# REACTION TO THE GREEN PAPER FROM THE ENCORA EUROPEAN COASTAL NETWORK

## **DRAFT 17-1-2007**

In this reaction the ENCORA community presents its view on several issues raised in the Green Paper on a European Maritime Policy. This view is based on the experience of ENCORA in sharing coastal expertise among and within the communities of science, practice and policy. It is endorsed by the ENCORA Steering Committee, in which international thematic networks and national coastal networks of many European countries are represented.

The issues addressed refer to the role of science and its interaction with policy and practice:

- 1. How can the EU add value to the many national, local and private initiatives which already exist in the maritime field?
- 2. How can ICZM be successfully implemented?
- 3. How can a European Marine Related Research Strategy be developed to further deepen our knowledge and promote new technologies?
- 4. Should a European Marine Research Network be developed?
- 5. In what ways should stakeholders be involved?
- 6. How can a European Marine Observation and Data Network be set up, maintained and financed on a sustainable basis?
- 7. On what lines should a European Atlas of the Seas be developed?

# 1. How can the EU add value to the many national, local and private initiatives which already exist in the maritime field?

## Green Paper:

We should consider a new approach to oceans and seas management that no longer looks only at what humans can extract from the oceans and seas, nor one that looks at the oceans and seas on a purely sectoral basis, but one that looks at them as a whole. To achieve this, it is necessary to increase cooperation and to promote effective coordination and integration of ocean and sea-related policies at all levels.

## **ENCORA** reaction:

Coastal and marine professionals - practitioners, policymakers, scientists – are often not fully aware of studies and/or experience in other European countries on issues they are dealing with in their own country. Even if regional specificity plays an important role, there are many similarities among coastal and marine issues in Europe, due, for instance, to the ongoing integration of European economies and regulations and to global economic trends and climate change. We believe that progress in European coordination and integration in the maritime field will be achieved by stimulating and facilitating contacts among coastal and marine professionals working on similar problems and by sharing knowledge and experience on scientific, technical, practical and political aspects.

Holistic approaches will be further enhanced through better insight into the complex interaction between the dynamics of natural coastal and marine resources and their exploitation for human uses. Such improved understanding can be achieved by defining and

implementing targeted research programmes, which address critical issues at the interface of different scientific and technological disciplines.

## **Recommendation:**

The European Maritime Policy should strengthen existing pan-European research and networking initiatives for harmonizing and integrating European coastal and marine policies.

Example of multidisciplinary themes underpinning integrated coastal and marine policy: The ENCORA thematic networks

- Social and economic aspects of ICZM; Multi-functionality and Valuation
- ICZM Participation and Implementation
- Coastal and marine spatial planning
- Pollution, prevention and mitigation
- Long-term geomorphologic change and climate impacts
- Effect of development and use on eco-morphology and coastal habitats
- Assessment of biodiversity change
- New sustainable coastal engineering techniques
- Assessment of field observation techniques
- Capacity building, education and training

# 2. How can ICZM be successfully implemented?

## Green Paper:

The coherence of EU policies affecting the coastal zones and the integration of the various levels of governance are a pre-requisite for successful ICZM. Actual solutions to coastal planning and management issues are best found at a regional or local level. Given the interaction of coastal and maritime issues across the land-sea interface, an overall EU maritime policy has a major stake in the success of ICZM. Consideration should therefore be given to an EU-wide mechanism for comparative analysis and an exchange of best practice.

## **ENCORA** reaction:

The EU Demonstration Programme on ICZM and the EURosion study revealed that many local and regional ICZM initiatives have emerged during the past decades. Scattered over Europe there is much experience on successful and less successful implementation strategies. Although local specificity may prevent that successful strategies be simply copied to other regions, much insight can be gained from understanding successes and failures experienced elsewhere. However, there are several obstacles to learning from experiences elsewhere:

- dispersal and fragmentation of information;
- information is often only available in the country language.

## **Recommendation:**

The European Maritime Policy should strengthen and complement existing initiatives to share existing practical ICZM expertise in different European regions by facilitating the creation of coastal managers networks for regions with similar characteristics and issues.

Example: The North Sea Coastal Managers Network, in which participate the national coastal authorities of UK, Denmark, Germany, Netherlands, Belgium, France, meets every year to exchange new experience of coastal management practices and policies. ENCORA stimulates and facilitates the establishment of such networks.

# 3. How can a European Marine Related Research Strategy be developed to further deepen our knowledge and promote new technologies?

## Green Paper:

The contribution from FP7 represents a fraction of public and private spending on research in the Community. It is essential that marine related research in Europe is considered as a whole and that co-ordination and co-operation in this area is significantly improved.

