



Topic	H2020 – INFRAIA-2018-2020
Short Title	Eurofleets+
Title	An alliance of European marine research infrastructures to meet the evolving requirements of the research and industrial communities
Project Number	824077
Delivery Date	31.07.2023
Deliverable No	D5.5
Lead Beneficiary	EMSO ERIC
Dissemination Level	Public

D5.5 Map of user needs for research vessel infrastructure



Document information	
Document Name	D5.5 : Map of user needs for research vessel infrastructure.
Document ID	Eurofleets+_D5.5_Map of user needs for research infrastructure_V5
Revision	Version 5
Revision Date	31.07.2023
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Security	Public

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History			
Revision	Date	Modification	Author
V1.0	20.07.2023	First release	Paolo Favali, Valentina Tegas
V2.0	21.07.2023	Second release	Giuseppe Magnifico, Niamh Flavin, George Petihakis, Lorenza Evangelista, Sandra Sá, Sylvia Christodoulaki, Juanjo Dañobeitia
V3.0	24.07.2023	Third release	Niamh Flavin
V4.0	26.07.2023	Fourth release	Sandra Sá, Sylvia, Juanjo Dañobeitia
V5.0	28.07.2023	Final release	Paolo Favali, Valentina Tegas

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Executive Summary

Deliverable 5.5-*Map of user needs for research vessel infrastructure*, enriches the map of stakeholders' needs gathered by the Eurofleets+ consortium outlined in D5.3 with the same title. Indeed, engagement activities and related identified user needs are reported in D5.3 as the first phase of the project Stakeholder Engagement activity and in D5.5 as the second phase. This report 5.5 covers activity from January 2023 to July 2023.

The ultimate goal of mapping users' needs is to collect and assess the dynamic needs and perspectives of stakeholders and user communities to ensure that the relevant marine research infrastructures are coordinated, designed and operated optimally for user's challenging requirements.

D5.1 and its second release D5.6, both named *Strategic Agenda for Stakeholder Engagement*, defined the methodology followed for the identification of the stakeholder categories and the approach adopted to engage them.

In this report, the main results obtained with respect to the previous documents issued, the stakeholder' engagement have been documented and analysed. These results have followed three lines: a) launch of a new survey and analysis of the results; b) participation in main events; c) stakeholders' engagement via Transnational Access (TNA) and Training activities. The results obtained in all the three lines of activity have demonstrated the validity of the strategy adopted in the WP5-*Stakeholder Engagement*.

1 Introduction

Eurofleets+ is "An alliance of European marine research infrastructure to meet the evolving needs of the research and industrial communities", funded by the European Commission's Horizon 2020 Research and Innovation programme. The project facilitates open free of charge access to an integrated and advanced research vessel fleet. The project includes 42 partners and involves the use of 13 global ocean research vessels, 14 regional vessels, 7 Remotely Operated Vehicles (ROVs) and 5 Autonomous Underwater Vehicles (AUVs).

One of the key aims of the Eurofleets+ project is to involve a wide range of stakeholders to provide visibility and information on the operation, development and strategic direction of the European research vessel fleet, and gather information of their specific needs. Eurofleets+ WP5-Stakeholder Engagement is dedicated to this.

Stakeholder dialogue activities were planned throughout the duration of the project. The results of these activities have been described in two deliverables D5.3 and D5.5, both named *Map of user needs for research vessel infrastructure*. D5.3 has described in detail how to engage the different categories of stakeholders and some results obtained, while D5.5 represents an update and the completion of the process of the map of the user needs. The previously issued D5.1 and D5.6, both named *Strategic Agenda for Stakeholder Engagement*, described in detail the methodology followed.

2 New collection of user needs

In the activity reported by D5.3, it was decided to begin the engagement process by involving three categories (i.e., Pan-European Research Infrastructures, Research Institutions and Education, Industry) among the nine selected (details in par. 2.1) f. The next step was dedicated to 1) continue the engagement activity in general, and 2) involve the remaining six categories in particular, as reported in D5.5: EU infrastructure projects and Networks, Organizations and Frameworks; media including science communicators, journalists, and documentarists; general public and representatives of national and European non-governmental organisations; representatives of international non-governmental environmental organisations; last but not least, decision-makers, policy makers, public agencies, funders, and planners.

2.1 New Survey and analysis of the results

We launched a new survey concomitant to some of the events described in paragraph 2.2 and through the issue of a dedicated newsletter, managed by WP9-*Dissemination and Communication*. The survey consisted of 12 questions, reported in Annex 1, in which we obtained 26 responses. The first three questions are referred to the countries (Q1), to the categories of stakeholders (Q2), and to the marine community (Q3) the responders belong to.

The categories are the nine selected in the *Strategic Agenda for Stakeholder Engagement* deliverables (D5.1 and D5.6):

1. Pan-European Research Infrastructures (particularly ERICs)
2. Projects (EU, National, International)
3. Networks, Organizations and Frameworks
4. Research Institutions and Education
5. Industry
6. Governments
7. Media
8. Public
9. NGO's.

The list of communities to choose from are:

- Research vessels operator
- Fixed-point observatory
- Mobile systems
- Remote sensing
- Environmental-marine policy makers
- Other

The Q1, Q2, and Q3 results are shown in Figures 1, 2, and 3 respectively.

