

Euro-International Symposium «
*Towards common scientific responses
to the challenges of the
Mediterranean* » Organised by
Ifremer National institute of marine
research November 20-21, 2007
Toulon FRANCE

Contribution of Italy

Italy

Italy not only geographically “cuts across” the Mediterranean, but also shares with the Mediterranean riparian countries all the environmental risks that are typical of the area: endangered biodiversity, over-fishing, anthropogenic stressors and climate change, volcanoes, earthquakes, tsunamis, landslides, fires, pollution, coastal erosion, fragility of lagoons, etc.. Moreover, geopolitical affairs (water, navigation, exploitation of natural resources immigration, security,) of the area require a widely shared science-based approach that by its own nature crosses political boundaries. It is even more so for EU Member States that, in view of the application of Nature legislation in the European seas, have an obligation to apply nature legislation in waters under their jurisdiction and, outwards, in waters where they exercise sovereign rights.

General considerations

- 1) Italy contributes actively to CIESM Programs and scientific strategy by means of its participation to CIESM Policy Board and via the contributions of numerous Italian scientists to CIESM monitoring Programs and exploratory Workshops.
- 2) Several *recent projects* have proven not only the possibility, but the *concrete advantages* of working in *cooperation among different* nations. Italy has been/is a major partner in all the mentioned projects and is the coordinator of one. Cooperation with other Mediterranean countries - Egypt, Algeria, Tunisia and Morocco and the “new” EU countries Turkey, Romania, Bulgaria, Albania, Croatia - shows the great potential of considering an “extended Mediterranean area” including, in fact, all countries of *Southern Europe and Northern Africa*.
- 3) Environmental problems of natural or anthropogenic origin cut across national borders and can be fully tackled only if the study of the Mediterranean Sea is undertaken as a multi-national effort.
- 4) Through its role in the Research Infrastructures for Marine Research Italy can encourage and promote both the participation of non-European Mediterranean countries and the geographical extension of some infrastructures.

ACTIONS

As a follow-up of Aberdeen Declaration (2007) the Italian Scientific Community perceives the need for an urgent concerted action among all the Mediterranean riparian countries to further develop and enhance a partnership with the appropriate partners and stakeholders in order to:

1. initiate a comprehensive and integrated networking of existing and new projects toward the implementation of a regional '*approach of European Marine and Maritime Science, Research, Technology and Innovation Strategy*' as proposed in Aberdeen and accepted in EC 'Blue Book 'on Maritime Policy';

2. '*initiate and support the necessary funding mechanisms, specialised infrastructures, data collection and information management, and capacity building essential to manage our on-going relationship with the oceans and seas*'.

3. establish a sustained process to facilitate the integration of the Mediterranean countries through capacity building, sharing facilities, promoting transnational exchanges of young researchers for the build-up of the next pan-Mediterranean scientists generation.

Some specific comments

As to the proposed Symposium Program:

Topic 1 : Investigating the “new” pollutants with an ecosystem approach (Italy is aware of - and ready to support - Ifremer efforts to consolidate the CIESM Musselwatch network so as to include emerging contaminants).

Topic 2 : Investigating the adaptation and mitigation actions against climate change in the area

Topic 3 : Include the submarine volcanism in the geohazards.

Topic 4 : Identification of the offshore SIC or ZPS to regulate the fishery impact.

Topic 5: A basin wide network of coastal Marine Protected Areas as sensors of the sea health.

Topic 6: Wide range of resources exploitation for different industrial purposes (from renewable energy to biotechnology: the Mediterranean is a highly rich yet unexplored source of highly marketable products).

Topic 7: Mediterranean Metabases (of key parameters) to contribute to the decision-making process (see the “Marine Atlas” EU priority action).

There are *additional* (with respect to the Symposium Program) *issues to be addressed*:

- 1) navigation, deep sea exploration and preservation (Deep-sea Frontier European initiative), small islands, submarine archaeology; impact on the coastal region of tsunami waves (either generated by earthquakes or submarine slides);
- 2) Mediterranean Regional Fleet (3 Italian research vessel are available to support a cooperated research);
- 3) implementation of the researchers/engineers/technicians training and exchange within common international research programmes and projects;
- 4) prediction of changes in water mass stratification and circulation path and their relation to global warming scenarios;
- 5) evolution of coastal systems under forcing from natural processes and anthropogenic activities;
- 6) functioning, stability and biodiversity of deep sea ecosystem.

Formation

Formation of young “operators” requires a *sufficiently long time envelope* (nowadays of the order of ten years) and *new careers and job opportunities*.

Italian Community is already undertaking:

- 1) “Coordination” of existing bodies: new COI (Italian Oceanographic Commission); the implementation of National Thematic Laboratories (i.e. deep-sea, lagoons, coastal erosion) as tool for national coordination in order to mitigate fragmentation (which is a well known problem in Oceanography).
- 2) Demonstrative contribution of two Italian Research Vessels, namely the *Universitatis* (CoNISMa), and the *Urania* (CNR) to the first series of CIESM-SUB oceanographic campaigns accessible to scientists from both north and south Mediterranean shores (July and December, 2005 respectively).

Announcement

Italian community is willing to organize and host a meeting following up the Toulon symposium.