#### **ENCORA** reaction:

An increasing share of public and private research funding is dedicated to finding practical solutions for coastal and marine problems with a local and short-term character. This funding generally does not cover the additional costs of transnational research cooperation and does not provide many opportunities to experiment innovative approaches. The successes of the European MAST programmes show that transnational research cooperation greatly contributes to reaching world top-level research and innovation. This stresses the importance of international funding schemes, in particular the 7<sup>th</sup> Framework Programme. These funds should be directed to the fields of basic and applied research where international cooperation yields the greatest added value to achieve breakthroughs and innovation. The expertise of scientific and technological coastal and marine experts in Europe is needed to identify the most promising fields of research cooperation. International research cooperation has to be backed by national programmes; this can be achieved through the ERAnet frame.

## **Recommendation:**

The European marine research strategy shall include a significant component of basic research and development in the fields of coastal, estuarine and oceanographic disciplines; existing networks should be involved to identify research priorities and can be used as a basis for setting up top-level research groups across Europe.

Example: The ENCORA themes will develop European Action Plans identifying existing major deficiencies in knowledge, practices and strategies to implement Integrated Coastal Zone Management across Europe; these action plans will be published by the end of 2008.

## 4. Should a European Marine Research Network be developed?

# Green paper:

A vision is urgently needed for marine related research in Europe leading to a strategy that derives even greater benefits from the Framework Programmes and other sources of funding in Europe, avoids duplication, closes gaps and creates synergies. The strategy should include mechanisms for optimising coordination, cooperation and dialogue between the Commission and policymakers, industry and scientific communities in Member States and third countries. On the basis of input from the scientific and technical community, it should set out what is necessary to support strong and durable integration of activities among organisations carrying out research relating to the sea and maritime activities in Europe, and to provide for a

stronger cross sectoral dialogue between scientific disciplines and technology developers, to provide input for a holistic approach to maritime policy.

## **ENCORA** reaction:

In all European countries several (or even many) institutions are active in coastal and marine research or performing practical studies for coastal and marine policy and management. Europe has a rich potential of knowledge and experience in the maritime field, but it is strongly fragmented. Most information on the internet is region or discipline specific. There is no up-to-date directory telling what expertise is available where in Europe. Therefore it is difficult to take full advantage of coastal and marine expertise existing in Europe. Disciplinary networks exist, but only few networks address interaction among disciplines and interaction among science, policy and practice. There is no adequate information flow among disciplines and among science, policy and practice.

# **Recommendation:**

The European Maritime Strategy should strengthen existing initiatives to share knowledge and experience among coastal and marine disciplines and among the science, practice and policy communities.

Example: The first steps to achieve the vision laid out in the Green Paper have already been taken in ENCORA, supported by the  $6^{th}$  Framework Programme.

# 5. In what ways should stakeholders be involved?

## *Green paper:*

The European Dredging Association (EuDA) suggested the establishment of "a European Centre of Excellence for the knowledge of the sea and the oceans with as focal themes marine resources, climate change effects, dynamics of coastal zones, impact of infrastructure development, the relationship between development and ecology over longer periods". This proposal highlights the multi-faceted nature of marine-related research. Taking account of this could facilitate the exchange of information between sectors and research organisations. Options could include a regular conference to disseminate results of marine-related research and obtaining feedback from industrial stakeholders. The establishment of a single European Internet portal for research-related projects to replace the fragmented web pages that currently exist could be envisaged.

## **ENCORA** reaction:

Existing documentation and communication practices – specialized journals, grey literature, websites – are intended to exchange knowledge among experts in particular fields. However, they are not suited to convey coastal and marine knowledge and experience from experts to non-experts or from one discipline to another. The amount of information on coastal and marine issues is huge, but it is unstructured, fragmented and specialized. A productive dialogue between scientists and other stakeholders is hampered by a lack of information at matching levels, a lack of comprehensiveness of the body of information and a lack of consistency among information pieces. Relevant information cannot be easily found; a web portal that guides users to relevant information sources would help to overcome this problem. But users still face questions as to the comprehensiveness of the information, its comprehensibility, consistency, quality and actuality. Addressing these problems asks for new documentation and communication practices. Several internet systems have been developed during the past decade, some based on semantic linking of information and others on

collaborative production of information and on building linked information structures. Wikipedia is a promising example of the latter type of development, as it includes explanations of major concepts and their relationships. It contains information at several levels of specialization and guides users through these different levels while keeping the general overview. It is continuously improved, complemented and updated by the users, without loss of original contributions. A coastal and marine wikipedia for professional use does not exists at present, but in the ENCORA project an initiative for developing such a wikipedia has been launched. We feel that this is a better way to take advantage of the European resource of coastal and marine knowledge and experience than the establishment of a European Centre of Excellence.

## **Recommendation:**

The European Maritime Policy should promote and support the development of new documentation and communication practices for sharing coastal and marine knowledge among coastal stakeholders at different levels of specialization.

