

# ENCORA - Theme

## Restoration and Preservation of Coastal Biodiversity

initiative for a **Coordination Action** within the European coastal research **and** practitioners community

### WHY ?

The continuously increasing socio-economic pressure on the coastal system from activities in that region (e.g. tourism, coastal shipping routes, port and harbour-related activities, coastal defence, fisheries, aggregate extraction and windfarms), as well as upstream and land-based activities, supports the need for a decision making framework to objectively allocate the different user functions in the coastal zone and minimize environmental degradation. This calls for a spatial structure plan, preferentially firmly based on the concept of ICZM, which incorporates protective designations to restore and preserve coastal biodiversity.

In this, the importance of coastal biodiversity and ecosystem functioning cannot be neglected: coastal ecosystems are among the most productive ecosystems worldwide and a major part of the current and future socio-economic activities in the coastal zones are depending on these living resources (e.g. tourism and fisheries).

At present, the coastal biodiversity already suffered badly from the anthropogenic stress hampering the urgent need for a thorough preservation and restoration of coastal biodiversity and maintenance of ecological integrity (e.g. integral water management). Since obviously the precautionary principle cannot always be enforced, the conservation and restoration of coastal biodiversity should primarily focus on the most ecologically valuable and vulnerable biotopes. Hence, it is of utmost importance to be able scientifically to underpin the valuation of coastal biotopes (i.e. ecological valuation).

Several biological valuation strategies for the terrestrial as well as the marine part of the coastal zone have already been proposed (at national, European and worldwide level), but their applicability at a wider scale and the relationship and interconnection between the terrestrial and marine system are largely lacking.

Furthermore, most of these strategies were designed specifically to comply with primarily national demands. This is particularly problematic for shared coastlines and watersheds.

### WHAT ?

The ENCORA theme on the preservation and restoration of biodiversity in the coastal zone will aim

to develop a strategy for ecological valuation in the coastal zone which is carried with a broad scientific support and which is applicable to a wide range of European coastlines. Such a strategy will largely enhance an objective prioritization and allocation of coastal protected areas at a European scale.

The need for a wide support from the scientific community stresses the importance of the collaboration and discussion between a wide variety of environmental scientists and policy makers, which would be facilitated through ENCORA. Furthermore, the applicability and use of the ecological valuation protocol should be thoroughly assessed by the most relevant stakeholders within the European coastal environment: ENCORA stakeholder participation is an essential step towards a useful ecological valuation protocol.

At first a draft protocol for European ecological valuation in the coastal environment will be set by a team of ENCORA environmental scientists. This team will further evaluate its applicability throughout Europe, in order to upgrade the draft protocol into a widely applicable, fine-tuned valuation protocol. Stakeholder remarks on the applicability and usefulness of the fine-tuned valuation protocol will finally help to set out a coastal ecological valuation protocol that will contribute to the biodiversity conservation in Europe.

### HOW ?

- (1) During a first environmental scientists' workshop, the already existing, national and international strategies for the ecological valuation of the terrestrial as well as the marine part of the coastal zone will be used as a baseline for setting the protocol for European ecological valuation in the coastal environment.
- (2) A selected set of case studies along the European gradients in biogeography, in knowledge (well- versus poorly known) and in preservation (e.g. preserved, restored and degraded systems) will be used to evaluate the applicability of the protocol and will thus render information necessary to upgrade the protocol (this can be done during a second environmental scientists' workshop).
- (3) Stakeholders in the European coastal zone will then be invited to test the usefulness of the protocol for European Ecological

Valuation, rendering information needed to finalize the protocol into a final ecological valuation protocol during the third and last environmental scientists' workshop.

This theme will largely benefit from a close collaboration with MARBEF Theme 3, in which valuation (primarily socio-economic, but also ecological) in the marine environment is aimed at. The added value from this ENCORA theme is demonstrated by its specific focus on the 'entire' coastal zone (including the terrestrial component) as well as the stakeholder participation, being indispensable to come up with a widely applicable and useful ecological valuation protocol.

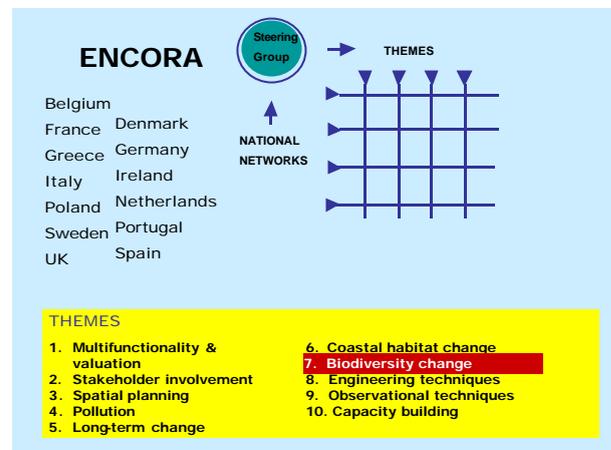
## WHO?

### Theme lead

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The theme integrates national research programmes on Restoration and Preservation of Coastal Biodiversity in the different countries.