

**IFREMER comments on european commission's Communication
« marine knowledge 2020 »**

The Commission's communication "marine knowledge 2020, marine data and observation for smart and sustainable growth" (COM/2010/461), published on 8 september 2010 clearly reveals true efforts made to build more coherence in all initiatives of European commission launched those five passed years as well as related research projects.

However, it does not meet all expected clarifications on the relations between activities developed under EMODNET, GMES, SEIS and WISE-Marine, and research infrastructures involved in data acquisition and management (*EURO-ARGO*, *EMSO*, *EUROFLEETS*, *SEADATANET*, *JERICO*, *EuroSites*, etc., projects co-funded by DG-RTD).

In particular, a number of crucial issues to ensure sustainability of the whole strategy are not or not enough developed in the Communication :

- Funding of in situ data collection (that means in situ data acquisition and regional data centers ensuring the data validation and storage) is not considered as an EC priority in this Communication: this is considered as a member-states responsibility for subsidiarity reasons. Actually, Member States only ensure on a regular basis the collection of the "legally obliged" data in the framework of their national rules and/or the ones derived from the EU Directives. Other collected data are provided through short-term research projects (4 years typically), funded by competitive money of different national or European calls. Therefore, this important part of data production is randomness: a fruitful *in situ* data acquisition can be stopped at the end of its host project if new funding resources are not provided. Therefore, an ambitious vision of a marine data assembly and portal should be balanced with a regular data collection for which a contribution of the EU is also welcome and required (in particular for the ocean component), so that both activities can offer a regular public service. Data Collection for Fisheries (DCF) can be quoted as a reference of that type of service where both Member States and Europe contribute.
- *SEADATANET* project is not explicitly mentioned, although this project play a significant role at pan-European level for standardization of marine data and meta-data, allowing interoperability and the building of a network of distributed data centers, and ensuring sustainability of this system. GMES Marine Core Service "*My Ocean*" is a user of *SEADATANET* for delayed-time data. *My Ocean* and *SEADATANET* have recently signed a MoU with the aim to make available a comprehensive dataset of in situ observations from both the Operational Oceanography and research communities as well as other users. EMODNET is also building on *SEADATANET* for the standardization of assembled data in the framework of preparatory actions. It is therefore important that *SEADATANET* can continue with its federative role: the current project will end in april 2011 and a follow-up "*SEADATANET 2*" has been proposed to the DG/Research Infrastructures call 2011.

- GMES : Marine Core service project is not limited to spatial observation and derived products. It seems necessary to remind that GMES includes three components: space observation, *in situ* observation and services (including Marine Core Services ensured by *My Ocean*). Concerning the marine data *in situ* component, data acquisition in the water column, from the sea surface to the sea-floor, require a sustainable *in situ* infrastructure (Argo profiling floats, sub-sea moorings, moored buoys, surface drifters, etc ...) as well as real-time data collection by the *in situ TAC* (“*Thematic Assembly Center*”) of *My Ocean* including the Coriolis data center contribution. Concerning physical data, data produced and assembled in the framework of *My Ocean* project, *EUROGOOS* regional networks and *SEADATANET*, will be of benefit to EMODNET preparatory action.
- The IODE programme "International Oceanographic Data and Information Exchange", of the "Intergovernmental Oceanographic Commission" (IOC) of UNESCO, is not mentioned, while its purpose is to harmonize oceanographic data and information at an overarching international level (<http://www.iode.org/>).
- The fact that international observation networks (notably ocean ones) are not mentioned, together with the affirmation that Member States should fully finance *in situ* observation infrastructures will unease the request for a GMES co-funding on these systems (this comment is a complement to the need for an EU contribution for data *in situ* acquisition as explained above)
- Data access: European policy on marine data aims at widening free and unrestricted access to available data for all users. This is similar with US practices where the financial feedback is expected through the added value of products issued from data (products provided by the private sector) and not the selling of data themselves. Actually, “free access” or “marginal costs” options still have to be stated according to the type of data and within the INSPIRE Directive. These costs are to put compared with the necessary budgets for supporting data Centers, usually hosted by research organisms, for data validation, process, storage and access activities linked with an “all public” service.

To sum-up, it is necessary to keep clarifying what is covered or not by the different programmes and initiatives (in particular EMODNET, GMES, SEIS, Research Infrastructure-ESFRI & I3 projects) and related funding processes : in this respect, representatives of each DG of European Commission should take part to the elaboration of the “Operational Marine Data Architecture”, and look for a balanced and sustainable funding processes for the long term together, from data *in situ* acquisition to data access portal.