# 6. How can a European Marine Observation and Data Network be set up, maintained and financed on a sustainable basis?

# Green Paper:

The EU could consider setting up a European Marine Observation and Data Network which would provide a sustainable focus for improving systematic observation (in situ and from space), interoperability and increasing access to data, based on robust, open and generic ICT solutions. Such a Network would allow for an EU integrated analysis of different types of data and meta-data assembled from various sources It would aim to provide a source of primary data for implementing in particular forecasting and monitoring services, to public authorities, maritime services and related industries and researchers, integrating existing, but fragmented initiatives.

Creating such a network would require the EU to take legislative, institutional and financial steps. Legislation may be needed, for example, to facilitate better access to data from sources such as that of the Common Fisheries Policy and the Framework Programmes for Research. Institutional changes could include the strengthening of existing bodies at a national, regional and European level and the creation of a permanent secretariat with scientific and information technology expertise. Financial support should aim to be sustainable and long-term. Representatives of those who need the data – including Member States, the Commission, the European Environment Agency (EEA), the European Maritime Safety Agency (EMSA), the European Global Navigation Satellite System (GNSS) Supervisory Authority, the climate change community, industry and service providers should continually review priorities and set objectives.

#### **ENCORA** reaction:

Different users – from science, practice, policy – have different needs for information and data. This is reflected in existing datasets and monitoring programmes, which differ as to the type of information and data, acquisition schemes and methods, accuracy and the scales in time and space. The integration of existing datasets is therefore difficult and sometimes not even possible. Efforts are underway for the inventory and collection of existing datasets and information retrieval systems, such as EIONET, SeaDataNet and Mersea, ECOOP, EEA, HELCOM, OSPAR and MAP aim to streamline marine monitoring policies and EUROGOOS

endeavors to harmonize monitoring practices. The INSPIRE initiative aims at harmonizing data description protocols in Europe.

## **Recommendation:**

The European Marine Strategy should support these efforts and broaden their scope to the entire maritime field. European networks of coastal and marine scientists, practitioners and policymakers should be invited to advice on the rationalization of marine monitoring and on the harmonization of data acquisition and data access facilities.

# 7. On what lines should a European Atlas of the Seas be developed?

## Green paper:

On the basis of data collected from these various sources, the EU could also develop a veritable Atlas of EU coastal waters which could serve as an instrument for spatial planning. It would be a contribution to the similar UN project and a valuable educational tool to raise the consciousness of Europeans of their maritime heritage.

#### **ENCORA** reaction:

Spatial planning often requires a level of detail beyond the scale of a European Atlas. ENCORA therefore recommends to analyze and identify which data should be made available at the European scale and which data are more suited for being collated and stored at national or regional level. To be useful for ICZM, an Atlas of the EU coastal waters should include information of the terrestrial part of the coastal zone. The value of the Atlas would be greatly augmented if it would not only provide figures, but also explanation and understanding.

## **Recommendation:**

The Atlas of the EU coastal waters should be incorporated in a common coastal and marine database with links to a coastal and marine wikipedia.

## **SUMMARY RECOMMENDATION**

Many of the issues raised in the Green Paper ask for the creation of networking services within and among the communities of coastal and marine science, policy and practice, to better share knowledge and experience, throughout Europe. Important networking services are:

- assistance in finding and bringing together coastal and marine professionals who work on similar problems in different EU countries
- a web portal providing:
  - guidance to important internet information sources for coastal and marine professionals;
  - a contact database of coastal and marine professionals in Europe;
  - internet forums for selected user groups to discuss specific topics, to exchange information, to identify topics for international research cooperation and to initiate such cooperation
- a wikipedia for coastal and marine professionals as a shared and continuously updated source of knowledge and experience at different levels of specialization.

The EU-funded ENCORA Coordination Action, which is based on international thematic networks and national coastal networks in many European countries, has

initiated this type of services. The European Maritime Policy can take advantage of the experience of ENCORA in optimizing the effectiveness and sustainability of these networking services. The approach of ENCORA is to develop networking services that can become largely self-sustaining with only modest external funding. However, ENCORA is just a first step to better coordinate and harmonize European efforts in the maritime field. It aims to bring about a new attitude of open cooperation, mutual coaching and collaborative learning among coastal and marine professionals throughout Europe. This process is a crucial step towards harmonization of ocean and sea-related policies across Europe. However, it needs time and probably cannot be completed within the lifespan of the present ENCORA Coordination Action.

#### **Overall recommendation:**

The European Maritime Policy should provide a framework for sustaining networking services within the European community of coastal and marine professionals, to facilitate sharing of knowledge and experience. Existing networking initiatives should be integrated within this framework and broadened to the entire field of maritime science, policy and practice.