CIESM Congress Panel P4 – Marine Observatories Networks
Venice, 12 May 2010

summary by Luis Valdés

The Panel brought together physicists, biologists, chemists, and data managers who presented some examples of networking at regional scale in the Mediterranean Sea. The session was very well attended and the presentations were followed by 45 minutes of discussions from the attendants.

Objective: To develop a process for building consensus for sustaining and evolving systematic and routine ocean and coastal observations in support of scientific and societal needs.

Rationale and Summary: The magnitude of the challenges associated to climate and anthropogenic changes, the loss of biodiversity and other uses of the coast and oceans go beyond the individual capacity of single laboratories. Research at unprecedented geographic scales is required to improve our understanding of climate change, biodiversity conservation and management options. Obtaining multidisciplinary data with a better spatial and temporal resolution is a crucial and necessary step to take the pulse of the oceans at regional and planetary scale and then keep them under permanent review. A common marine strategy at regional and international levels on a long-term basis is demanding considerable efforts towards increasing oceanographic data acquisition, and towards promoting data analysis and technological assistance. All of these big issues imply the mobilization of human, technical and financial resources.

Also the maritime policy and governance need of international cooperation. Currently the governance of oceans resources is fragmented (fishing, shipping, offshore oil and gas, offshore renewable energy, etc) as if we were managing separate entities. We need to move towards integrated approaches and therefore there is an urgent necessity for integration and coordination of existing networks

Public awareness about these problems has increased considerably in the last years, so that societies are now demanding from policymakers proactive positions towards respecting the sustainable use and management of natural resources. Therefore, it is urgent to set standards, good practices and boundaries to guarantee the sustainable use and development of marine resources and communities. The scientific community should not ignore this reality as the health of our seas and oceans depends on these new approaches: the scientific community must understand that it is time for joint actions.

Conclusions:

- Use of ocean observations in ecosystem services is in its infancy. The next 10 years will see a large increase in the use of ocean observations for ecosystem services through the enhancement of sensors, platforms, integrated observing systems, data delivery and use, and models.

- Biological/chemical observing systems are clearly behind the physical ones and most of them are not integrated in regional or global databases.

- Strengthening collaboration among the existing hydrographical and biological observing systems is essential and should be a goal.

- The challenge is to move from hydrography to multidisciplinary networks, including geosciences, chemistry and biology (with assessment of intraspecific biodiversity using genetic markers).

- The restriction to access the data currently available in the existing networks of biological observing systems was considered as a severe weakness of these networks.

- An open policy of access to data should be developed for the entire Mediterranean basin.

- Easy access to funding sources is essential to support capacity building and integrate Levant and North African countries into the Mediterranean programmes and projects.

- Long term observations require constant inputs and feedbacks to/from large research projects with specific scientific objectives