

# **TOWARDS A EUROPEAN INTEGRATED COASTAL ZONE MANAGEMENT (ICZM) STRATEGY**

## **General Principles and Policy Options**



EU DEMONSTRATION PROGRAMME  
ON INTEGRATED MANAGEMENT  
IN COASTAL ZONES 1997-1999



EUROPEAN COMMISSION



European Commission

# Towards a European Integrated Coastal Zone Management (ICZM) Strategy:

## General Principles and Policy Options

**A reflection paper\***

Directorates-General  
Environment, Nuclear Safety and Civil Protection  
Fisheries  
Regional Policies and Cohesion

1999

\* This document has been compiled by the Demonstration Programme's team of thematic experts. It is intended to stimulate a broad debate. It is based on a series of hypotheses, and does not in any way prejudge the final position of the Commission.

A great deal of additional information on the European Union is available on the Internet.  
It can be accessed through the Europa server (<http://europa.eu.int>).

Cataloguing data can be found at the end of this publication.

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## TABLE OF CONTENTS

<b>Foreword</b>	5
<b>1 Introduction</b>	7
1.1 <i>The Significance of the Coastal Zone</i>	7
1.2 <i>The Challenges of Managing the Coastal Zone</i>	7
<b>2 General Principles for Good Management of Europe's Coastal Zones</b>	11
<i>Take a Wide-Ranging Perspective</i>	11
<i>Build on an Understanding of Specific Conditions in the Area of Interest</i>	11
<i>Work with Natural Processes</i>	12
<i>Ensure that Decisions Taken Today Do Not Foreclose Options for the Future</i>	12
<i>Use Participatory Planning to Develop Consensus</i>	12
<i>Ensure the Support and Involvement of All Relevant Administrative Bodies</i>	13
<i>Use a Combination of Instruments</i>	14
<b>3 The Need for a European ICZM Strategy</b>	15
3.1 <i>What is ICZM?</i>	15
3.2 <i>Diversity</i>	16
3.3 <i>The European Dimension</i>	17
<b>4. Policy Options for a European ICZM Strategy</b>	19
4.1 <i>The Role of the EU</i>	19
4.2 <i>Adapting Individual EU Sectoral Policies</i>	20
4.3 <i>Intersectoral Coordination</i>	22
4.4 <i>A Legal Framework?</i>	23
4.4.1 <i>Action at the European level</i>	24
4.4.2 <i>Action at national/regional/local level</i>	24
<b>5 References</b>	25
<b>Annexes</b>	
<i>Annex I: Guidelines for Consultation</i>	27
<i>Annex II: Map Showing Location of Demonstration Projects</i>	29
<i>Annex III: Typology Maps</i>	31



## FOREWORD

The European Commission's Demonstration Programme on Integrated Coastal Zone Management was launched in 1996 as a joint initiative of DGs XI, XIV and XVI, with substantial contributions from other DGs, particularly XII and the JRC, as well as the EEA. The Programme is based around 35 local and regional projects\* to demonstrate the application of ICZM, a series of cross-cutting thematic analyses and research projects, complemented by regular meetings with an experts group (consisting of national experts and representatives of local administrations, of socio-economic actors, and of NGOs) and by extensive contact with other outside organizations.

The Demonstration Programme is designed to document and assess the hypothesis presented in COM 511/95 that the continued degradation and mismanagement of many of Europe's coastal areas can be traced to problems related to:

- Insufficient or inappropriate information, both about the state of the coastal zones and also about the impact of human activities (economic and non-economic)
- Insufficient coordination between different levels and sectors of administration, and their policies
- Insufficient participation and consultation of the relevant stakeholders

As well as providing concrete examples of good practice in Integrated Coastal Zone Management (ICZM) in a range of socio-economic, cultural, administrative and physical conditions, the Demonstration Programme is also intended to be the raw material for the development of a **European ICZM Strategy**, promoting sustainable development of E.U. Coastal Zones.

This present document thus has two purposes:

- ★ To compile and diffuse the principal policy lessons emerging from the experiences of the Demonstration Programme to date
- ★ To stimulate debate and develop consensus on a European ICZM Strategy, designed to reverse the trend towards unsustainability that is presently pervasive in coastal zones across Europe

This strategy will need to consider the various legal, economic, and policy instruments that could be put to the service of ICZM, and the conditions under which each instrument might be appropriate. It will also need to consider the relative responsibilities of the various administrative levels (in application of the subsidiarity principle), and the information base needed at each of these levels in order for them to assume their responsibilities. It is not intended that a future European ICZM Strategy would increase the total amount of European expenditure in coastal zones, but rather should indicate ways to make better use of existing levels of funding.

It is hoped that many of the principles and lessons related to Integrated Management that are arising in this programme might also be applied in the management of other, non-coastal areas of the European territory, and in guiding collaborative initiatives with our neighbours in the Mediterranean and PECO countries.

The intended audience for this document includes all those individuals and organizations with an interest or stake in the management of our coastal zones. The accompanying document prepared by the Demonstration Programme's team of thematic experts, "Lessons From the European Commission's Demonstration Programme on Integrated Coastal Zone Management (ICZM)" is a compilation of experiences and lessons from the Demonstration Programme; although it is the underlying basis for the discussion in this volume, it will probably be of most interest only to those actually involved in establishing or sustaining an ICZM initiative. In both documents, essential points are highlighted in bold.

**Readers are invited to react to this document — to agree with, disagree with or complement the contents — following the guidelines in annex I.**

\* Including two projects in Eastern Europe and one in Norway (see annex II for locator map).





