Exploration and Engagement (COSEE), and the IOC-WMO Joint Committee for Oceanography and Meteorology (JCOMM). In 2017, EuroGOOS published an OL child book 'The Ocean is My Home' (Eparkhina and Lehtonen, 2017), which has since been translated into several European languages through the in-kind contributions from the EuroGOOS members and peer networks and presented in various schools as well as science policy meetings, including the Our Ocean Conference 2017, Malta. The case study of the book's uptake was presented at the IOC-UNESCO OL Conference in Venice in December 2017 as a best practice on bridging the gap between policy relevance and policy awareness of the ocean's importance, services, observing needs, and threats. This experience clearly demonstrated that the OL discourse for policy or for general public is ultimately the same, however, policy/decision-makers also need to see a clear relevance of the discourse to their specific objectives. The 'Ocean Is My Home' book has achieved this double objective of linking the story with the policy objectives, while at the same time displaying the OL principles for general public and young readers.

Realising the strategic importance of OL and its policy relevance, the EuroGOOS Board of Directors approved a EuroGOOS activity on OL which will support the individual EuroGOOS members' OL and public and policy engagement efforts and help upscale those through the EuroGOOS influence at pan-European and global levels (Global Ocean Observing System and IOC OL activities). This activity will serve the EuroGOOS general objective in establishing closer links with its members and providing tangible support to the members' activities in a strategically relevant area. It is expected that the success of this activity will generate spin-off effects that will reverberate across other EuroGOOS areas of strategic interest.

2. Aim and Objectives

The EuroGOOS OL Expert Group has been formed from the pool of EuroGOOS member organizations' OL and communication experts. The expert group works to:

- Develop the EuroGOOS member sharing platform for OL activities, including advice on the target audiences, expected impacts, and operational capacities of the platform;
- Provide inputs on the platform's content, including ideas, textual inputs, images and multimedia, etc;
- Support dissemination of information about the expert group's activities within and beyond their organizations;

- Jointly develop contributions to European or international events related to the expert group's activities, e.g. posters or dissemination materials;
- Help attracting the broad EuroGOOS membership and beyond to the activities and outputs of the expert group.

3. Expected Impact and Target Audience

It is expected that the activity will deliver an attractive online platform for EuroGOOS members' OL activities which will serve as a catalyser to:

- Visibility and recognition of the members' OL efforts at pan-EU and global levels;
- Reusing, repurposing, adapting or translating each other's materials;
- Joining efforts in collaborative projects or initiatives;
- Contributing to the European role in international OL in link with the Ocean Decade's developments.

In view of these expected impacts, the following audiences should be targeted:

- Pan-EU networks with an interest in OL;
- European Commission and European Parliament;
- Subnational regional authorities;
- Schools and teachers;
- Aquaria;
- NGOs;
- Foundations;
- EuroGOOS members' own management and other departments;
- IOC-UNESCO;
- Global Ocean Observing System Regional Alliances (GOOS regions who are peers to EuroGOOS);
- International organizations and fora, e.g. Consortium for Ocean Science Exploration and Engagement and the IOC-WMO Joint Committee for Oceanography and Meteorology (JCOMM), and others;
- Other disciplines, e.g. arts.

4. Composition and Operation

The expert group is composed of the OL or communications experts from the EuroGOOS member organizations and is led by the EuroGOOS Policy and Communications Officer.

Members were selected based on a call for nominations to the EuroGOOS member organizations in June 2019. Where deemed necessary throughout the lifetime of the expert group, experts from non-EuroGOOS-member organizations may be invited.

Members will be selected keeping in mind the spread and representativeness in expertise, geographical representation and the gender balance on the group as possible.

Members do not have an established mandate duration unless the activity is terminated. However, membership is reviewed by the EuroGOOS office, Board of Directors and General Assembly on a regular basis and can be terminated if the member does not fulfil the below responsibilities.

Members' responsibilities are to:

- Participate in the expert group activities;
- Attend expert group meetings;
- Deliver outputs as required, orally or in writing, in a timely manner;
- Represent the activity at external meetings, if needed and as agreed by the expert group;
- Follow-up on the developments related to the expert group's activities, to ensure the work is timely, topical, and cognisant of the broader landscape.

5. Mode of Operation

The membership of the expert group was established in June 2019 and the group became operational. A webex meeting was organized on 28 June 2019 to agree the terms of reference presented here, the membership, and kick-start the activities.

The group operates based on its terms of reference and annual implementation plans. Its activities will be regularly reviewed at the EuroGOOS Executive Directors Board and the EuroGOOS General Assembly.

The activity is financially supported by the EuroGOOS office budget. Expert group members' time and any travel associated with the expert group's work will be supported by the respective EuroGOOS member organization in kind.

6. Deliverables

The main deliverable of the expert group activities will be an online EuroGOOS member sharing platform for OL.

Once the platform is launched, other activities will be considered in the next stage of the expert group. To maximize the strategic relevance of the activity, the platform can:

- Obtain an official recognition as a contribution to the IOC Ocean Decade preparation (see <https://en.unesco.org/ocean-decade/resources> for guidelines on obtaining IOC Ocean Decade patronage);
- Launch the platform at the SDG14 Conference in Lisbon, 2-6 June 2020.

7. Indicative Timetable (Gantt chart)

The timetable was discussed with the expert group and agreed at the kick-off webex meeting.

	Jun/ 2019	July/ 2019	Aug/ 2019	Sept/ 2019	Dec/ 2019	Feb/ 2020	Mar/ 2020	April/ 2020	May/ 2020	June/ 2020
Terms of Reference	X									
Platform budget approved by EuroGOOS	X									
Call for member nominations	X									
Kick-off meeting	X									
Survey of members' OL activities		X								
ToR presented at the GOOS Regional Alliances Forum; IOC informed about the plans			X							
OD patronage application				X						
Platform mock-up (work start: Sept)					X					
Platform beta version open to EG member inputs						X				
IOC informed about the platform's finalization							X			
Platform final – online								X		
Platform presented at EuroGOOS Assembly									X	
Platform's international launch at SDG14 Conf.										X
Presentations at relevant fora – May/June onwards										