

INTEGRATED COASTAL ZONE MANAGEMENT: TOWARDS AN ATLANTIC VISION
PROTECTION AND MANAGEMENT OF THE NATURAL RESOURCES

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ABSTRACT

The conservation of the natural resources and, particular, of the coastal zone contributes too many technical and political discussions, concerning to the compatibilization of the activities that are being developed in the coastal zone, to the actions associated to the protection and utilization, planning and management instruments, or the function increased by the different agents.

In order to develop an integrated and sustainable management of the natural and environmental coastal resources, concerning, simultaneously, its protection and contribution to the social-economic development in the surrounding area, it was approved and presented by the Community Initiative Programme INTERREG III B «Atlantic Area» 2000-2006 the project “*Integrated Coastal Zone Management: Towards an Atlantic Vision*” involving regions of Spain, France, Ireland, Portugal and the United Kingdom.

The Greater Metropolitan Área of Lisbon (GAML), with the coloboration of the Instituto de Dinâmica do Espaço of the Universidade Nova de Lisboa (New University of Lisbon), lead the Thematic Action NATURAL HERITAGE and develops the specific action “*Study of the Natural Resources in the Atlantic Coast*” trying to analyse, evaluated and promote an integrated and sustainable management of the natural and environmental coastal resources of the Atlantic Coast, based in a comparative study of the natural resources of the three partners (Lisbon, Aquitaine and Severn).

In this presentation we will intend to show the global objectives of the entirely project and how it is being developed, focusing particularly in our Thematic and Specific Actions in order to present the methodologies and preliminary results, based in an Ecological Monitorization System, to a better planning and management of the natural resources in the Atlantic Cost.

INTRODUCTION

As the European Parliament and the Council of the European Union affirms “the coastal zone is of great environmental, economic, social, cultural and recreational importance to Europe”, however in the present we assist to a continued degradation of the European coastal zones including the quality of coastal water. The effects of climate change, in particular rising sea levels, changes in storm frequency and strength, and increased coastal erosion and flooding, associated to population growth and the development of economic activities are increasingly threatening for both the environment and society of coastal zones.

So, this project cross 4 thematic actions (Coastal Access, Natural Heritage, Cultural Heritage and Urban-Rural Interdependencies) and 4 crosscutting actions (Geographic Information System, Stakeholders Involvement, Governance and Dissemination) using and combining experiences at local and regional level to provide and contribute to a vision for the whole area that will be useful for Member States as they develop their national strategies.

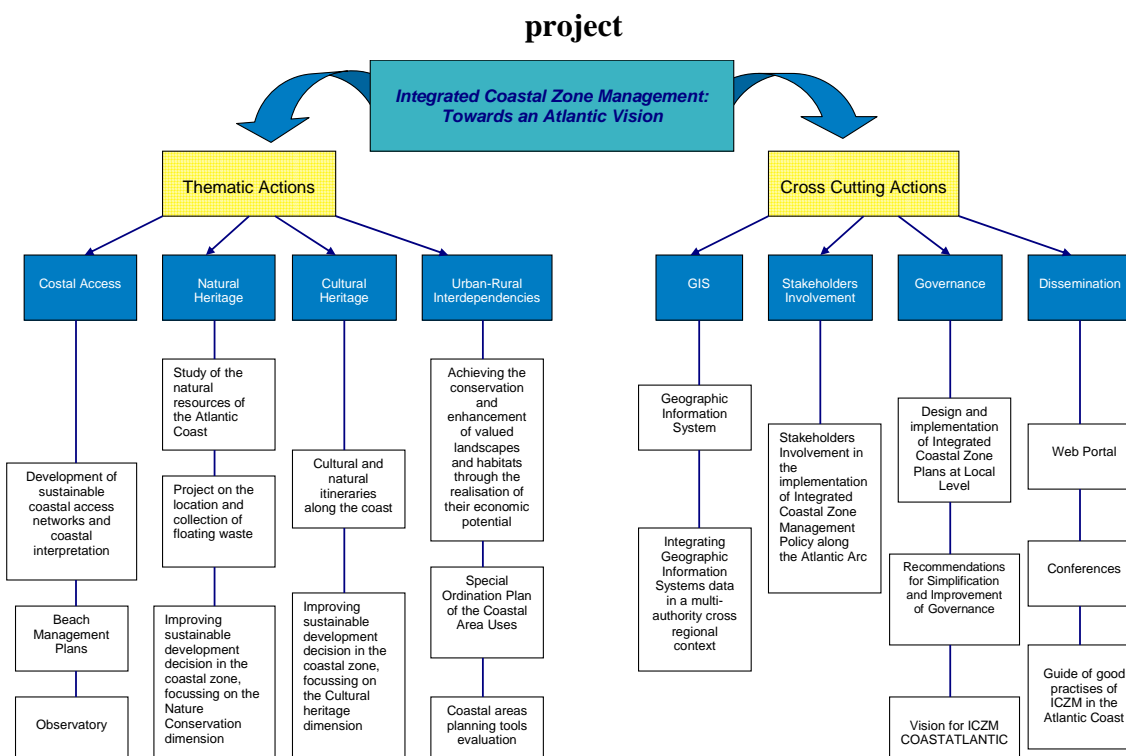
The project seeks to encourage the sustainable development of coastal areas promoting integrated land use planning in conjunction with the implementation of efficient management practices and promote an integrated and continuing development of the zones along coasts and estuaries, with the main result being the resolution of environmental conflicts as an encouragement to sustainable development.