# 1 INTRODUCTION

## 1.1 THE SIGNIFICANCE OF THE COASTAL ZONE

Historically, the coastal zone has been a major focus for the development of human society. Use of the sea for transport and trade and availability of abundant food from highly productive coastal waters encouraged settlement. Many of Europe's coastal towns and cities have a culture and way of life stretching back over centuries.

The coastal zones continue to be areas of rich potential for our modern society. The productivity of coastal lagoons, tidal inlets, salt marshes and estuaries have an important role to play in food production - through maintenance of fisheries and aquaculture - and in safeguarding nature and biodiversity.

However, the role of the coastal zones is much broader and more diverse than this; coastal zones also serve functions related to job creation, economic growth and quality of life, such as:

- Agricultural production in coastal plains – using coastal water resources (from aquifers or desalinization)
- Diversification of fishery activities
- Energy production – including both traditional sources like oil and gas, and renewables based on wind and waves
- Mobility and commerce – ports, harbours and coastal transport routes are key elements in global transport links
- Repositories of cultural heritage – both in living communities and at archeological sites
- Tourism, leisure, recreation and aesthetics – beaches, water sports and pleasing landscapes
- Retirement residences
- Defense against the destructive forces of the sea
- Breakdown and buffering of pollutants

Coastal areas and their natural resources (marine and terrestrial) have a strategic role to play

in meeting the needs and aspirations of current and future European populations.

## 1.2 THE CHALLENGES OF MANAGING THE COASTAL ZONE

The dynamics of natural coastal processes, including tidal regimes, weather systems and sediment transport mechanisms, as well as the hydrological links between the catchment and the coast, are all factors that have influenced our ability to sustain human activities in these areas. This is manifested by increased hazards and increasing costs of sustaining infrastructure and human populations as sea levels rise, whether as a consequence of climate change or subsidence. Human actions have in some areas exacerbated these problems through the inappropriate location of infrastructure developments and overexploitation of living and non-living resources. Such human pressures pose the risk of destroying habitats and the resource base of the coastal zones, and with them, the ability of the coastal zone to perform many of its essential functions.

Increasing populations, both resident and transient, are leading to increased conflict between competing uses in the coastal zone, of both the land and the sea. Low impact uses are frequently being replaced by intensive uses that are profitable in the short-term, but which undermine the long-term potential of the coast, by reducing its “resilience”.

Unfortunately, there is no sign that inappropriate uses of the coastal zone are becoming less frequent. In fact, with increasing numbers of residents and visitors, the pressures for unsustainable use are increasing.

*Strymonikos <sup>(1)</sup> is expecting to face a heavy influx of tourists from East European countries in the next five to ten years.*

The current conflicts and incompatibilities amongst sectoral uses require identification and solution.

<sup>(1)</sup> See the Demonstration Programme Web page ([europa.eu.int/comm/environment/iczm/home.htm](http://europa.eu.int/comm/environment/iczm/home.htm)) for more information on this and other Demonstration Programme projects.



## COMMON PROBLEMS IN THE COASTAL ZONE:

**Unplanned Development** causing wasted investments, lost opportunities for durable employment, environmental and social degradation. Uncontrolled development - whether from tourism or other sectors - can rapidly overburden the natural carrying capacity of coastal zones, polluting and degrading natural resources, destroying landscapes and reducing the quality of life for residents. This kind of development also destroys the resource base that supports economic activity, including the attributes of the coastal zone that attract tourists and the environment that supports fish nurseries. *This problem is particularly significant in areas that are undergoing rapid economic expansion, such as along the Mediterranean coast in Andalucía (ES), and in the countries of Central and Eastern Europe.*

**Decline of Traditional, Environmentally-Compatible Sectors** leading to unemployment, massive emigration, and social instability. Whether through dwindling stocks or technological changes, many traditional sources of income, like coastal fishing, have become unprofitable, causing social and economic problems. These problems may result in the proliferation of other, less sustainable sectors. *For example, in La Gironde (FR), professional coastal fishing is experiencing difficulties in remaining competitive.*

**Coastal Erosion** that damages natural habitats and human settlements, destroys economic activities and threatens human life. Sea level rise resulting from climate change is poised to aggravate erosion. In many places, “solutions” that attempt to fight the forces of nature compound the problem while wasting scarce financial resources. *The coast of East Anglia (UK) is threatened by massive erosion and inundation despite - and perhaps partially because of - major investment in seawalls.*

**Lack of Appropriate Communications and Transport Networks**, resulting in increasing marginalization from the rest of Europe. Accessibility is a major problem for many coastal zones, particularly on islands. *In the Cyclades Islands (GR), due to the inaccessibility of the islands — particularly in winter — the year-round population has dwindled and seasonal tourism become the only viable economic sector; land degradation and social disintegration are the result.*

Note: The problems of the coastal zones are discussed in further detail in annex I of the accompanying technical document “Lessons From the European Commission’s Demonstration Programme on Integrated Coastal Zone Management (ICZM)” and in Commission Communication COM95/511.

While similar problems may occur in other parts of the European landscape, they are particularly acute in the coastal zones because of the complexity of the interactions between the aquatic systems and terrestrial systems, between coastal zones and their hinterlands (including between ports and the inland economy), and between islands and continental areas.

The urgency for action in the coastal zones is also determined by:

- a history of mismanagement of many coastal areas.
- the limited resilience of the coastal zone to recover from serious mismanagement

*Saltwater intrusion, from overexploitation of coastal aquifers, is a major problem in Murcia (ES). The damage to the aquifer normally results in a permanent reduction in available water resources.*

- the short time scales over which dynamics evolve in the coastal zones;
- the rich potential of the coastal zone, which acts as a magnet to individuals and economic activities;
- the many problems of pollution and sediment management that are generated upstream - or in the open seas - but have their ultimate manifestation in the coastal zone;

- the particular limits and challenges to land use planning and transport management that the physical boundary between the land and the sea presents;
- the particularly high risk of natural hazards, such as flooding from either the land or the seaward side;
- the extremely large number of different activities that are vying for use of the same resources; and
- the upcoming process to enlarge the EU to include applicant countries of Central and Eastern Europe whose coastal zones face similar problems and challenges.