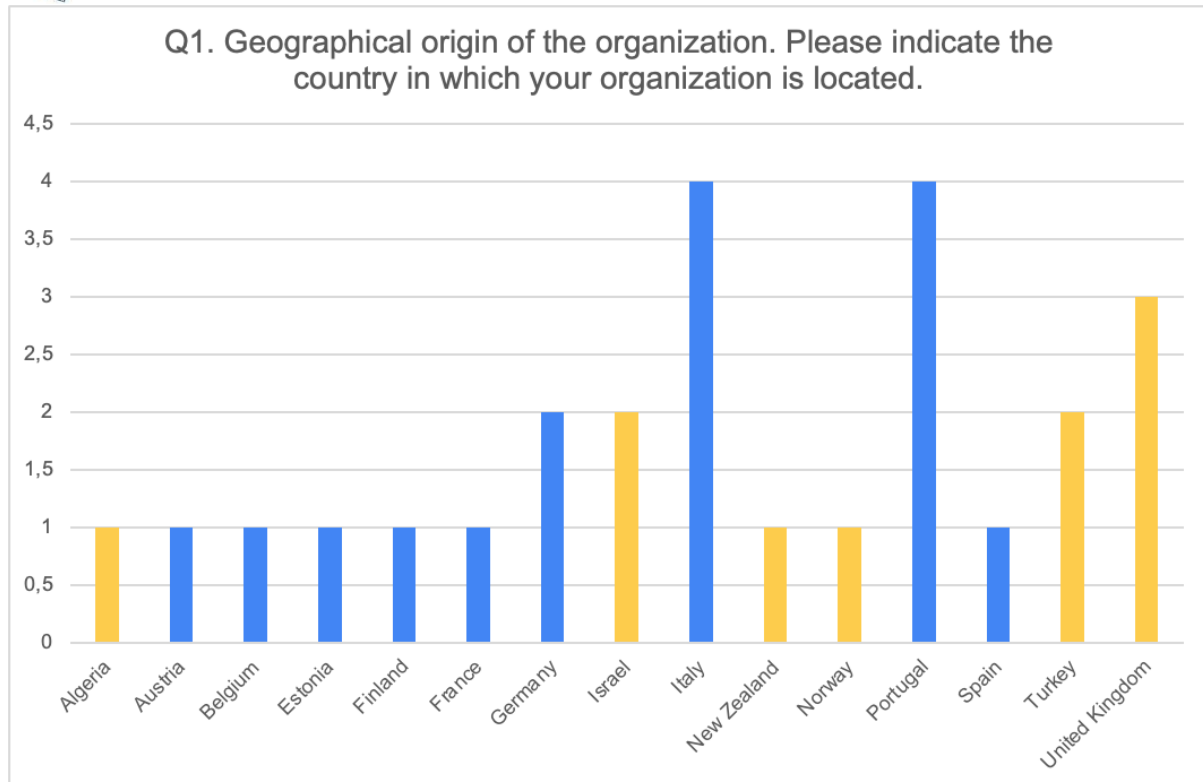


Figure 1. Countries of the responding organisations (in yellow countries outside EU)