The overall objectives of this project are:

- To increase the understanding and awareness of the potential of the spatial planning development decisions to affect the nature conservation resource;
- To empower decision-makers in the definition of sustainable development decisions;

- To ensure the contribution of activities, plans and projects to the conservation of the natural heritage of protected areas.
 - ⇒ Formulation of concrete recommendations and measures aimed at the reduction of economic activities negative impacts and the protection of natural coastal resources at local, regional, national or community levels.

Structure of the *Integrated Coastal Zone Management: towards an Atlantic Vision*



The Thematic Action *Natural Heritage* and the Specific Action “*Study of the Natural Resources of the Atlantic Cost*” - lead and develop by the “Grande Área Metropolitana de Lisboa” (Great Metropolitan Area of Lisbon), one of the Portuguese partners - are being developed at a regional level, based in a comparative study of the natural resources of the Metropolitan Area of Lisbon, the Regional Council of Aquitaine and the Severn Estuary Partnership, with the finality to elaborate a Proposal and make Recommendations for an Interventional Program to the Atlantic Cost.

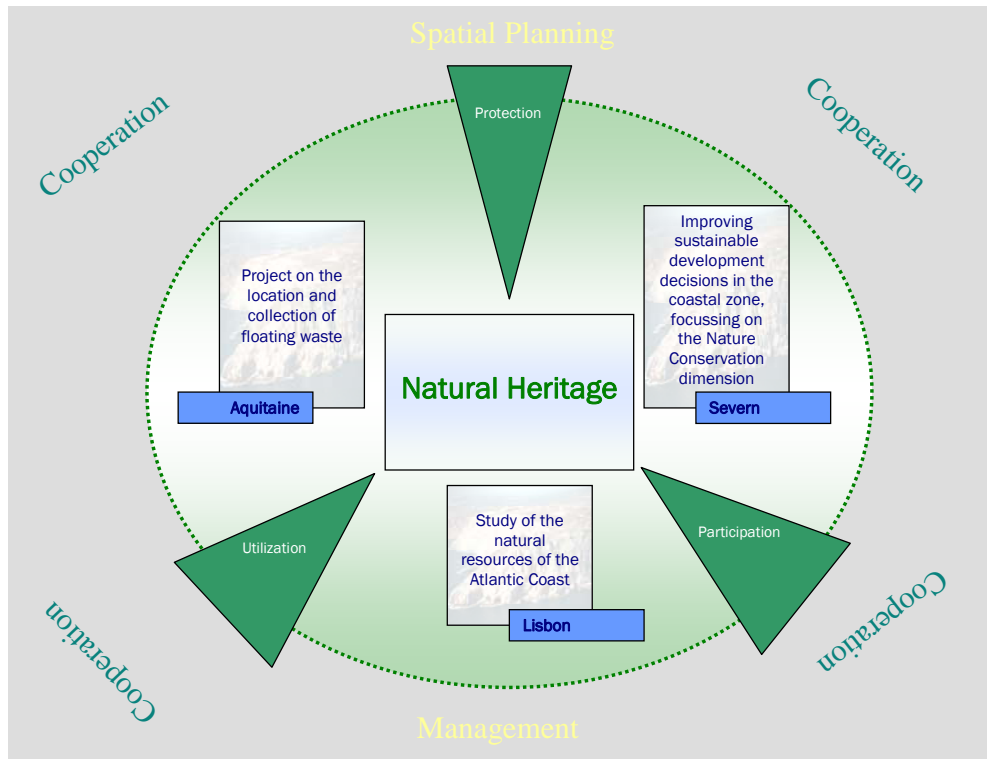
The Natural Heritage Thematic Action aims to help planners and decision makers to take account of the potential impact of development and economic growth on the natural resource conservation of the Atlantic Coast. The general objectives:

