



European Marine Infrastructures: perspectives for Marine and Earth Sciences

P. Favali (1), L. Beranzoli (1), P. Egerton (2), P.Y. Le Traon (3), and W. Los (4)

(1) Istituto Nazionale di Geofisica e Vulcanologia, Italy, emsopp@ingv.it, (2) European Science Foundation, International, pegerton@esf.org, (3) IFREMER, France, pierre.yves.le.traon@ifremer.fr, (4) Universiteit van Amsterdam, The Netherlands, w.los@uva.nl

The European Commission (EC) is supporting a variety of Research Infrastructures in many different scientific fields: Social Sciences and Humanities, Environmental Sciences, Energy, Biological and Medical Sciences, Physical Sciences and Engineering and e-Infrastructures. All these infrastructures are included in the new report of the “European Roadmap for Research Infrastructures” published in late 2008 by ESFRI (European Strategy Forum on Research Infrastructures, <http://cordis.europa.eu/esfri/>).

In particular, some research infrastructures for the Environmental Sciences specifically addressed to the marine environment are presented:

- EMSO (European Multidisciplinary Seafloor Observatory). The development of this underwater network is being supported by several other EC initiatives, ESONET-NoE (European Seas Network), coordinated by IFREMER (<http://www.esonet-emso.org/esonet-noe/>).
- ERICON AURORA BOREALIS (European Research Icebreaker Consortium, <http://www.eri-aurora-borealis.eu/>).
- EURO-ARGO (Global Ocean Observing Infrastructure, <http://www.euro-argo.eu/>).
- LIFEWATCH (E-science and technology infrastructure for biodiversity data and observatories, <http://www.lifewatch.eu/>). In particular through its scientific marine networks: EUR-OCEANS (European Network of Excellence for Ocean Ecosystems Analysis, <http://www.eur-oceans.eu/>); MARBEF-NoE (MARine Biodiversity and Ecosystem Functioning, <http://www.marbef.org/> and Marine Genomics (<http://www.marine-genomics-europe.org/>).

Possible profitable links with new research infrastructures recently included in the roadmap, such as EPOS (European Plate Observing System) and SIAEOS (Svalbard Integrated Arctic Earth Observing System) are also pointed out.

The marine EC infrastructures presented constitute the fundamental tools to support the Earth Sciences, both terrestrial and marine.