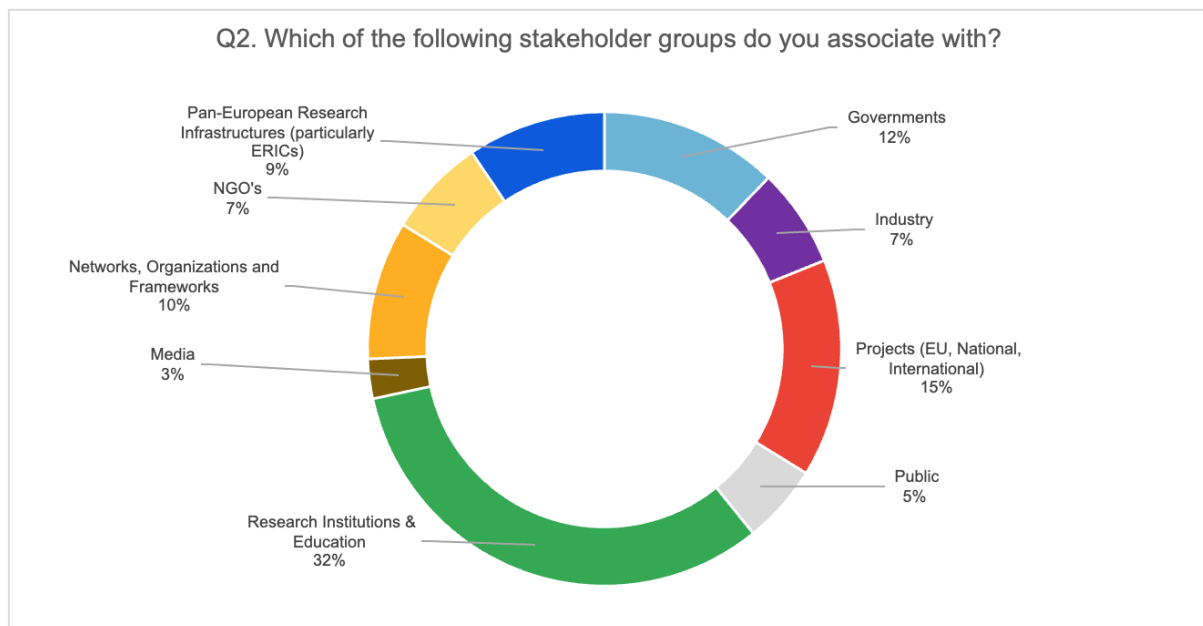


Figure 2. Stakeholders' categories

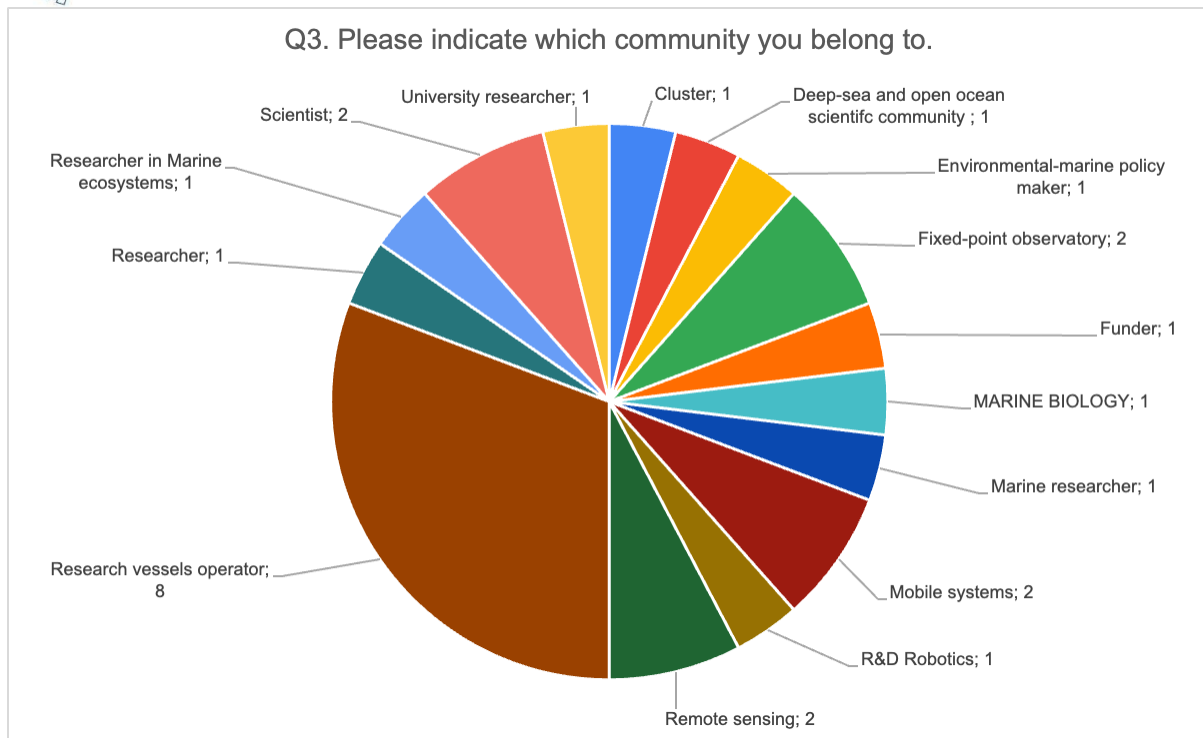


Figure 3. The percentages of the Stakeholders' communities

The fourth question (Q4) is related to define the priority needs among the Eurofleets+ activities, that are listed below:

- TOPIC #1 - Transnational Access (TNA)
- TOPIC #2 - Joint Research Activity (JRA)
- TOPIC #3 - Education and Training
- TOPIC #4 - Innovation management and Exploitation
- TOPIC #5 - Foresight roadmap and Legacy
- TOPIC #6 - Communication and Outreach.

The TNA, together with the JRA, received the highest priority.

The fifth question (Q5) refers to specific needs/services that are not listed in Q4. The most significant answers highlighted the importance to promote and implement sustained observations of EOVS, including the use of new sensors and technologies. Another important aspect was to favour the exchange of personnel and equipment.

Questions 6,7,8, and 9 were focused on Dissemination and Communication. Also the Q11 question is related to this set of questions, and was about how to ensure that the feedback and inputs from the stakeholders' communities are incorporated into any decisions or actions.

Question 6 relates how the responders were aware of the work carried out and the role of the Research Vessels for supporting marine and environmental sciences. Most of the answers demonstrated that there is a high level of awareness (~77%).

Question 7 asked how Eurofleets can better engage with different communities of stakeholders and how to ensure better engagement in the future. Among the suggestions, it was highlighted that there is a need to have more opportunities under new projects for TNA and for National access, and for supporting oceanographic monitoring campaigns in general, with more days at sea. It was also suggested to figure out a better relationship between Eurofleets and OFEG (Ocean Facilities Exchange Group). Also floating universities and training missions were considered really interesting. At the end the need to achieve Eurofleets-RI was underlined.

Question 8 asked about challenges in accessing information about Eurofleets and Research Vessels. The main identified challenge was the need to implement the information with the community through a continuous and effective/permanent plan of communication. Following this line, Q9 asked to suggest any specific channels or platforms for communication and outreach to ensure that different communities are reached. The answers recognised that Eurofleets has good tools, such as an efficient and easy website, an effective and systematic use of social media, updated mailing lists and participation in conferences with booths.

The answers to question 11 suggested having feedback and inputs incorporated in any decisions or actions, for example promoting a wider consultation through advisory board activity. Moreover, information channels are envisaged in order to promote opportunities for new projects and projects' developments.

Question 10 focused on communication through networking. In fact, it asked for any existing networks or organisations that could help to facilitate outreach efforts. The main answers underlined the importance to relate to International organisations and initiatives (e.g., EGU, AGU, Marine Board, GOOS and EuroGOOS, UN Decade of Ocean Sciences) or National organisations (e.g., French fishing organisations, Turkish Ministry of Agriculture and Forestry), and to International legal entities like ERICs (such as EMSO, ICOS, EMBRC).

Finally, the last question (Q12) was related to anything else the responders would like to share on experiences and perspectives. In this case the answers were very positive to the Eurofleets experience and it is worth continuing.

2.2 Engagement with Policy Makers

The engagement with Policy Makers has been implemented through the active participation at events described below.

European Maritime Day (EMD)

During EMD which took place in Brest from the 24th-25th of May 2023 Eurofleets+ shared an exhibition stand (Figure 4) with EMBRC and EUROARGO ERICs to present the accomplishments of the project to attendees including DG Mare Deputy Director-General, Kestutis Sadauskas. Other stakeholder groups engaged included representatives from European Commission (EC), industry, academia and research institutions, NGOs, media, and communication.



Figure 4. Picture of the stand at EMD

On the afternoon of Thursday 25th a workshop titled: “Sustainable ocean observation, from open sea to coast: shared responsibilities” was organised by EuroGOOS, EOOS, IFREMER, Eurofleets+, Esprit de Velox, EUROARGO ERIC and EMODnet. The workshop aimed to explore the sustainability of Ocean Observation and our shared responsibilities. The workshop agenda is reported in Annex 2a.