- A survey of the natural resources of the Atlantic Coast and the impact activities have on them;
- A study of the contribution that protected areas make to the socio-economic development of the surrounding areas;
- Land use planning and sustainable development of the coastal zone, drawing up directives for the use of the soil, shorelines, estuaries and marshes, as well as beaches and cliffs;
- Protection and promotion of habitats and coastal species, and the restoration of degraded areas;
- Promotion of the role of the natural heritage of the Atlantic Coast in land use planning and decisions regarding development.

Our objective is to contribute to the realization of an Integrated Coastal Zone Management through the identification and conservation of the natural and environmental coastal resources, using a natural resources inventory and an analysis of the environmental, social, economical, institutional and juridical aspects, with the purpose to find the common actions to the management and protection of the natural resources of the Atlantic Coast and to incentive the development of the transnational cooperation in order to deal with the environmental problems, to protect the resources and natural heritage and to reduce the regional and national disparities.

Simultaneously, we will increase the participation of the socio-economical identities on the resolution of the problems concerning environmental issues with the aim to promote the sustainable development of coastal zones, through an integrated coastal resources management, which associates the protection with the use of the natural resources.

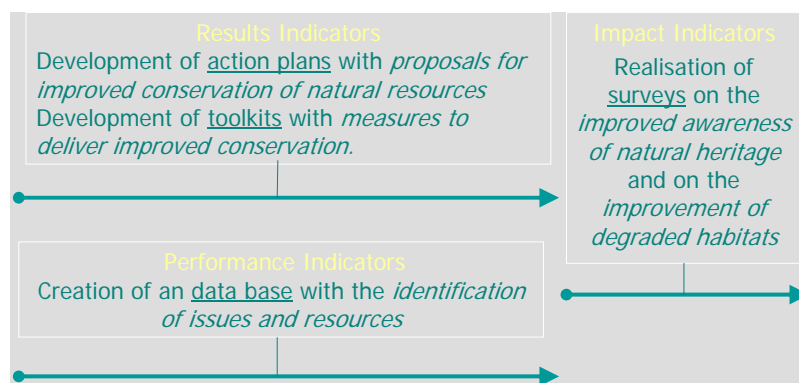
Approach to the thematic action Natural Heritage



INDICATORS

To better develop the thematic action Natural Heritage we select some indicators:

Monitoring Indicators



Results Indicators

- Development of **action plans** with *proposals for improved conservation of natural resources*.
- Development of **toolkits** with *measures to deliver improved conservation*.

- An overview of potential and actual impacts of a range of activities, plans and projects on the nature conservation interest of a major estuary.
- A framework to manage information relating to these activities.

Performance Indicators

- Creation of a **data base** with the *identification of issues and resources*.
- Enhanced conservation of key nature conservation features of the estuary .
- Practical and accessible guidance for development practitioners, readily available guidance on best practice in the management of activities, plans or projects in areas that interrelate with the Natura 2000 sites.

Impact Indicators

- Realisation of **surveys** on the *improved awareness of natural heritage* and on the *improvement of degraded habitats*.
- Better understanding, prediction and recording of the impact of activities, plans and projects.
- Improved understanding and exchange of information between those promoting and those regulating development.
- Better availability of information relevant to project evaluation, Environmental Impact Assessment and ICZM programmes.
- Improved sustainability of development in the surrounding areas.

