



Eurofleets⁺

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



Summary for Policy Makers

© Bermuda-Institute-of-Ocean-Sciences

Charting a Sustainable Course: EUROFLEETS+ and the Future of Marine Science

Initiated in 2019, the EUROFLEETS+ project embarked on a mission to provide invaluable access to an integrated research vessel (RV) fleet, successfully facilitating access to 27 state-of-the-art research vessels distributed across diverse regions. Recognising the vital need for ongoing coordination and sustainability, the consortium is actively striving to establish EUROFLEETS Research Infrastructure (RI) as a bona fide legal entity, poised to catalyse seamless pan-European collaboration.

The primary objective of EUROFLEETS RI is to improve access to marine infrastructures, fortify the well-being of our oceans, foster technological advancements, and nurture ocean literacy. In its role, EUROFLEETS RI aspires to be a cornerstone in achieving European Union Missions, offering sustained access to seas and oceans for multifaceted science teams embarking on missions of paramount importance.

In today's rapidly evolving world, the future of oceanographic research and its consequential impact on global ecosystems is of critical importance. As the entrusted custodians of our oceans, European policymakers face a pivotal juncture in their capacity to shape the trajectory of marine science and innovation.

At the forefront of these imperatives lies an unwavering commitment to ensuring uninterrupted access to advanced RVs, demanding steadfast financial support and the enactment of policies that pave the path for the establishment of a permanent EUROFLEETS RI. Recognising the critical significance of capacity building and education, we collectively invest in the sustainable future of marine science. EUROFLEETS RI is prepared to make substantial contributions in this regard, paving the way for comprehensive training courses for young scientists, vessel crews, marine technicians, RV operators, and other indispensable personnel.

Lastly, our resolute advocacy centers on supporting greener and more sustainable RV and underwater vehicle operations. This support is paramount for mitigating environmental impacts and, crucially, actively contributing to climate preservation.

Messages for Policy Makers

Providing European researchers and their partners with access to cruises on board high performing RVs must go on

Research vessels are the primary method of oceanographic observation, through direct observation and via autonomous vehicles. Research vessels across Europe, and internationally, provide support for complex, multidisciplinary, multi-investigator research, and include state of the art technology and instruments to serve research and innovation needs for a large number of different end user communities.

Call for Action: Ongoing and better support for integrated and transnational access to research vessels through funding, and a supporting policy allowing the creation of a permanent EUROFLEETS RI.

Integration is essential for A European shared strategic vision of the European RV fleets

Ocean science has strongly benefitted from investment in research and innovation, but there is still a lot of scope for better and more efficient use of the existing resources. To better exploit previous efforts and to improve sharing of knowledge for mutual benefits, there is a need for greater integration of existing resources and infrastructure and for integration to be part of the planning for new initiatives. Data integration also requires long-term financial and political support for data repositories in all earth system disciplines.

Call for Action: Greater support for cooperation and collaboration between Infrastructures, data providers, data managers, across regional, national and international scales, to ensure interoperability and standardized methodologies for data gathering, transfer, treatment, storage and retrieval. The proposed EUROFLEETS RI will also play a key role to ensure the coordination of cruise planning and to reduce duplication of efforts, increase the sharing of data, thus broadening the impact of each cruise.

Integration is essential for A European shared strategic vision of the European RV fleets

Through the implementation of an active open data management strategy and associated procedures including adoption of SeaDataNet standards. EUROFLEETS+ is ensuring the capture, transmission, and publishing of information about the cruises, their data collection, and involved researchers, and data collected underway and processed later in time.

Call for Action: Greater support for cooperation and collaboration between data providers, data managers, across regional, national, and international scales, to ensure interoperability and standardized methodologies for data gathering, transfer, treatment, storage and retrieval. The proposed EUROFLEETS RI will also play a key role to maintain the legacy of the web-system European Virtual Infrastructure in Ocean Research (EVIOR).

Ocean exploration must strive for excellent data

Continuity and longevity in Ocean research require that someone assumes ownership for the system and for the environment. Through its training activities EUROFLEETS+ supports the empowerment of early-stage researcher's careers and is training the next generation of 'blue professionals'.

Call for Action: Greater support for education programmes developed and implemented by an experienced selection of technical and scientific staff, thereby maximising capacity and adding value. The proposed EUROFLEETS RI will contribute to improving scientific expertise in the field of marine science/research. It will facilitate education and training courses, activities, opportunities, programs, summer schools (both theoretical and practical), not only for young scientists from countries where such facilities are lacking but also for vessel crews, marine instrument technicians, RV operators and other shore-based staff who are vital to planning and executing RV cruise activities.

Greener and more sustainable RV and underwater vehicle operations and design must be supported

EUROFLEETS+ has contributed to a better understanding of potential environmental impacts of RV operations, both for the RV operators, vessel crews and scientific parties on board, and what could be done to minimize or even eliminate such potential negative consequences. The guidelines developed outlines several options RV owners and operators can reduce environmental impacts of vessel operation while advising on the design of new RVs to reduce operational environmental impacts.

Call for action: Endorse and support the adoption of the EUROFLEETS+ guidelines and recommendations on new RV's, thus contributing positively to necessary environmental protection and climate preservation. Support research and development projects for eco-designed and eco-responsible European RV fleets of the 21st century.



This project has received funding from the European Commission's Horizon 2020 Research and Innovation programme under grant agreement No 824077.