In the face of climate change and loss of biodiversity, considering that the ocean is significantly regulating the future of the planet, ocean observation from open sea to coast is key to preserving the Ocean as a common good of humanity among other aspects that comply with the European Green Deal. Faced with this mandate and this ambition, currently the European observation of the oceans is not effective, since it lacks clear European coordination and support, and its trajectory is not aligned with the greenhouse gas reduction targets by 2050. Indeed, by depending heavily on marine research infrastructures and observing networks, from member states with a maritime coastline, it slows down the incorporation of advanced technologies by not satisfying needs for exponential growth and profound technological re-foundation.

Coordinated and optimised for efficiency, cost and intrinsic environmental footprint, ocean observation from open sea to coast is paramount for sustained and reliable provision of oceanographic services and information. This workshop discussed how the ocean observing stakeholders are consolidating efforts to limit the duplication and promote long-term coordination and sustainability. We discussed the challenges we face and solutions our communities offer in delivering a common ocean observation strategy.

The very successful workshop was followed by a panel discussion moderated by Kate Larkin, EMODnet. Then it was followed by a constructive question and answer session on how ocean observation stakeholders are consolidating their efforts to promote the long-term coordination and sustainability of ocean observation.

To achieve a concrete outcome from the discussions, organisers shared a statement on the key role of *in situ* marine data collection in Ocean Observation, and invited participants to contribute their views through a shared online survey and a collaborative document. The final statement was published following input from workshop attendees.

The final collaborative statement

In situ measurements of the ocean provide scientific evidence for understanding the functioning and health of the ocean, assessing and monitoring the impacts of multiple stressors (climate change, biodiversity loss, persistent pollution) and finding solutions to the major challenges we face (e.g., energy efficiency, reduction of ecological impact).

This vital activity relies on the use of a combination of multiple platforms, sensor networks, and data management systems developed and maintained by Research Infrastructures, observing networks, and the people implementing them working collaboratively to deliver maximum efficiency.

In the era of digital twins, contributors to political, innovation and investment decisions, and key players in reducing anthropogenic impact on the environment, there is an urgent need for a European policy that supports data producers to ensure that *in situ* observation systems can fulfil their potential long-term, supporting the mission for sustainable observation of the oceans.

EC Stakeholder consultation workshop "Ocean Observation Reporting Obligations"

The EC Directorate General Maritime Affairs and Fisheries (DG MARE) invited key stakeholders, including Eurofleets+, to an online consultation workshop focused on "Ocean Observation Reporting Obligations", which took place on 20th June, 2023.

The workshop, organised in the context of the ongoing study prepared for the European Climate, Infrastructure and Environment Executive Agency (CINEA) on "Ocean Observations Reporting Obligations". The study aims to review ocean observation reporting obligations and templates and to propose, test and seek stakeholder feedback on a new common template that could be used to better coordinate ocean observation plans in EU Member States and across Europe, for the benefit of the Ocean Observation community.

The workshop brought together national representatives from across EU Member States and wider experts in ocean observation. Briefing information was sent prior to the workshop, together with specific content on the study. The workshop was part of a first stakeholder consultation phase towards a common reporting tool for ocean observation plans in Europe, in the context of the European Union initiative "Ocean Observation Sharing Responsibility" which aims to achieve a coherent approach to European ocean observation.

Eurofleets+ played a full and active role both during the open discussions and during the breakout session. In addition, contributions were made to the workshop Mural board and feedback provided after the event via the feedback questionnaire.

Private Stakeholder Consultation Meeting with DG Mare

Following both the European Maritime Day workshop and the European Commission Stakeholder consultation workshop "Ocean Observation Reporting Obligations" Eurofleets+ were invited by Rémy Dénos, Deputy Head of Unit, Unit A1-Maritime innovation, Marine Knowledge and Investment, Directorate-General for Maritime Affairs and Fisheries (MARE) to present the Eurofleets+ Project and the role Research Vessels play as key infrastructures in Ocean Observation. The meeting was attended by representatives from EC, EMD-European Marine Board, EuroGOOS, EMODnet and EOOS.

Aodhan Fitzgerald, Eurofleets+ Project Coordinator provided a brief overview of the Eurofleets+ projects, its aims, achievements and results followed by a summary overview the European Research Vessel landscape, its current capacity and the fleet renewal including the new vessels that have come into operation and vessels planned up to 2030. Following the presentation, a series of open discussions took place, fostering a deeper understanding of how the Research Vessels programmes work, which allowed for a good overview of how vessel schedules can be included in a planning tool under development by DG MARE. Eurofleets+ will continue to engage with both DG Mare and EuroGOOS who are developing the platform under contract.

Eurofleets+ Expression of Interest (Eoi)

An initiative of the Eurofleets Research Infrastructures Working Group (WPs 1 and 8) launched the call for Eoi Planned inauguration of the EUROFLEETS-RI. The Eoi was distributed to each European Research Vessel Operator to ascertain interest in membership of EUROFLEETS-RI and gather feedback from each potential member on what proposed services were of interest to them.

Twenty-seven organisations were contacted directly. A webinar took place to present the Eoi and its purpose where a total of 27 people attended representing 15 organisations. The agenda featured a general description of the proposed EUROFLEETS-RI, from the concept origin as far as the proposed structure (AISBL-*Association Internationale San but Lucratif*) as reported in EUROFLEETS-RI Business Plan (D8.3-*Report on feasibility study for implementation of a transnational access, including business plan*). This was followed by a Q&A session where participants provided feedback and comments on the information provided and the structure of the survey. In total 19 responses were received, 11 electronically, 6 replied using the softcopy survey provided and a final 2 provided feedback via email due to their organisations position with regard to joining an AISBL. This represents a total response rate of 70%.

