



EUROFLEETS2: New operational steps towards an alliance of European research fleets

Project Name: New operational steps towards an alliance of European research fleets

Project acronym: EUROFLEETS2

Funding scheme (FP7): Combination of Collaborative project and Coordination and Support Actions for Integrating Activities

EU financial contribution: €9 million

EU project officer: Agnès Robin

Duration: 48 months

Start date: 01 March 2013

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The marine environment is a major source of economic growth that should be harnessed. The maritime economy accounts for 5% of European economic activity and the EU's maritime regions account for almost 40% of its GDP (Gross Domestic Product). As a research arena, the ocean is costly to access requiring various complementing Research Vessels (RVs) and related mobile equipment. Because of the increasing complexity of societal demands and the profound influence on our daily lives, marine research and technology should be addressed in a consistent, holistic and coherent way.

• The need for a sustainable coordinated approach in marine research vessels

Fragmentation is still a weakness of European marine research. Despite this, European marine research is still at the forefront. To maintain and possibly strengthen this position, the move towards strategic leadership and a coordinated approach to investments and use of large facilities is essential. It will allow Europe to carry on delivering world-class science using facilities which are integrated, networked and accessible to all research teams across Europe. The present crisis period reinforces the essential character of progressing in such a shared cost effective approach. The development and funding of marine research infrastructures under a common strategic framework is a crucial issue. European research fleets could all together be considered as a distributed Research Infrastructure (RI) really competitive with its international counterparts as the US one. RVs represent very expensive nationally funded assets with high development, investment, operation, maintenance and implementation costs. RVs are necessary for marine science to maintain observation systems (biogeochemistry, physics...), to monitor oceanographic parameters, to deploy sophisticated equipments in the deep sea,

to carry out specific observation missions and to collect rare and sensitive biological samples. Their role is expanding with the development of in situ operational observation (moorings, floats, gliders, seabed observatories...). They might be particularly useful to respond to some MSFD (Marine Strategy Framework Directive) obligations.

A high availability of research fleets and associated equipment, a shared strategic vision and coordinated access to facilities are essential for a high quality of the research at sea. A pan-European distributed Regional RVs Infrastructure with a common strategy and development plan could help to provide European researchers and industries with world level marine research facilities and user services. The objective should be the significant improvement of marine research, related tools and technologies for marine resource observation, exploration and development and the convergence on common scientific and technical standards in marine research.

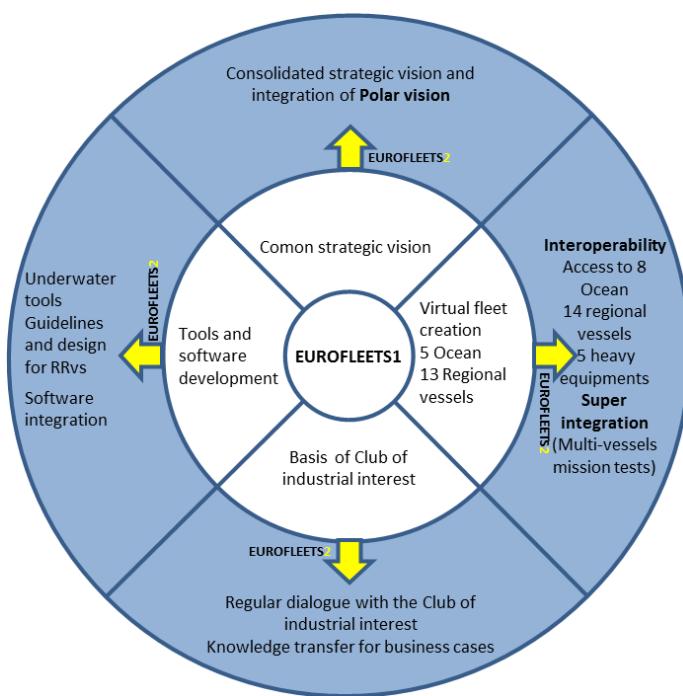
● The need to complete EUROFLEETS1 efforts