NATURAL HERITAGE - SPECIFIC ACTIONS

1. *Project on the location and collection of floating waste.* Region d'Aquitaine

Key objectives

This is a regional co-ordination action based on the study of the location, collection and treatment of the floating wastes in the maritime and estuary zone of the Aquitaine littoral,

which will be complemented by the use of technological and regulatory means to reduce the amount of pollution that appears in the littoral waters.

Procedures

Record the problems caused by the presence of “floating wastes in Aquitaine”.

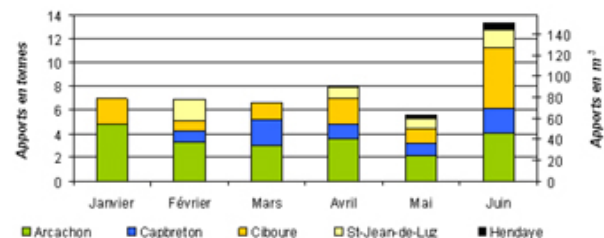
- Taking a thorough inventory of the operations to be carried out in the Aquitaine littoral.
- Compiling a specialised bibliography on the nature of the floating wastes, the frequency of their appearance, and the operations for their collection.
- Publishing an Annual Guide of Operations.

Actions of regional co-ordination carried out or to be carried out.

- Establish an organisation of current actors.
- Stir up interest in the Aquitaine network through the action of its Secretary-general, organising reunions and visits to pilot-project sites, resuming experiments, and communicating information for technical purposes or for the public at large.
- Identify and mobilise the Aquitaine resources (industrial or laboratory studies) for treating wastes and getting value from them.

Put into action an on-going technological and regulatory service.

- Service based on the resources and the experience of the scientific structures. This is based on identifying new technological mechanisms, adaptable to the littoral and estuaries, which may lead to the modification of existing local regulations.



Create a framework for the operation of “*collecting wastes at sea by fishermen*”.

- Encourage the participation of maritime professionals, especially fishermen, in the collection of wastes and in the promotion of the protection of coastal resources.

Prepare a specifications sheet for studies involving technical participation.

- Description, method of management and expected performance.

Begin actions of Information/Awareness.

- Transmission of specific information to port directors regarding national proceedings and the importance of the presence of maritime sports figures in the press as a means of raising awareness for the preservation/protection of the marine environment.
- Encouragement and valorisation of the initiatives by local associations that seek to inform the general public.

2. Improving spatial planning and sustainable development decisions in the coastal zone, focussing on the Nature Conservation Dimension. Severn Estuary Partnership

Key objectives

The protected area of the Severn Estuary covers the jurisdictional area of 10 local authority planning departments, as well as other statutory organisations and users involved in the development and use of the estuary, so this specific project aims to help spatial planners and decision makers take account of the potential impact of development and activities on the nature conservation resource of the Severn Estuary.

- To improve understanding and awareness of the potential for spatial planning development decisions to affect the nature conservation resource.
- To empower decision makers in the making of sustainable development decisions.
- To ensure that activities, plans and projects contribute to the conservation of the natural heritage of protected areas.

Procedures

Broad Project Actions

- Work together with transnational partners and local stakeholders to identify common development threats to the nature conservation resource and best practice in managing these to minimise impact.
- Produce accessible and user friendly guidance and proformas to assist in the spatial planning process and empower those seeking to make sustainable development decisions in the coastal zone.

Specific Project Actions

- Use a develop existing Stakeholder Forums, networks, documentation and initiatives, to discuss an inventory of the main activities taking place in the area covered by the Severn Estuary Partnership, their management and their known impact on wildlife.
- Research local, EU and other sources of best practice for techniques to manage a representative range of activities to conserve wildlife.
- Prepare user-friendly guidance notes for those planning and regulating development in areas that interrelate with the Natural 2000 site.
- Develop a standardised format for the presentation of information relevant to the management of activities on the estuary.
- Make recommendations for other practical actions to move forward the spatial planning and sustainable management of activities.

Therefore, the main outputs will be: User friendly guidance for spatial planners and decisions-makers to move forward best practice by taking account and seeking to manage the potential impact of activities and development on wildlife.