The results of the survey were presented at the European Research Vessel Operators (ERVO) meeting held in Stockholm, in June 2023, and the results are outlined across D8.5-*Scenarios for a permanent fleet coordination platform* and D8.6-*EUROFLEETS roadmap and guidelines*.

2.3 Stakeholders' engagement via TNA and Training activities

The Eurofleets+ Transnational Access (TNA) and Training were considered the most important outcomes of the project. These activities were managed by WP2-*Transnational access* and WP4-*Call management and Proposal evaluation*, and WP6-*Education and Training* respectively.

Transnational Access (TNA)

The second phase of this engagement process gathered results not only from the survey activity but also from the TNA activities, implemented in the frame of WP4, which contributed to attract users from outside the EUROFLEETS community.

Indeed, the aim of Eurofleets+ TNA has been to put at disposal of users the global and regional research vessels, together with the use of submarine vehicles (ROVs and AUVs), and the possibility of remote connections with the ships. This activity has been managed by a series of specific calls.

The Table 1 synthesises the TNA results, demonstrating the great success of the initiative with a very large participation of institutions coming from a variety of European and global countries.

Funded Shiptime Days	266
Funded Cruises (16 vessels, 3 ROV and AUV cruises)	23
Funded Co-PI Projects	4
RTA Project	1
Male PIs	17
Female PIs	6
Male Co-PIs	0
Female Co-PIs/RTA lead	5
Number of Participating Scientists (137 females, 178 males)	315
Number of Early Career Researchers	114
Number of Nationalities	33
Average n. nationalities per cruise	4

Table 1. Summary of the results of TNA activities

Most of the TNA users came, as expected, from the category “Research Institutions and Education”. Nevertheless, there was a large participation of countries for each funded cruise. The countries involved are from Europe, mainly outside the Eurofleets partnership, North Africa, Middle East, USA, Canada, Australia, New Zealand.

A survey of satisfaction on the calls for proposals has been presented and evaluated through the D4.11-*Performance evaluation: satisfaction survey of the call for proposals*.

Training activities

The Training activities are managed through the WP6-*Education and Training*. This work package planned different tasks of activities.

- Floating universities - on board of many different research vessels, with the aim to attract young people to science and stimulate their interest in marine research. This activity was ruled with calls dedicated to students and early stage researchers, well in line to what was successfully done in the previous Eurofleets projects.
- Blue skill labs - dedicated training courses to encourage the next generation of marine researchers to take full advantage of the possibilities offered by this kind of scientific instrumentation onboard European research vessels.
- Marine Internship - offering seagoing placements for students or technicians of marine related sciences and technologies on the Eurofleets+ partner research vessels, utilising spare berths.

Another important task was dedicated webinars and presentations on access and exchange, in cooperation with WPs 2 and 4. This task was organised in four programmes: Co-chief, Marine internship, Teacher at sea, and Personnel exchange. Other tasks were dedicated to: Blue skills and workshops; Remote access, e-learning and ocean literacy.

Alumni FORUM

Eurofleets+ has provided a range of training programmes and training opportunities to early career scientists since 2019. In order to assess the impact of the Eurofleets+ Training Programmes a survey was conducted to gather feedback on course participants, their careers or further education choices. A Eurofleets+ Alumni Forum was also held, where graduates from each course presented on their Eurofleets+ experience and its impact on their work or studies to date. The workshop agenda is reported in Annex 2b. The results of the study were also presented and discussed in an open forum to explore how to improve course offerings into the future. The results of this survey can be found in *D6.9-Impact of Eurofleets+ training and education from the perspective of Eurofleets+ Alumni*.

2.4 Stakeholder Engagement Public and Media

During proposal writing it was envisaged that several of the Eurofleets+ Research Vessels would conduct Open Days onboard vessels to reach audiences such as local communities, media, schools and educators. Unfortunately, during the COVID 19 Pandemic all public access to Research Vessels stopped and regretfully has not returned in 2023. There are a number of reasons for this, some vessel protocols have yet to be more flexible due to the ongoing circulation of the virus, and the risk this poses to the onboard living conditions on a vessel. Additionally, to mitigate the loss of these planned activities, the project worked with many funded Principal Investigators to disseminate and communicate as much as possible, the activities on board of the scientific campaigns, via various online, virtual and traditional media channels in order to reach these stakeholder groups. Activities carried out either by Eurofleets+ partners, and by funded Principal Investigators and their teams have been outlined below (Table 2).

Cruise Name	Activity Type	Description	Audience	Links
FOCUS AUV	VIDEO – Publically Available. Featured on local news station	NIWA scientists head back to the Kaikōura coastline for an in-depth look at deep-sea changes post the 2016 earthquake	Public/Media	https://vimeo.com/niwanz/auv
PORO-CLIM	Website/Blog/Video/Podcast/Social Media	Website with blog, podcast and video. Strong Social Media Campaign featuring Lego scientists and story book sketches aimed at engaging younger audiences	Public/Media	https://www.poro-clim.org/
IMAR	Strong social media campaign	Live ship to shore via Facebook hosted by The Zoological Society Of London	Public/Media	@AzoresDeepSeaTwitter https://www.publico.pt/2021/03/04/ciencia/noticia/cientistas-ganham-financiamento-expedicao-mar-profundo-acores-1953077 https://observador.pt/2021/03/04/cientistas-ganham-financiamento-para-expedicao-ao-mar-profundo-dos-acore/
BENCHMARK	Ship to Shore broadcast	Live ship to shore via Facebook hosted by The Zoological Society of London	Public/Media	https://fb.watch/IDBJ78bwtU/
GRASSMAP	Ship to Shore broadcast	Live ship to shore via Eurofleets Facebook page	Public/Media	GRASSMAP SHIP TO SHORE
Phycob	Cruise Video	Scientific operations during the campaign	Public/Media	Phycob Campaign Video

Cruise Name	Activity Type	Description	Audience	Links
GRACE	Children's book and ship to shore broadcasts.	This group produced a children's book to explain geology and also did two live ship to shore broadcasts to schools in both Ireland and Spain		Twitter: @Grace_EFplus
TALPRO2022	Hydrography Educational Focus	Focus on educational dissemination around cruise activities	Public/Media	https://mediterraneanmonitoring.wordpress.com/ Used Facebook, twitter and Instagram
IOPD	Strong social media campaign	Focused on cruise activities dissemination through science teams social media accounts	Public/Media	Twitter @BooneWieter @Lorenz_Meire @DrKikiSchulz @AnoukOllevier @KlasOve @NIOZnieuws @HereonHelmholtz @VLIZnews
OASIS				Instagram , Twitter

Table 2. List of the activities made with public and media

3 Main Outcomes/users' needs results

This section reports the main outcomes of the stakeholders' engagement and the users' needs results.

