## Theme 7: Assessment of biodiversity changes in the coastal zone

• Importance of biodiversity assessment in ICZM ?

for

"Ecosystem approach"

"Spatial planning"

## Job's ENCORA questions for EAP:

**Criteria:** research topics which describe in terms of criteria relevant for ranking their priority.

- 1. Contribution to removing a major obstacle for sustainable coastal and marine management
- 2. Contribution to a major breakthrough in science/technology
- 3. Feasibility within the context of European research cooperation

THEME 7: Assessment of biodiversity changes in the coastal zone

TITLE	Networks of observatories and repositories of biodiversity (change) data and information in the coastal area (both terrestrial, transitional (estuaries, lagoons, beaches, rocky shores, .) and marine) at appropriate spatial and temporal scales
WHY	<ul> <li>will ensure that the 'Ecosystem Approach' will merge the different types of valuation, both hard and soft values (link with other ENCORA themes)</li> <li>will ensure relevant information for spatial planning</li> <li>will ensure quick detection and risk assessment of 'biodiversity problems' (invasive species)</li> <li>will ensure the biological information for a sustainable management of natural resources (fisheries,)</li> </ul>
WHAT	Sustained observations and interpretation of the 'biodiversity status' of coastal areas (link with biodiversity and habitat mapping) at appropriate spatial and temporal scales
HOW	<ul> <li>Continuation of data gathering, filling gaps in knowledge and setting up good data policy agreements in order to share data (across national borders)</li> <li>Continuity of EU-networking: NoE, Coordination Actions, as facilitators for this process</li> <li>To include OSPAR, ICES,</li> </ul>

**THEME 7: Assessment of biodiversity changes in the coastal zone** 

TITLE	To improve the understanding of how coastal biodiversity is affected by the mitigation of climate change and how biodiversity can be used to mitigate the effects of climate change.
WHY	Investigate the benefits of protection, restoration and recovery of coastal ecosystems and its biodiversity (salt marshes, dunes, beaches, biogenic reefs,) as mitigation and adaptation measures  Effects of climate change on economic goods and services (fisheries,) of coastal biodiversity.
WHAT	Quantification of the benefits of mitigation by biodiversity and compensation measures
HOW	Investigate the changes in coastal habitats at appropriate spatial and temporal scales, including experiments

## Theme 9 suggestion : Field observation techniques

TITLE	Adapting marine habitat classification to new observation techniques	
WHY	Mismatch between habitats as observed by remote sensing tools (both visible and acoustic) and as hierarchically modelled in current classifications (e.g. Eunis)	
WHAT	Enhanced integration of ground observation data with modelled (or measured) key habitat drivers (depth, energy, light)	
HOW	Key actions:  - Intensive/comprehensive collection of field samples on a wide variety of sites throughout Europe illustrating the full diversity of marine habitats  - Refine modelling of some key drivers to habitat presence on the same sites, with a view to reformulating classifications in a way to integrate ground truth and environmental features.  - Focus on priority habitats as well as invasive species shaping new habitats.  Strong link to Theme 6 and 7	