3. Study of the natural resources of the Atlantic Coast. Great Metropolitan Area of Lisbon

Key objectives

1. Identification and stocktaking of the natural and environmental coastal resources (type of resources and planning and management tools).
2. Promotion of an **integrated and sustainable management** of the natural and environmental coastal resources, regarding, simultaneously, their **protection** and their **contribution to the social-economic development** in the surrounding area.
3. Formulation of concrete **recommendations** and measures aimed at the reduction of the negative impacts of the human activities and the protection of natural coastal resources at local, regional, national or community levels.
4. Identification of scenarios at European level – used as a support in spatial planning and development decisions.

Procedures

- Development of a methodology for the study of the natural resources of the Atlantic Coast, using a **systemic perspective** that integrates the Biophysical – Ecological – Social – Economic – Political – Institutional components and their relations and interconnections.
- Definition of an **European network** for integrated management of the Atlantic Coast natural resources – identify the coastal resources due to be protected, qualified or recovered in each (partner) region.
- Orientation of **European Union policies and actions** (ECONET and Nature Network 2000), aiming to the sustainable development of coastal zones, through an integrated coastal resources management.
- Promote the awareness of local communities regarding the importance of an integrated management and protection of natural resources.
- Realisation of an European workshop for the explanation and discussion of the results obtain.
- Edition of Good Practices Guide (handout, CD-ROM and web page).

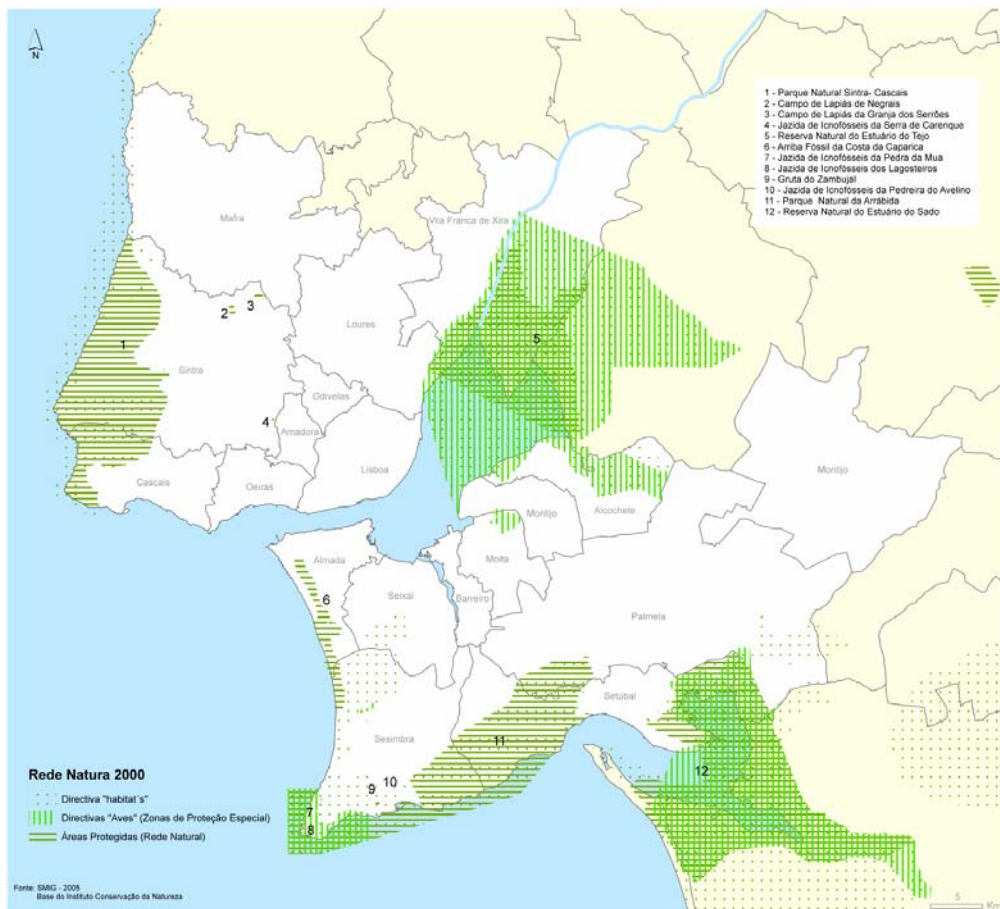
Arrábida Nature Park



Sintra-Cascais Nature Park



Protected Sites of the GAML



All the protected sites of the GAML are located in the coastal zone.