On the basis of the survey results, in particular question 4, the users' needs topics are classified in terms of priorities. The first priority is assigned to *TOPIC #1 - Transnational Access (TNA)*, the second priority to *TOPIC #2 - Joint Research Activity (JRA)*, the third one to *TOPIC #3 - Education and Training*, the fourth to *TOPIC #5 - Foresight roadmap and Legacy*, the fifth priority to *TOPIC #4 - Innovation management and Exploitation*, and the final one to *TOPIC #6 - Communication and Outreach*. The categories participated in the survey showed an obvious prevalence of Research Institutions and Education, in addition to Projects and Pan-European Research Infrastructures; but it is also possible to note a significant participation by Governments, Industry, Organizations, and NGOs (see Figure 2).

The engagement with Policy Makers was carried out through participation in events such as EMD with the side workshop "Sustainable ocean observation, from open sea to coast: shared responsibilities". This workshop aimed to explore the sustainability of Ocean Observation and our shared responsibilities. The stakeholder groups engaged included representatives from EC, industry, academia and research institutions, NGOs, media, and communication. The workshop was finalised with a final collaborative statement to achieve a concrete outcome from the discussions.

Eurofleets+ participated, as one of the key stakeholders, to an online consultation workshop organised by DG MARE and focused on “Ocean Observation Reporting Obligations”. The workshop brought together national representatives from across EU Member States and wider experts in ocean observation. This workshop was a step of a first stakeholder consultation phase towards a common reporting tool for ocean observation plans in Europe, within the European Union initiative “Ocean Observation Sharing Responsibility” aiming for a coherent approach to European ocean observation.

Analysing the TNA activity, it was very successful with a large participation coming from 33 countries. (with also a good balance between males and females). Particularly successful was the significant participation of early career researchers (about one third of the total). Additionally, Eurofleets has provided training programmes and training opportunities to early career scientists since 2019.

For the engagement of public and media, Eurofleets+ Research Vessels planned Open Days onboard vessels to reach local communities, media, schools and educators. However, due to the COVID 19 restrictions, this was not possible until 2023. Trying to overcome such a limitation, Pls used various online, virtual and traditional media channels in order to reach these stakeholder groups (see Table 2).

The work carried out across the Eurofleets+ Stakeholder engagement programme has led to two key future projects being successfully funded by Horizon Europe.

“Aqua Research Infrastructure Services for the health and protection of our unique oceans, seas and freshwater ecosystems” (AQUARIUS). The Marine Institute, Eurofleets+ project coordinator, led a proposal under the HORIZON-RIA HORIZON Research and Innovation Actions RI services advancing frontier knowledge: co-fund pilots with pan-European RIs and/or national RIs. The success proposal AQUARIUS will provide a highly comprehensive suite of integrated RIs appropriate to addressing significant challenges for the long-term sustainability of our unique oceans, seas and freshwater ecosystems. The proposal for the first time brings together diverse RIs combined to facilitate the work of researchers and key stakeholders focused on challenges and opportunities for both marine and freshwater systems.

“Advance Marine Research Infrastructures Together” (AMRIT). The AMRIT project has been funded under the RI Services to Support Health Research, Accelerate the Green and Digital Transformation, and Advance Frontier Knowledge (INFRASERV) programme. The project brings together core Marine RIs (MRIs) focused on ocean observing (EMSO, EUROARGO and ICOS ERICs; Eurofleets+, EuroGoShip, GROOM RI, JERICO RI and MINKE as INFRA projects) are the main providers of *in situ* ocean data for the EOOS and COPERNICUS, and the primary managers of instrumental capacity supporting fundamental research. These MRIs are aware that the lack of effective cross coordination prevents them from fully supporting frontier research, while the lack of integration makes it difficult to reach a critical mass for EOOS and results in significant cost duplication. Close collaborations between Marine RI’s has been fostered and grown significantly since the beginning of the EUROFLEETS+ project with the first Eurofleets+ Stakeholder Engagement workshop being the first of many collaborative meetings that have taken place, effectively yielding these collaborative projects.

4 Annexes

Annex 1. Survey questions

Eurofleet+ Survey_

We kindly invite you to fill in the following 12 questions as potential stakeholders of the Eurofleets + Project. Eurofleets+ is "An alliance of European marine research infrastructure to meet the evolving needs of the research and industrial communities." The project facilitates open free of charge access to an integrated and advanced research vessel fleet. The project includes 42 partners, and involves the use of 13 global ocean research vessels, 14 regional vessels, 7 Remotely Operated Vehicles (ROVs), 5 Autonomous Underwater Vehicles (AUVs) and a telepresence unit.

One of the key aims of the Eurofleets+ project is to involve a wide range of stakeholders to inform on the development, operation and strategic direction of the European research vessel fleet as well as collect as many needs and suggestions as possible.

* Indicates required question

1. Email *

2. Q1. Geographical origin of the organization. Please indicate the country in which your organization is located.

Tick all that apply.