More than 4 years are needed to:

- Consolidate the common strategic vision of the infrastructure and the coordination of European research fleets capacities, taking into account both the pan-European and pan-regional dimensions to address properly the ocean challenge and to foster cooperation at the adequate level;
- Consolidate a common strategic vision for all RVs with special focus on Regional ones. The polar RVs were not included in EUROFLEETS1 but have an important role to play within crucial Arctic ocean issues: they will be included in this strategic vision;

- Provide marine researchers with easy RV access and particular those from countries with limited or no access;
- Implement common procedures and large operational interoperability in marine research tools and equipment;
- Equip a larger number of RVs with inter operable tools;
- Create sustainable mechanisms of easier and larger marine research results transfer to industrials and other stakeholders in order to enlarge the impact of marine research;
- Promote a distributed Research Infrastructure (RI) concerning RRVs which could be inserted in the ESFRI roadmap

● The objectives of EUROFLEETS2



EUROFLEETS2 will enhance integration through specific actions aimed at consolidating the organization, methodology and tools initiated during EUROFLEETS1 and through operational initiatives towards more integrated, interoperable and cost effective European fleets for the benefit of academic, industrial and operational marine research.

More specifically the objectives of EUROFLEETS2 can be summarized as follows:

- Promote a larger integration of European RVs. In fact in EUROFLEETS2 a higher participation of RVs is expected: 8 Ocean/Global; 14 regional RVs and 6 mobile equipment pieces not accessible on their usual national support vessel;
- Integrate a common polar vision in the strategic vision of the European marine research fleets;
- Promote exchanges of movable equipment on board European RVs and in doing so fostering high operational interoperability within Europe;
- Further integrate the European RVs by coordinating multi-vessels experiments (super-integration) for larger and ambitious marine research missions;
- Initiate operational initiatives demonstrating the higher interoperability of European fleets;
- Enhance the impact of research infrastructures on innovation by fostering the involvement of industry with specific activities, both as a user and as a supplier of such facilities;
- Make an important step towards a sustainable European Regional RVs Infrastructure and prepare its possible insertion into the ESFRI roadmap.

Partners:

AWI - Alfred Wegener Institute for Polar and Marine Research, Germany
 CNR - National Research Council, Italy
 CSIC - Spanish National Research Council, Spain
 DFKI - German Research Centre for Artificial Intelligence, Germany
 DTU-AQUA - Technical University of Denmark, Denmark
 IOPAS - Institute of Oceanology of the Polish Academy of Sciences, Poland
 IPEV - French Polar Institute Paul-Emile Victor, France
 MARIS - Marine Information Service, The Netherlands
 MARUM - University Bremen - Center for Marine Environmental Sciences, Germany
 MI - Marine Institute, Ireland
 OGS - National Institute of Oceanography and Experimental Geophysics, Italy
 PROLION - Prolion, France
 RBINS - Royal Belgian Institute of Natural Sciences, Belgium
 SHIPS - Ship Studio SARL, France
 SPRS - Swedish Polar Research Secretariat, Sweden
 TÜBİTAK - Scientific and Technological Research Council, Turkey
 , Croatia
 VLIZ - Flanders Marine Institute, Belgium

TUT - Tallinn University of Technology, Estonia
 UdG - University of Girona, Spain
 UNIZG-FER - Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia
 ESF - European Science Foundation, France
 EurOcean - EurOcean Foundation, Portugal
 FAMRI - Faroe Marine Research Institute, Faroe Islands
 GeoEcoMar - National Institute of Marine Geology and Geo-ecology, Romania
 GINR - Greenland Institute of Natural Resources, Greenland
 HCMR - Hellenic Center for Marine Research, Greece
 IEO - Spanish Institute of Oceanography, Spain
 Ifremer - French Research Institute for Exploitation of the Sea, France
 IMR - Institute for Marine Research, Norway
 IO-BAS - Institute of Oceanology - Bulgarian Academy of Science, Bulgaria
 IOF - Institute of Oceanography and Fisheries



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