**The experiences of the Programme are confirming the hypothesis that most of the physical problems and conflicts observed in the coastal zones of Europe can be traced to procedural, planning, policy and institutional weaknesses, many of which can be traced to a lack of awareness about the strategic economic and social importance of sustainable management of the coastal zones.**

**The Demonstration Programme indicates that if we wish to achieve environmentally sustainable, economically efficient and socially equitable development in the coastal zones, the challenge is finding a way of correcting these weaknesses.**

**The Demonstration Programme has identified seven key principles that must be implemented in order to improve the status of our European coastal zones. These principles are described in chapter 2.**

**Chapter 3 introduces the concept of Integrated Coastal Zone Management (ICZM) as a process that can facilitate the application of these principles, and indicates the need for a European ICZM strategy.**



**Chapter 4 then opens the question of the correct form and content for this strategy. What exactly should be done? And how?**



### **Historically,**

- Legislation and policy has been sectorally-based and uncoordinated
- Inappropriate and isolated sectoral planning decisions have often worked against the long-term interests of sustainable management of the coastal zones.
- Rigid bureaucratic systems have limited local creativity and adaptability
- Local initiatives in sustainable coastal management have lacked adequate resources and support from higher administrative levels
- Management of the coast has lacked vision and is based on a very limited understanding of coastal processes
- Scientific research and data collection have been isolated from end-users



## 2 **GENERAL PRINCIPLES FOR GOOD MANAGEMENT OF EUROPE'S COASTAL ZONES**

The experiences of the Demonstration Programme have indicated that good management of coastal zones can take on many forms. However, the Programme also suggests that all successful initiatives follow certain general principles, namely they all:



### **TAKE A WIDE-RANGING PERSPECTIVE**

Coastal zones are complex; they are influenced by a myriad of inter-related driving forces and pressures including hydrological, geomorphological, socio-economic, administrative, institutional and cultural systems. Attempts to manage coastal zones sustainably will fail unless they consider concurrently the entirety of the many systems that have a significant influence on the dynamics of the coastal zones.

*The relationship between fishing in coastal waters and the importance of estuaries as nursery areas illustrates the need for a "systems" approach.*

The geographic scale and extent of a coastal zone management activity should be adapted to the issues under consideration. In practice, projects most commonly select the boundaries that are the simplest to manage – frequently administrative boundaries. However, administrative boundaries do not generally coincide with boundaries of natural or social systems. A "systems" approach will normally require looking at driving forces or areas of impact located in other administrative units and possibly far from the coastline.

*The RICAMA project is concerned with land use practices throughout the entire waterbasin owing to their impact on the coastal sediment regime: Population increase, associated deforestation and agricultural development in the mountains from the late Roman period until the 1700s resulted in the rapid development of coastal deltas from the deposition of sediment. Over the past century, tourism infrastructure was developed on these new lands. However, recent changes in inland land uses, damming*

*of rivers and mining of aggregates (in the river and at its mouth) have reduced or eliminated the source of sediment, leading to coastal erosion and to deterioration of the environmental quality of beaches.*

*In Strymonikos, river borne pollution derived from agricultural runoff upstream in Bulgaria is affecting the quality of coastal waters.*

*The Rade de Brest project has selected the watershed as the project boundary because of concerns about pollution issues.*

*The Vale do Lima project involves both the coastal and inland towns in this valley – because of both physical and economic linkages.*

*The Wadden Sea project is based on the natural entity that also is subject to the Trilateral Cooperation on ministerial level between Germany, Denmark and the Netherlands.*

*The working group approach of projects such as Dorset and La Gironde supports a flexible, issue-based definition of the geographic extent of the initiative.*

The close links between the marine and terrestrial components of the coastal zone (linked through both human and physical processes) imply that any successful coastal zone management initiative should include both the seaward and landward portions of the coastal zone.



### **BUILD ON AN UNDERSTANDING OF SPECIFIC CONDITIONS IN THE AREA OF INTEREST**

To be effective, any proposals for specific solutions to problems in the coastal zone and any decisions about its optimal use are necessarily site specific; even the choice of the approach to launching or sustaining an ICZM initiative should reflect the context. The initiative must therefore be rooted in a thorough understanding of the local circumstances. Annex III illustrates just how diverse these conditions are, including variations in the physical, social, cultural, institutional and economic characteristics of the area.

Appropriate management of the coastal zone requires developing an understanding of the

specific characteristics of the area in question, as well as an appreciation of the pressures and driving forces that are influencing its dynamics, including those that come from outside of the local area. This implies a need for the collection of appropriate data; the production of relevant information and indicators; good flows of information between those taking ICZM action and information providers; and proper use of integrated assessment techniques.

*All of the demonstration projects have set out to assemble the information necessary to develop an understanding of the factors and conditions driving the dynamics in their project area. However, most of the projects are still learning how to use this information to undertake integrated assessment.*



#### **WORK WITH NATURAL PROCESSES**

In the past, coastal management has often been seen as a “battle against the sea”, a battle in which natural processes have frequently defeated expensive human efforts. Successful coastal zone management is based rather on an understanding of the natural processes and dynamics of coastal systems; by working with these processes, rather than against them, we increase our long-term options, by making our activities more environmentally sustainable and more economically profitable in the long run.

