Objectives of the MRI expert group

1. Identify important marine research infrastructure gaps and needs, in addition to those in the ESFRI list, e.g. marine research infrastructure with a regional sea dimension. Attention should be paid to gaps in some EU regional seas;
2. On the basis of funding opportunities identified (e.g. under structural funds), propose mechanisms to link marine research infrastructure needs with funding opportunities;
3. Develop a conceptual framework and assessment method for valuing the socio-economic impact of Marine Research Infrastructure, which can be used to promote investment in marine research infrastructures by member states and maritime regions;
4. Advise on governance for EU marine research infrastructures, in particular with a view to ensure their long term sustainability and maximise synergy in their utilisation.

Marine Research Infrastructure (MRI) – gaps & issues

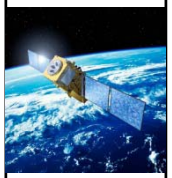
- Infrastructures needed to acquire and manage marine data for a broad range of uses: science / research, marine environment monitoring and protection, ocean / climate interactions, socio-economic applications…
- Remote observation vs. in-situ observations
- Physical / chemical / biological / geological observations
- Temporal gaps (long term series) and spatial gaps (MED/BS)
- Concrete initiatives (ESFRI, non-ESFRI), oceanographic vessels, data management infrastructures… are essentially multi-use infrastructures
- There is a need for full access to and integration of data, across initiatives and parameters measured ←→ data standardisation / improved access to data

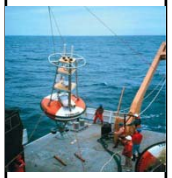
Cost and value of MRI

- MRI are expensive, cost of maintaining and operating them can represent ~ 50% of total marine research budget ←→ crucial to maximise synergies at EU level
- Socio-economic value of research infrastructure is not easy to assess, but we can propose a framework to approach it, covering:
  - Innovation in marine bio-economy, ocean energy, Protection of the marine environment, marine safety, better prediction of climate change impact and management of related risks
- However policy decision making process for investments (e.g. structural funds) hardly based on "thorough" socioeconomic valuation
- So we need to show how MRI can help respond to societal needs and better convey their socio-economic value, including the protection of ecosystem services, but…
- This is more a pragmatic – down to earth exercise than a thorough – detailed exercise

MRI Projects and Initiatives

Obs. Sys.





Projects e.g.

- EMECO, T ENATSO
- ESONET / EMSO
- MOON
- EuroSITES
- Euro-Argo
- ECOOP

Initiatives (can be)

- International
- Regional EU
- National

Operational
- Public
- Commercial

Research
- ERIC (European Research Infrastructure Consortium)

Selected Initiatives

Eurofleets

Ships of opportunity

Mapping of EU sea beds / habitats

LIFEWATCH / EMBRC