



**COMMISSION EUROPEENNE
DIRECTION GENERALE AUX POLITIQUES REGIONALES ET A LA COHESION
PROGRAMME OPERATIONNEL INTERREG III C – ZONE SUD**

Opération Cadre Regional
BEACHMED-e: La gestion stratégique de la défense des littoraux pour un développement
soutenable des zones côtières de la Méditerranée
(code 3S0155R)

**Barcelona, 2007 February 2nd
Consorci El Far**

Meeting between two European projects INTERREG IIIC:

DEDUCE: Développement Durable des Zone Côtières Européennes

BEACHMED-e: La gestion stratégique de la défense des littoraux pour un développement
soutenable des zones côtières de la Méditerranée

Participants:

Signature

Xavier Martí, Generalitat de Catalunya _____

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Simone Martino, Università La Tuscia di Viterbo _____

Mauro Fabiano, Università di Genova _____

Fabio Fabbri, Regione Lazio _____

Silvia Bellacicco, Regione Lazio _____

Introduction:

The main goal of this meeting is to exchange experiences and methods.

To have a contact with other experiences in this matter it's strategic and that for many reasons like:

1. to avoid repetition in the outcomes
2. to reach more advanced results by a real exchange of experiences
3. to uniform parameters and evaluation criteria

This meeting is a good opportunity to improve both projects, e.g. carrying out an assessment of the practical use of the ICZM indicators set by the Work Group on Indicator and Data (EU Integrated Coastal Zone Management Expert Group).

The agenda of the meeting is:

- 1) state of the art of the two projects
- 2) proposal of an analysis of the WG ID indicators n° 25, 26, 27 and 28
- 3) hypothesis about collaborations between DEDUCE and BACHMED-e
- 4) discussion about an hypothesis of European and Mediterranean Observatory focused on the coastal erosion phenomena.

STATE OF THE ART OF THE TWO PROJECTS

DEDUCE

EVALUATION MODEL FOR THE SUSTAINABLE DEVELOPMENT OF EUROPEAN COASTAL ZONES

The aim of *Deduce* project is developing a methodology to assess the ICZM strategy. Among several topics, it is concerned on indicators and geographical information system for land use. The objective of these indicators is the control of the occupation of the natural spaces, the protection of the natural biodiversity, the promotion of the economy of the coastal lands, the reduction of social exclusion and the quality improvement of the beach.

A specific purpose of the project is the application of these indicators, testing their compatibility, homogeneity and applicability among different tiers of governments, from the local to the European scale.

Out of them, the economic indicators are split in two categories: social and economic. Social are included in cluster 21 (see the list below) and refers to the social exclusion degree, while the number 27 concerns the capital asset in danger (people living in a risky coastal zone, protected sites in a risky areas, values of the capital assets). The last indicators, the number 28, is a governance assessment instrument, even though it is not well described and not specifies how is related to the 27 previous *outcome indicators*.

The Deduce project has tested all these indicators and provided to their evaluation in a numeric way, specifying the criteria and the standards for their calculation. Nevertheless some of these indicators are not found to be calculated and then they will need a more explicit definition by the WG-ID.

BEACHMED-e

STRATEGIC MANAGEMENT OF BEACH PROTECTION MEASURES FOR THE SUSTAINABLE DEVELOPMENT OF MEDITERRANEAN COASTAL AREAS

The Beachmed-e project measure 3.2 (ICZM-MED) is oriented on three main activities:

1. Implementation of operational strategic studies for beach reconstruction
2. Cost/benefit analysis for coastal area defense and appraisal of the beach economic value
3. Applicability of integrated management criteria

For the first aim the specific objectives are the following:

- a. Evolution Outcome of a specific coastal area.
- b. Socio- environmental and land analyses
- c. Integrated Coastal Zone Management scenario proposals.
- d. Management Master Plan
- e. Specific Intervention Programme Commitment

For the Cost/Benefit analysis leaned to a coastal area defense and the beach economic value appraisal, the General Objective is the “development of a cost-benefit analysis model for the comparison of different types of coastline defense interventions and economic value of beaches resulting from specific socioeconomic analyses”.

In detail the specific objectives are:

- a. Compare and exchange views with regional partners relating to Integrated Coastal Zone Management.
- b. Develop coastal state indicators (CSI) which are linked to the resources, in order to describe the dynamic state of the coasts subject to Integrated Coastal Zone Management.
- c. Use questionnaires to monitor and assess the “non commercial” value of the beach, in which tourists are asked to answer a set of questions.
- d. Use questionnaires to monitor and discover tourist and operator preferences regarding the various types of coastline defense systems.
- e. Define Mediterranean beaches according to their value profiles.
- f. Define a specific method for the assessment of beach value to be used in cost-benefit analysis.
- g. Define a methodology which can create cost parameter and assessment criteria for the various types of coastline defense interventions.
- h. Apply cost-benefit models to pilot sites.
- i. Define a method which can determine ideal/optimal beach advancement results using artificial beach nourishment techniques.

And for the last activity, which is strictly connected with the PAP/RAC’s recent Protocol on Mediterranean Coastal Zone Management , the general objective is to verify the applicability of these proposals at a local level using a pilot zone including more than one local authority and that corresponds to at least one physiographic unit.

In this case the specific objectives are:

- a. Apply the definition of coastal zone
- b. Establish management intervention criteria at a local level.
- c. Verify planning tools and their consistency with what has been defined/stated in the Protocol.
- d. Verify management, organization, information and participation levels and aspects.
- e. Contribute towards the setting up of a Mediterranean and national integrated management strategy.