*Engineering works to improve port facilities in Aveiro have contributed to accelerated erosion of the adjacent shoreline because they did not adequately account for coastal dynamics and processes. Subsequent investments to “protect” the coast through hard defenses have not been successful. Through more sound management practices, the port development could have been achieved without generating the erosion. This would have improved the economic efficiency of development investments, and avoided the social stresses and economic costs involved in erosion control.*

*The Flanders project (TERRA CZM) illustrates an effort to work toward a vision of returning parts of this substantially built up and engineered coast to a more natural form by reversing earlier engineering solutions to coastal defense.*



#### **ENSURE THAT DECISIONS TAKEN TODAY DO NOT FORECLOSE OPTIONS FOR THE FUTURE**

Coastal zone management must explicitly acknowledge the uncertainty of future conditions and promote sufficiently flexible management. At the same time, action must be taken in accordance with the “precautionary principle”, which states that rather than await certainty, regulators should act in anticipation of any potential harm in order to prevent it.

*The position of the coastline is naturally subject to change as sediment accumulates or erodes. Developments on today’s shorefront, may tomorrow be located significantly inland — or find themselves threatened by destruction by the erosive powers of the sea. This fact needs to be considered during planning.*



#### **USE PARTICIPATORY PLANNING TO DEVELOP CONSENSUS**

##### **The Demonstration Projects see participatory planning as:**

- “the active involvement by relevant individuals and groups in the design and implementation of a process”. (County Down)
- “participation means of course taking part in something and being involved in something but an important part is also carrying the responsibility”. (Consultant of the municipality of Ruotsinpyhtää, Gulf of Finland)
- “the procedure of activation of the relevant bodies for their essential involvement, through tasks, actions, advice, opinions, as a tool for the promotion of specific objectives, in the frame of sustainable management”. (Strymonikos)

Participatory planning works to build the opinions and perspectives of all of the relevant stakeholders into the planning process through collaborative involvement. Involvement builds commitment and shared responsibility, harnesses local knowledge, helps to ensure identification of real issues and tends to lead to more



implementable solutions. Early involvement can develop trust and commitment.

***The importance of participation:** In 1993, a consultant-produced management plan for the Exe Estuary was rejected by the local people who felt that it did not incorporate their points-of-view, particularly on issues related to charging estuary users for the provision of harbour services. This experience led to the creation of a series of topic groups composed of Estuary users. Following a broad system of consultation based on local meetings, the result has been an agreed - and widely supported - management plan. The participatory process has now been formalized into the Exe Estuary Forum (not a Demonstration Programme project) and a range of Focus Groups, made up of local community representatives. These arrangements will be key to the preparation, on an annual basis, of the Estuary Action Plan.*

Through participatory planning, and a focus on common interest, good coastal zone management can reduce conflict and develop consensus. Through seeing the wider, long-term perspective, participatory planning can also reveal indirect advantages to the stakeholders in changing their behaviours. By developing a common perception of major problems among the various stakeholders, each key player can assess what they are prepared to “give up” in order to achieve common goals in management of the coastal zone.

#### **Conflict between stakeholders in the coastal zone can arise from:**

- competing sectoral interests, each with its own agenda and professional blinkers
- cultural differences and traditions
- inaccurate, withheld or disputed data
- ignorance or unconcern for other needs
- structural, social or economic inequalities
- clashes of interest on specific issues or procedures
- personalities and power struggles

Since non-participatory coastal zone planning has long been the standard in most countries, shifting to a participatory approach may take time to overcome the natural inertia to change.



#### **ENSURE THE SUPPORT AND INVOLVEMENT OF ALL RELEVANT ADMINISTRATIVE BODIES**

While bottom-up participation is an important component of successful coastal zone management, national policies guide the development of sectoral objectives as well as plans and investment strategies associated with the use of coastal areas and their natural resources. Almost all of the Demonstration Programme project leaders have affirmed that coastal zone management is **not** effective if it is not supported by all levels of administration, as well as by all of the relevant sectoral branches of administration concerned with the target coastal area.

While it is essential to engage local authorities from the start, there is a need for willingness from all levels and sectors to provide ongoing support for the coastal zone management process, including institutional capacity for data collection, maintenance, and documentation.

*The Magnesia project has ensured close involvement of local authority officials and their departments through an audit at a very early stage. A similar approach has been adopted by the Kavala project in a desire to sustain commitment.*

The principle of subsidiarity should guide the clear division and assignment of responsibilities between administrative levels (EU, regional, national, local), with a willingness at all higher levels to support the development of local assessment capacity. The development of mutually supportive actions and linkages between levels and sectors of administration, and the coordination of their policy, is essential.

*Before embarking on ICZM, the municipalities in Latvia had little experience of working together. The ICZM pilot project “forced” them to meet, to share their problems and concerns and to plan together. In doing so they discovered many shared problems and issues and also a new strength in tackling these problems jointly.*



### *USE A COMBINATION OF INSTRUMENTS*

Coastal zone management can only succeed through the use of multiple instruments, including a mix of law, economic instruments,

voluntary agreements, information provision, technological solutions, research and education. The correct mix in a specific area will depend on the problems at hand and the institutional and cultural context.

### 3 THE NEED FOR A EUROPEAN ICZM STRATEGY

Given the complexity and urgency of the problems in the coastal zones across Europe, it is essential to move towards implementation of the principles presented in the previous

chapter. It is apparent that something needs to be done to address the underlying institutional weaknesses that have caused or exacerbated the problems in the coastal zones, and to find a formula for moving towards sustainable development in these strategically important areas.

#### What is sustainable development?

**The concept of sustainable development acknowledges the principle that economic well-being, social justice and environmental objectives cannot be decoupled, but are inherently inter-dependent over the long run.** Sustainable management of coastal areas strives for the maximum long-term societal good, including environmental, economic, social and cultural considerations. It strives to promote social equity through the fairer distribution of opportunities both within the present population, and between present and future generations.