In this way, we will develop a methodology for the study of the natural resources of the Atlantic Coast, using a systemic perspective, that will be applied by an European network

for integrated management of the Atlantic Coast natural resources, in order to: identify the coastal resources to be protected, qualified or recovered in each region; define the orientations of European Union policies and actions, aiming to the sustainable development of coastal zones, through an integrated coastal resources management.

EVALUATION – PRINCIPLES OF ICZM

To support the development of the trans-national and common vision of ICZM for all the Atlantic Area there will be used an integrated approaches to coastal management at the local level - taking into account the local conditions and constraints.

Consequently, the local projects are evaluated against a simple matrix of the 8 principles of IZCM agreed by the EU (Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe – 2002/413/EC).

Principles	Description	Constraints		Evaluation
		Institutional	Resources	
A Broad "Holistic" Perspective				
A Long Term Perspective				
Adaptive Management				
Local Specificity				
Working with Natural Processes				
Participatory Planning				
Support & Involvement of all Relevant Administrative Bodies				
Use of a Combination of Instruments				

.To contribute to a Vision for the Atlantic Arc, recommendations on improvement of governance and ICZM best practice we will increase the Governance with the development of the:

1. Stakeholder Involvement

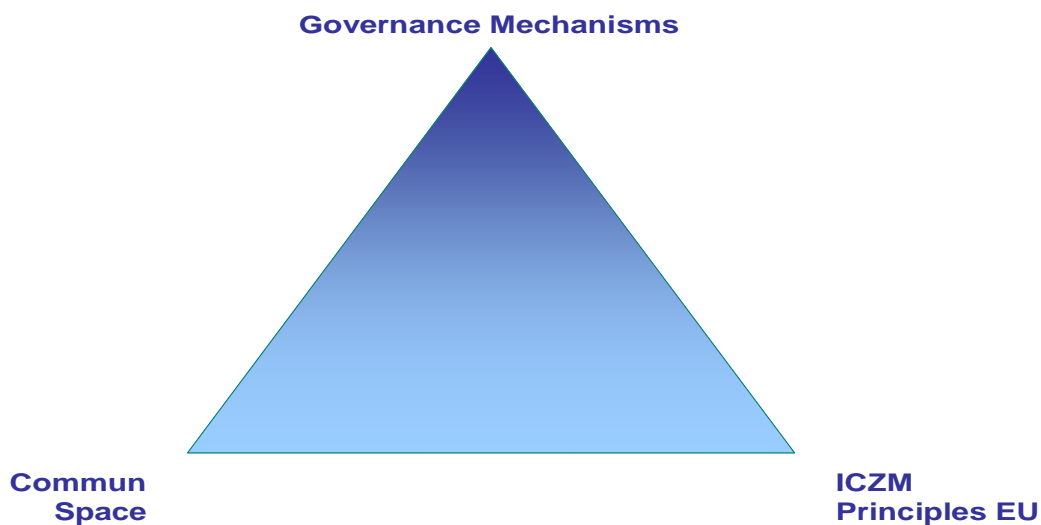
- It is essential that all the relevant stakeholders participate in coastal planning if the sustainable development of the Atlantic area is to be archived.

2. Information Management

- Cooperation in GIS – cross in Europe.
- Coastal observatories and a network for the Atlantic coast region could provide a useful approach to coordinating data and information.

3. Spatial Planning

- The coast and marine waters of the Atlantic Seaboard of Europe are common shared place for which there should be a high-level, integrated vision, supported by a convention and action plan, to inform and support national, regional and local initiatives, and regional cooperation and coordination.
- Identify potential subdivision of the Atlantic Arc Area for ICZM purposes.



PRELIMINARY DIAGNOSTIC

Strengths

- Natural diversity
- Wealth of the natural heritage – wealth of natural values
- International value
- Great potential:

- development with compatible uses
- conciliation between different uses with a sustainable utilization and protection

Weaknesses

- Competencies in the coastal zone are divided between different administrative levels - many entities and public organisms with competencies in the coastal zone
 - Attributions and competencies of the different entities
 - Management (municipals and natural reserves)
- Insufficient public information (for all the citizens)
- Not exploitation of the potential utilization with the compatible uses – to protect and to utilize.