Currently the partnership of the sub-project ICZM-MED has completed the first phase of the job consisting in bibliographic researches and in an evaluation of “state of the art”.

List of WG ID INDICATORS

1 DEMAND FOR PROPERTY ON THE COAST
2 AREA OF BUILT-UP LAND
3 RATE OF DEVELOPMENT OF PREVIOUSLY UNDEVELOPED LAND
4 DEMAND FOR ROAD TRAVEL ON THE COAST
5 PRESSURE FOR COASTAL AND MARINE RECREATION
6 LAND TAKE BY INTENSIVE AGRICULTURE
7 AMOUNT OF SEMI-NATURAL HABITAT
8 AREA OF LAND AND SEA PROTECTED BY STATUTORY DESIGNATIONS
9 EFFECTIVE MANAGEMENT OF DESIGNATED SITES
10 CHANGE TO SIGNIFICANT COASTAL AND MARINE HABITATS AND SPECIES
11 LOSS OF CULTURAL DISTINCTIVENESS
12 PATTERNS OF SECTORAL EMPLOYMENT
13 VOLUME OF PORT TRAFFIC
14 INTENSITY OF TOURISM
15 SUSTAINABLE TOURISM
16 QUALITY OF BATHING WATER
17 AMOUNT OF COASTAL, ESTUARINE AND MARINE LITTER
18 CONCENTRATION OF NUTRIENTS IN COASTAL WATERS
19 AMOUNT OF OIL POLLUTION
20 DEGREE OF SOCIAL COHESION
21 RELATIVE HOUSEHOLD PROSPERITY
22 SECOND AND HOLIDAY HOMES
23 FISH STOCKS AND FISH LANDINGS
24 WATER CONSUMPTION
25 SEA LEVEL RISE AND EXTREME WEATHER CONDITIONS
26 COASTAL EROSION AND ACCRETION
27 NATURAL, HUMAN AND ECONOMIC ASSETS AT RISK
28 INTEGRATED COASTAL ZONE MANAGEMENT

Sub-indicators for the items 25,26,27.

251. Number of 'stormy days' thereat to coastal zones posed by

252. Rise in sea level relative to land

261. Length of protected and defended coastline

262. Length of dynamic coastline

263. Area and volume of sand nourishment

271. Number of people living within an 'at risk' zone

272. Area of protected sites within an 'at risk' zone climate change and to ensure appropriate and ecologically responsible coastal protection

273. Value of economic assets within an 'at risk' zone.

COLLABORATIONS BETWEEN DEDUCE AND BACHMED-E

1) Participation to initiatives and meetings for updating

The Coordinators of the two project involved agreed about the necessity of a reciprocal participation to the initiatives of each project itself. Then Mr Marti has been invited to the next BEACHMED-e conference and Mr Lupino has been invited to the meeting which will be hold in Tarragona (ES) on next March 2nd.

2) Proposal of collaboration on the indicators n° 25,26,27 and 28

The proposal is to study the set of indicators taking into account the specificity of the coastal environments at stake, (in our case the beach). Among them, the biodiversity values, and the nonuse values. It seems interesting to consider indicators relating to land and properties values, such as the marginal value of properties as a function of quantitative and qualitative variation of the environment of interest (i.e beach). This should link the variation of the capital asset values to the quality exchange of the environment.

Other values not very well specified in the DEDUCE project are commercial and industrial, as well as agricultural and fisheries activities. The former may be assessed by consumer and producer surplus, while the latter by yield exchange. This variation should be related to the environmental quality changes too.

The necessity to consider these benefits is important for choosing the cost-effectiveness way to manage the coast. Moreover in a typical monitoring of coastal planning policy implementation, benefits are usually cited but not assessed.

Other economic indicators should consider the expenditures incurred on the coastal planning and management activities (i.e. research and planning activities, promotion and information, capital investment in specific projects) in order to compare costs with benefits achieved.

Synthesis and proposal for a new research:

- 1) expanding the indicators proposing new ones more specific to the environment considered;
- 2) including indicators valuing the biodiversity loss or its changes;
- 3) relating the economic values to the changes of the environmental characteristics;
- 4) linking the indicators number 28 to the previous 27 indicators. Can we say that the process or governance indicators (expressed as unique indicator number 28) has as direct outcome measured with the other 27 indicators

- 5) Assessing the process of public policy valuation (in this case the results of the coastal governance).

On this topic Prof. Fabiano presents a methodology used for a synthesis of the management indicators (EMERGY), highlighting the problem of the risk awareness which don't seem to be considered among the WGID indicators. Prof. Fabiano shows as well some slides comparing the WGID and EMERGY indicators. Comparing the two methods it's possible to develop several considerations judged very interesting by all the presents. Prof. Fabiano is invited by Mr Marti at the meeting in Tarragona in order to show these evaluations.

In any case the sub-project ICZM-MED will work taking into account the WGID indicators and the DEDUCE outputs, improving and specifying the indicators from 25 and 28. The results of a preliminary analysis on this topic will be presented within _____,

DISCUSSION ABOUT AN HYPOTHESIS OF EUROPEAN AND MEDITERRANEAN OBSERVATORY FOCUSED ON THE COASTAL EROSION PHENOMENA

Mr Lupino presents a preliminary hypothesis about an Observatory System focused on the beach erosion matter and particularly interested at the Mediterranean coasts. The document is annexed to this report.

Mr Marti is very concerned to this hypothesis but suggests to expand the field of interest over the topic of the coastal sustainability.

However, needing this matter an adequate period to be thought, the Coordinators agree about an up to date, putting off any further considerations to the next meeting scheduled for _____.