While long-term economic, environmental and social considerations are always inseparable, short-term trade-offs between these goals may be unavoidable, due to the finite nature of coastal resources. Within a sustainability framework, it is important, at a minimum, to ensure that the process of trade-offs is disciplined such that economic, environmental, and social objectives are all met at some “threshold level” even in the short-run. What represents acceptable levels will depend on the values prevailing in a given society and at a specific time.

Furthermore, since the coastal resource is finite in physical, and spatial terms, certain short-term decisions may permanently destroy resources for the future. One of the goals of sustainable development must therefore be to ensure that present decisions do not foreclose future options. However, the concept of “Sustainability” also needs to embrace the idea that many of the negative situations created by human intervention in the coastal zone are capable of being reversed or radically altered, albeit at a cost and over very long periods of time.

#### 3.1 WHAT IS ICZM?

**Integrated Coastal Zone Management (ICZM) is a generic method that embodies the general principles outlined in chapter 2, and that promotes the sustainable management of the coastal zones.** It is a means to accept differences of objectives and opinions, and of tolerating uncertainties about the ongoing and future natural processes while still proceeding to address the issues under debate through finding broadly acceptable solutions.

The philosophy behind ICZM includes recognizing that:

- ICZM can help to develop democratic systems and strive to create mechanisms to facilitate the meaningful engagement of organizations and individuals at all levels of society;

- Coordination amongst sectors and between administrative levels is a key element of good governance;
- Any ICZM effort must develop a vision of what a sustainable society will look like. This vision represents the framework within which actions can be formulated and implemented;

#### The “Process” of ICZM:

The ICZM process starts with the **awareness of issues** of common concern, which facilitates a **dialogue** and exchange of views among interested and affected parties, which in turn supports **cooperation amongst the parties**, and this is the basis for **coordination of action**, which - in time - fosters **integration of management**.

## What is ICZM?

**ICZM is a dynamic, continuous and iterative process designed to promote sustainable management of coastal zones.** ICZM seeks, over the long-term, to balance the benefits from economic development and human uses of the Coastal Zone, the benefits from protecting, preserving, and restoring Coastal Zones, the benefits from minimizing loss of human life and property, and the benefits from public access to and enjoyment of the Coastal Zone, all within the limits set by natural dynamics and carrying capacity.

The “Integrated” in ICZM refers both to the integration of objectives and to the integration of the multiple instruments needed to meet these objectives. It means integration of all relevant policy areas, sectors, and levels of administration. It means integration of the terrestrial and marine components of the target territory. ICZM is integrated in both time and space, and is inherently multi-disciplinary. ICZM should certainly not be just pigeon-holed under “environment”.

Although ICZM refers to “management”, in fact, the ICZM process covers the full cycle of information collection, planning, decision making, management and monitoring of implementation. “Planning” is thus intended in its broadest sense, to mean strategic policy development, rather than only land use planning or other sectoral planning.

ICZM uses the informed participation and cooperation of all interested and affected parties to assess the societal objectives\* in a given coastal area at a given time, and to initiate the actions necessary to move towards meeting these objectives.

\* “Societal objectives” refers to the goals and aspirations of a given society, including environmental, economic, social and cultural objectives.

- The future is inherently uncertain;
- Problems need solving, not moving;
- ICZM is a highly complex and iterative process requiring time to develop. Capacity needs to be built up and a climate of participation needs to be encouraged and developed over time;
- There is no standard formula for ICZM;
- ICZM initiatives need to work within the existing institutional and political structures and ensure that any ICZM effort has political legitimacy, and respects culture and traditions.

There is also a great diversity in approaches to the concrete application of ICZM. The pilot projects in the Demonstration Programme indicate that approaches to ICZM can differ in:

- geographical extent of the project
- range and complexity of the issues addressed
- mix and status of private and public agencies and interests involved
- number and status of the agencies and interests represented in the core group (i.e. the key partners, those actually involved regularly in the work of the project)
- contractual/legal basis of the initiative, political support and way in which it is legitimized
- level and quality of leadership
- degree of authority enjoyed by the core group
- extent to which the initiative employs the existing statutory system as “framework”
- potential for durability of the process once launched

### 3.2 DIVERSITY

As yet there is no satisfactory and commonly accepted method of defining and classifying coastal zones. However, annex III presents a series of maps indicating some of the principle variables - or typologies - according to which the coastal zones might be classified. These maps highlight the diversity of conditions and problems in Europe’s coastal zones; this diversity will only increase with the entry of the central and eastern European countries into the EU.

- mechanisms for participation and type of interactions with the public
- mechanisms of linkage between agencies (voluntary, informal and formal).

Some of the most prominent factors influencing the choice of approach include:

- Cultural definition of the “public good”
- Understanding of the concepts underlying ICZM, level of information / data available
- Point of initiation of the initiative and discipline bias
- Quality of leadership and level of motivation of participants
- Resources available and timing of the initiative
- Levels of public awareness and general attitudes towards participation
- Legal, jurisdictional, administrative and planning structures and context
- Legitimization of the initiative

*Administrative context is one of the factors that will influence the choice of ICZM approach: There are wide differences in institutional structures for policy development. In France, for example, it is the elected representatives who set objectives, in contrast to more bottom-up approaches in some other countries.*

**Since the choice of approach to ICZM is influenced by historical, cultural and traditional context as well as by the natural conditions and physical problems faced in the target area, different approaches will be indicated in different places. The experiences of the Demonstration Programme have underlined that there is no one correct approach to ICZM.**

This complexity also makes it difficult to indicate which approach to ICZM might work best in a given area. However, initiatives can learn from the experiences of others by considering the most critical driving forces in the target area, and identifying other initiatives in areas that are similar in these critical dimensions.