- ☐ Austria
- ☐ Belgium
- ☐ Bulgaria
- ☐ Croatia
- ☐ Cyprus
- ☐ Czechia
- ☐ Denmark
- ☐ Estonia
- ☐ Finland
- ☐ France
- ☐ Germany
- ☐ Greece
- ☐ Hungary
- ☐ Ireland
- ☐ Italy
- ☐ Latvia

- ☐ Lithuania
- ☐ Luxembourg
- ☐ Malta
- ☐ Netherlands
- ☐ Poland
- ☐ Portugal
- ☐ Romania
- ☐ Slovakia
- ☐ Slovenia
- ☐ Spain
- ☐ Sweden
- ☐ Albania
- ☐ Armenia
- ☐ BosniaandHerzegovina
- ☐ Faroe Islands
- ☐ Georgia
- ☐ Iceland
- ☐ Israel
- ☐ Kosovo
- ☐ Moldova
- ☐ Montenegro
- ☐ North Macedonia
- ☐ Norway
- ☐ Serbia
- ☐ Tunisia
- ☐ Turkey
- ☐ Ukraine
- ☐ United Kingdom
- ☐ Other: _____

3. Q2. Which of the following stakeholder groups do you associate with? *

Tick all that apply.

- ☐ Pan-European Research Infrastructures (particularly ERICs)
- ☐ Projects (EU, National, International)
- ☐ Networks, Organizations and Frameworks
- ☐ Research Institutions & Education
- ☐ Industry
- ☐ Governments
- ☐ Media
- ☐ Public
- ☐ NGO's.
- ☐ Other: _____

4. Q3. Please indicate which community you belong to. *

Mark only one oval.

- ☐ Research vessels operator
- ☐ Fixed-point observatory
- ☐ Mobile systems
- ☐ Remote sensing
- ☐ Environmental-marine policy maker
- ☐ Other: _____

5. Q4. Please indicate by priority, your needs from the following EUROFLEET activity areas (1 as first priority down to 6 as the last priority).

Mark only one oval per row.

	1°	2°	3	4°	5°	6°
TRANSNATIONAL ACCESS__EUROFLEETS provides open access for research, industry						

and technical teams to an integrated and advanced research vessel fleet, designed to meet the evolving and challenging needs of its user community. A key objective of EUROFLEET is to facilitate interdisciplinary research groups to access European and global seas and oceans to conduct excellent research. Access is cross-disciplinary and provided through multiple channels, both physical and remote, while implementing the FAIR data principles to ensure optimised use while maximising impact.

☐☐☐☐☐☐

JRA JOINT RESEARCH ACTIVITIES_EUROFLEETS JRA-JointResearchActivity- contributes to quantitative and qualitative improvements of the services provided by RVs and to develop new ones. EUROFLEETS+ JRA are innovative and explore new fundamental technologies or techniques underpinning the efficient and joint use of the participating research infrastructures. They involve industry partners and Small Medium Enterprises (SMEs) to promote innovation and knowledge sharing through co-creation of needed technical solutions

☐☐☐☐☐☐

EDUCATION & TRAINING_EUROFLEETS is providing comprehensive training and exchange programmes for user communities and professional staff, while increasing ocean literacy, inspiring emerging researchers, and attracting women to science through targeted educational activities.

☐☐☐☐☐☐

INNOVATION MANAGEMENT & EXPLOITATION_EUROFLEETS will

expand the role and impact of RVs in the innovation chain and maximise the exploitation of data produced and/or collected by research cruises and project results. This activity is aimed at providing guidelines on innovation management and to reinforce collaboration with industry.

☐☐☐☐☐☐

FORESIGHT ROADMAP & LEGACY_The EUROFLEETS+ project has the ambitious goal to promote a model to ensure the integration of the European Research Fleets as well as the long-term sustainability of the integrated research infrastructure services provided at European level. A key aim for the project is to identify and agree on a long-term sustainable fleets coordination system, with a view to consolidating a strategic and coherent vision of the European Research Fleet and outlining the future research infrastructure developments within the ERA key priorities.

☐☐☐☐☐☐

COMMUNICATION & OUTREACH_EUROFLEETS+ promotes project results to raise awareness of the key role of the European Research Fleet and its benefit for the environmental and social challenges. It aims to raise awareness of the vital role of Research Vessels in relation to advancing our knowledge of marine processes and resources and thereby our management of the ocean.

☐☐☐☐☐☐

6. Q5. Is there any specific need/service not listed in Q4 above that would be useful to you or your community?

7. Q6. How aware are you of the work carried out by Research Vessels and the significant role they play in supporting Marine and environmental science?

Mark only one oval.

	1	2	3	4	5	
No awareness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fully aware

8. Q7. How can Eurofleets better engage with you and your community to ensure better engagement in the future?

9. Q8. What challenges have you faced in accessing information about Eurofleets and Research Vessels?

10. Q9. Are there any specific channels or platforms you prefer to use for communication and outreach to ensure we reach your community?

11. Q10. Are there any existing networks or organizations that you are already connected to that could help facilitate our outreach efforts?

12. Q11. How can we ensure that your feedback and input are incorporated into any decisions or actions that are taken?

13. Q12. Finally, is there anything else you would like to share with us about your experiences and perspectives on this issue?