Furthermore, despite the diversity of problems and conditions in the coastal zone, the Demon-

stration Programme has indicated that there are a number of common issues and concerns present in many coastal zones. The rest of this document will examine some of these common issues; it will also discuss possible policy options to promote ICZM across Europe through a common European strategy, based on a common philosophy, but implemented using a diversity of mechanisms, adapted to specific problems and spatial contexts.

### 3.3 THE EUROPEAN DIMENSION

**An enabling environment at the European level could provide the framework in which Member States can develop more appropriate integrated coastal zone management policies, including investment strategies, integrated development plans (spatial and functional) and resource management strategies.**

Many organizations, including UNEP, the OECD and the Council of Europe, are already promoting more integrated approaches, in which planning and management of human activities is indicated as the best way to resolve the conflicts in the coastal zone and optimize the use of its resources. References and links to these initiatives can be found on the Demonstration Programme Web page:

[europa.eu.int/comm/environment/iczm/home.htm](http://europa.eu.int/comm/environment/iczm/home.htm)

The experiences of these initiatives are entirely compatible with the lessons emerging from the Demonstration Programme. Indeed, many of our Member States have adopted recommendations of such organizations and launched unilateral initiatives to combat coastal degradation, particularly in the context of regional agreements such as the Barcelona convention, the Helsinki Convention and OSPAR.

However, there is a need for a common strategic understanding of how European coastal areas and resources can be utilized to meet future needs, and a formal agreement among the Member States on the priority of action to improve the planning and management of human activities in Europe's coastal zones, through implementation of ICZM. This strategy must both meet the needs of the present Member States, and reflect the challenges and opportu-



nities presented by the enlargement of the EU to include some of our eastern neighbours.

Council Resolution 94/C 135/02 emphasizes “the need for a Community strategy for the integrated management and development of coastal zones, based on the principles of sustainability and sound ecological and environmental practice”. The Demonstration Programme confirms the need for such a European ICZM strategy, and indicates that this need is justified by:

- the large impact that EU sectoral policy has on the status and development of coastal zones in Europe;
- the need to ensure a “level playing field”

- the importance of guaranteeing environmental health to all of our citizens;
- the obligation to foster social and economic cohesion of the coastal zone;
- the need to ensure the best strategic use of EU funds;
- the international quality of most coastal dynamics, including tourists from other member states, export agriculture and cross-border pollution flows and
- the EU role in resolving cross-border issues, including issues involving our neighbors in the Mediterranean, and in Central and Eastern Europe.

#### 4. *POLICY OPTIONS FOR A EUROPEAN ICZM STRATEGY*

ICZM will become widespread in Europe only with the active support of all administrative levels, from European to local. As the details of appropriate policy options at local and regional administrative levels will differ from coastal zone to coastal zone, this is not the appropriate topic for debate in a European-wide consultation. This section therefore focuses on the Community role in promoting and implementing ICZM, either through direct European level action, or through recommendations or requirements for other administrative levels to adopt good practice in coastal zone management.

This European focus should not in any way be interpreted as dismissing the importance of the actors at other administrative levels. **The Demonstration Programme indicates that an efficient European policy on ICZM can only be implemented in close collaboration between the European institutions, and with the full participation of national, regional and local administrations.** It is also important to remember that any European actions will need to respect international agreements such as on shipping, fisheries, environment and regional seas, which apply to areas larger or smaller than the EU itself.

This chapter is intended to spark a debate about the appropriate form and content for a future European ICZM strategy. As well as defining the general role of the EU, the development of the strategy must:

- Identify the many opportunities for existing EU policies to implement the principles introduced in chapter 2;
- Indicate the instruments and programmes that will be used to better support ICZM, both thorough action within individual policies and through better coordination among policies; and
- Determine whether or not there is a need for an EU legal framework to implement ICZM.

The options presented in this chapter are those that have been suggested during the course of

the Demonstration Programme. There is no presumption that they are either correct or complete. The final recommendations of the Commission regarding ICZM will be developed only after the public debate that this document is intended to provoke, and after an exchange of views with the European Parliament and the other EU institutions.

##### 4.1 *THE ROLE OF THE EU*

The role of the EU in promoting ICZM is derived and delimited by the European treaties:

- 1) One of the strongest legal bases for EU involvement in ICZM is article 6 of the Amsterdam treaty regarding the integration of environment into all other policies.
- 2) ICZM can be also seen as a valid tool for meeting other Communities objectives including regional cohesion, fisheries, social affairs, transport, energy and promotion of SMEs, among others.

The results of the Demonstration Programme indicate that the role of the EU should be to provide a general framework of coherent actions following a shared vision for the development of the coastal zones, and to stimulate the various interested and affected individuals, organizations and administrations to interact and to mobilize their own resources, in order to:

- look towards the long-term
- think multi-sectorally
- include the local needs and perspectives in coastal zone planning

This implies that **the EU could:**

***Define the Framework for ICZM:*** On the basis of a common understanding of the objectives of ICZM, define a set of guiding principles with a view to applying them in a flexible way in the varying EU regional contexts.

***Trigger ICZM:*** Activate ICZM actions at other administrative levels, through either direct obligations or conditionality for funding in certain EU programmes.

***Stimulate ICZM, through direct support for certain ICZM initiatives, including direct involvement in coordination of policies and activities of member states at the meso-regional level (Mediterranean, Atlantic Arc, North Sea, etc.).***

***Support ICZM through support for the development of tools and methodologies for ICZM, including human resource development and information collection.***

The present document and the other outputs of the Demonstration Programme are themselves a first step towards “defining” and also in “stimulating” ICZM. Experience gathered in the Demonstration Programme suggests that these activities need to be continued and formalized, and that there is a need to define how to “trigger” and “support” more broad implementation of ICZM in the Member States, whether through adaptation of existing policies or through the creation of new programmes or legislation.

A future European ICZM strategy should be appropriate to the needs of the existing Member States and also reflect the needs of neighboring countries with whom we share regional seas (such as the Mediterranean), and particularly those of the Central and Eastern European countries that are likely to become EU Member States in the near future.

As well as providing a framework for action at other administrative levels, **the EU needs to lead by example by improving cooperation between Commission services and ensuring that EU policies are adequately coordinated** to allow action that is integrated, yet sufficiently differentiated geographically to allow for implementation that respects the diversity of conditions in the different coastal areas of Europe.

#### **4.2 ADAPTING INDIVIDUAL EU SECTORAL POLICIES**

EU legislation has a major and growing impact on national coastal laws, particularly in the context of fisheries, water quality, nature conservation and environmental assessment. The implementation of international and European obligations by Member States may exert a unifying in-

fluence on national laws and transcend traditional legal concepts, but it can also be adversely affected by the legacy of national jurisprudence.

A range of EU sectoral policies have actual or potential *beneficial* effects on the coastal environment, particularly directives on pollution, nature conservation and environmental assessment. Various beneficial activities are also financed under the structural funds. However, the studies and projects in the Demonstration Programme have indicated that there is a significant amount of EU policy that either works against the objectives of ICZM, or does not fulfil its potential to support ICZM.

**EU sectoral policy could better promote ICZM through:**

- **improved concepts**
- **better implementation of good concepts**
- **increased integration of ICZM into individual policies**
- **adapting policy to regional specificity / scale**
- **greater clarity about the policy's application to the sea**

While not necessarily causing direct benefit or harm to the physical environment, the Demonstration Programme studies indicate that some items of EU legislation could be made more effective in supporting ICZM by improved design or drafting.

The studies further indicate that the ineffectiveness of other EU measures that could potentially support ICZM may derive from the manner in which they are implemented (or not) in the Member States. Other things being equal, the problem is greater the more discretion allowed to Member States: there can be a conflict between subsidiarity and the achievement of integrated management.

EU sectoral policies could also better support ICZM by taking full account both of environmental (and social, cultural, and economic) needs and also of the differing needs of different spatial areas. Article 6 of the Amsterdam Treaty requires that the environment be integrated into all other Community policies; spe-

cific steps for delivering it were contained in the June 1998 Cardiff European Council Conclusions. However, the Demonstration Programme studies indicate that far less attention has been paid to applying the treaty requirement that EU policies should take into account regional differences, although the ESDP has begun to give this issue a higher profile.

Finally, the studies suggest that certain Community policies could better support the objectives of ICZM to integrate management of the land and the sea by clarifying and resolving debates concerning their application to the sea.

**According to the studies of the Demonstration Programme, there is a need for thorough stock taking of policies at EU level and of relationships between EU policies and policies at other administrative levels, to identify opportunities to promote ICZM. At the very least, it is essential to ensure that EU policy does not impede the application of ICZM!**

A preliminary review was conducted in the context of the Demonstration Programme (see chapter 6 in the accompanying technical document “Lessons From the European Commission’s Demonstration Programme on Integrated Coastal Zone Management (ICZM)”, and also the final report for the thematic study on “EU Policies”). This review covers the official legislative policies of the EU, as well as on-going initiatives such as work on spatial planning that the Commission has conducted over many years in collaboration with the Member States. However, a more thorough review will require a concerted action from all of the Commission services in collaboration with their counterparts in the Member States, at national, regional and local level.

**As well as reviewing how specific policy areas might better support ICZM, there are a number of policy options that might be implemented in any of a number of existing policies and instruments.** These include:

- Stimulating activity at the “regional seas” level.
- Continuation or expansion of support for demonstration activities, especially those with a fisheries components;

- Establishment of a “label” for good coastal zone management; this could follow the model of the “sustainable cities” award, or of a charter for individuals and organizations in the coastal zone to sign, like the “Charter for Sustainable Tourism”;
- Incorporating activities to raise awareness about the beneficial effects of the adoption of ICZM;
- Promoting adoption of ICZM-friendly technologies, participation and coordinated information flow at regional and local level and between levels, through conditionality for funding;
- Providing assistance (technical and methodological) to countries in the development of CZ policy frameworks;
- Dissemination of structured information on good practice in ICZM to ensure that the limited expertise in ICZM is not lost. The Demonstration Programme has provided a contribution in this direction. Further development of an ICZM Web page, development of a support center, or even establishment of a “consultatory panel” might be mechanisms for the future.
- Drafting a model form of “contract” between partners in an ICZM initiative would help to strengthen and standardize activity.
- Transparent, strategic assessment, taken to at least the regional level, of the impact (environmental, socio-economic and spatial) of policy decisions.
- Ensuring that policy is developed in the spirit of finding a harmony and synergy between top-down and bottom-up approaches, adapted to individual issues and problems.
- Promoting targeted information and knowledge diffusion
- Maintaining the momentum of on-going ICZM projects.

*The ICZM Demonstration Programme is a good example of how relatively small amounts of funding, from existing programmes and budget lines, can be used to stimulate ICZM activity at the regional and local level.*

The final conclusions of the Demonstration Programme will need to indicate which, if any, of these options are appropriate.