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Annex 2. Agenda events

Workshop 23 - Sustainable ocean observation, from open sea to coast: shared responsibilities ×

ON-SITE

STAKEHOLDER WORKSHOPS

🕒 13:30-14:45

📍 Brest Expo - Hall 2 (1st floor) - Room 1.1

👤 149 participants signed up for this session

DESCRIPTION:

Subtheme : Research/innovation/technology/observation

Organisations : Institut français de recherche pour l'exploitation de la mer (Ifremer), EurofleetsPlus, Euro-Argo ERIC, European Global Ocean Observing System (EuroGOOS) and Esprit de Velox

Moderator:

- Dina Eparkhina, European Global Ocean Observing System
- Kate Larkin, EMODnet

Speakers:

- Ghada El Serafy, EuroGOOS
- Niamh Flavin, Eurofleets+
- François Frey, Esprit de Velox
- Lucie Cocquempot, Ifremer
- Yann-Hervé De Roeck, Euro-Argo ERIC
- Remy Denos, European Commission, DG MARE
- Catherine Chabaud, Member of the European Parliament
- Inga Lips, European Global Ocean Observing System (EuroGOOS) and EOOS Framework
- Toste Tanhua, Global Ocean Observing System (GOOS) and EuroSea project
- Jean-Marie Flaud, French Ministry of Research and representative of the European Strategy Forum on Research Infrastructures (ESFRI)

Description:

In the face of climate change and loss of biodiversity, for which the ocean is steering the future of the planet, ocean observation from open sea to coast is key to preserving the Ocean as a common good of humanity, and to deliver the European Green Deal. Faced with this injunction and this ambition, today European ocean observing is not sustainable, lacks coordination and support and its trajectory is not convergent with the greenhouse gas reduction targets by 2050. Indeed, by relying on marine research infrastructures and observing networks, mostly financed from research resources by member countries with a maritime coastline, the obvious progress made in recent years cannot satisfy the needs for exponential growth and profound technological refoundation.

Coordinated and optimised for efficiency, cost and intrinsic environmental footprint, ocean observation from open sea to coast is paramount for sustained and reliable provision of oceanographic services and information. This workshop will discuss how the ocean observing stakeholders are consolidating efforts to limit the duplication and promote long-term coordination and sustainability. We will discuss the challenges we face and solutions our communities offer in delivering a common ocean observation strategy.

Speakers' slides are available [here](#).

SPEAKERS:



Lucie Cocquempot

Coordination of ocean observations at [Ifremer](#)



Yann-Hervé DE ROECK

Director at [Euro-Argo ERIC](#)



Remy Denos

Deputy Head of Unit DG MARE A1 Maritime innovation, Marine Knowledge and Investment at European Commission



Dina Eparkhina

[European Global Ocean Observing System](#)



Niamh Flavin

Team Lead at [Eurofleets+ \(Marine Institute\)](#)



François Frey

President at [Esprit de Velox](#)



FLAUD JEAN-MARIE

MESR EXPERT at MESR



Kate Larkin

Head, EMODnet Secretariat at [European Marine Observation and Data Network](#)



Inga Lips

Secretary General at [European Global Ocean Observing System \(EuroGOOS\)](#)



Nicolas Pade

Executive Director at [EMBRC-ERIC](#)



GY Serafy

Specialist at [Deltares](#)



Toste Tanhua

Scientist at [GEOMAR](#)

EUROFLEETS+ ALUMNI FORUM

Location: Online
Date: 31/05/2023
Time: 14:00 CEST
Facilitator: Niamh Flavin

EUROFLEETS+

EDUCATION & TRAINING PROGRAMME ALUMNI FORUM WORKSHOP

31st May 2023



Eurofleets+

An alliance of European marine research infrastructure
to meet the evolving needs of the research and industrial communities

Description :

The Eurofleets Alumni Forum workshop will allow Eurofleets+ training participants to engage, network and collaborate online. This workshop will also aim to measure the effectiveness, impact and benefits of Eurofleets+ training through open discussions follow-on questionnaires and feedback to allow for the improvement of training activities provided to young researchers in the future

Workshop overview:

13:30 Meeting room open to speakers to test screen sharing and microphones

14:00-14:05 Welcome

14:05-14:55 Presentations from Eurofleets WP 6 and Training leads

14:55 – 15:00 Short break

15:00 – 16:25 Alumni Presentations including **15:30-15:40 Coffee Break**

16:25 – 16:35 Survey Results Andrea Caburlotto

16:35-16:55 Open Discussion

17:00 Forum Close

EUROFLEETS+ ALUMNI FORUM

Location: Online
Date: 31/05/2023
Time: 14:00 CEST
Facilitator: Niamh Flavin

EUROFLEETS+

EDUCATION & TRAINING PROGRAMME ALUMNI FORUM WORKSHOP

31st May 2023



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Part one

14:00 – 14:05	Welcome and introduction	Niamh Flavin
14:05 – 14:15	Overview of Eurofleets+ Training Activities 2019-2023	Andrea Caburlotto
14:15 – 14:25	Strategic Marine Alliance for Research and Training (SMART)	John Boyd
14:25 – 14:35	Partnership for Observation of the Global Ocean (POGO)	Lilian Krug
14:35 – 14:45	IOPAN Training Initiatives	Piotr Kowalczuk
14:45 – 14:55	AUV Technical Training	Anna Wåhlin
14:55 – 15:00	Short Break to allow changeover of presentations	

Part Two

15:00 – 15:15	Floating University – RV Celtic Voyager	Nil Rhodes
15:15 – 15:30	ROV Technician Exchange	Roeland Develter
15:30 – 15:40	Coffee Break	
15:40 – 15:55	AUV Lab - UGOT	Larissa Oliveira

EUROFLEETS+ ALUMNI FORUM

Location: Online
Date: 31/05/2023
Time: 14:00 CEST
Facilitator: Niamh Flavin

EUROFLEETS+

EDUCATION & TRAINING PROGRAMME ALUMNI FORUM WORKSHOP

31st May 2023



Eurofleets+

An alliance of European marine research infrastructure
to meet the evolving needs of the research and industrial communities

Part Two contd.

15:55 – 16:10

[Marine Internship Training – RV Belgica](#)

Lauretta Kaerger

16:10 -16:25

Seismic lab – OGS

Nora Markezic (TBC)

Part Three

16:25 – 16:35

Eurofleets+ Training Impact Survey Result

Andrea Caburlotto

16:35– 17:55

Open Discussion

17:00

Forum Close (Niamh Flavin)

Additional information

The meeting will be recorded with your permission.