COM 95/511 did not specifically address the problems related to matching EU policy to the needs and conditions of specific contexts. However, the Demonstration Programme has highlighted this as an important issue. **Injecting a greater spatial dimension into Community policies could help further the adaptation of individual EU policies to the needs of specific coastal zones.**

Key issues that need to be decided regarding how this might be done include the following:

- The regionalization (and definition of spatial units) varies among different EU policies, making their integration difficult.
- Would the determination of regions be decided at EU level, or be left to the discretion of Member States?
- Should regional differentiation be permissive (as with current agri-environmental schemes) or compulsory? If the former, opportunities for better integration would be patchy.
- The need to determine the correct level of regionalization to reconcile differential application of Community legislation with the needs of the Internal Market. Who should monitor this?

*In some traditionally centralized policy areas, there is a movement towards greater regionalization. The Agenda 2000 proposals for CAP reform offer greater scope for differentiation through direct farm income supports, possibly coupled with the application of environmental conditions. In the energy field, the recent Commission Communication "Energy for the Future: Renewable Sources of Energy – White paper for a Community Strategy and Action Plan (COM [97] 599, 26.11.97)" proposes doubling the contribution of renewables to 12 per cent of EU energy demand – a commitment that could lend itself to the production by Member States of regional action plans.*

**It is essential to ensure that the general principles for good management of the**

**coastal zones, as identified in chapter 2 of this document, should be reflected in any new proposed EU measures.**

#### 4.3 INTERSECTORAL COORDINATION

It has already been noted that there are treaty requirements to integrate both environment issues and the principle of economic and social cohesion into other policies. Similarly, and also relevant to ICZM, there is a requirement to integrate employment objectives into other policies. However, despite these requirements for integration, EU policy often continues to be sectoralized. Even in those policy areas where strong efforts at integration have been made in recent years, the time-lag factor means that the results are not always yet apparent on the ground.

*Upcoming co-ordination issues include the mutual relationship between River Basin Management Plans under the proposed Water Framework Directive; management plans for Sites of Community Importance (SACs) under the Habitats Directive; and integrated regional and rural development plans under the post-2000 Structural Fund Regulations.*

**There is a need for mechanisms for improved coordination of EU policies and multiple instruments to meet "integrated" goals.** This need was highlighted in the introductory speech on ICZM by Mrs. Langerhagen (MEP) at the workshops organized in Goteborg in October, 1998 on the implementation of ICZM, in which she called for a formalization of the current interdepartmental cooperation within the Commission on coastal areas.

Possible mechanisms for doing so include:

- Encouraging informal exchange of information between services and internal Commission seminars (inter-DG) to sensitize officers of all levels about the relationship between their policy areas and those of other services.
- Coordinated external diffusion of information
- Coordination of data reporting requirements
- Moving inter-service consultations to earlier in the policy development process



- Formal Memoranda of Understanding between services

It remains to be decided which, if any, of these mechanisms would be appropriate.

**The Demonstration Programme has shown that joint inter-DG activities to support ICZM initiatives provide an ideal framework for focussing interdepartmental cooperation and integration. However, it should be emphasized that such cooperation will only be successful with adequate political support from the top of the hierarchy, adequate provisions for time and resources for its implementation, and the full support of the other European institutions, particularly the Council and the Parliament.**

For some EU policies (such as the Structural Funds, agri-environment schemes, identification of nitrate vulnerable zones, and regional and urban energy management schemes) there is already scope for differentiated regional implementation. This provides an opportunity for integrating these policies at regional/local level.

*Few of the demonstration projects have taken advantage of possibilities to integrate EU policy at the regional or local level. The Demonstration Programme thematic studies suggest that the fault frequently lies with national agencies who have not informed lower administrative levels. Devon, Cornwall, and Storstrøm are among the few projects which appear to have well-developed links with Structural Fund Programme Monitoring Committees.*

**In line with the move towards increasing application of the subsidiarity principle, national, regional and local administrations could be encouraged to take a more active role in coordination of the application of EU policy.**

#### 4.4 A LEGAL FRAMEWORK?

The previous sections have illustrated that much could be done to promote ICZM at the European level by working through existing instruments, sectoral policies and initiatives, or by assuring better coordination between these sectoral policies.

Is this enough? Or, does a European strategy for ICZM also require a specific legal instrument at the European level? If there is a need for such an act, what should it cover? What form should it take - a regulation? A directive? A recommendation? A decision?

The diversity of Member States' legal systems and the range of possible structures for change suggest that the European Union should not seek to be too prescriptive. Moreover, any intervention must be consistent with the legal competence of the EU and the principle of subsidiarity. Under article 189 of the European Treaty, there is a range of legislative instruments available including directives, resolutions and decisions, each of which has advantages and disadvantages. A combination of these instruments might be used to implement an EU Strategy for ICZM.

**Directive:** A directive is legally binding on Member States, and therefore offers the benefit of legal enforceability. However, it would be politically the most difficult to agree. A directive cannot be expressed in too general terms, since compliance with its requirements must be verifiable. Any directive would, however, need to be general enough to allow the principle of subsidiarity to guide its implementation.

**Council Resolution - A Code of Guidance:** A code of guidance is the most flexible mechanism for ICZM, but, since it lacks legal force, its implementation depends on political will and cannot be guaranteed. On the other hand, non-statutory advice can be made more persuasive if it is accompanied by financial incentives.

**Decision:** A Council Decision is legally binding on those administrations (normally certain Member States) to whom it is addressed.

Because there is such a wide range of legal structures and legal problems (some common and some individual) in the coastal zones of Eu-

European States, whatever mechanisms for ICZM may ultimately be chosen by the European Union must be sensitive to the legal variations between those States, and must permit the most suitable approaches to be adopted by each.

Clearly any European legislation must conform to the treaties of the European Union. It must also be politically acceptable to the Member States and the European citizens.

This section will suggest various elements, any of which might be potentially included in such legislation.

#### **4.4.1 Action at the European level:**

Any European legislation on ICZM should logically start with a commitment by the European institutions to the goals and objectives of ICZM, emphasizing the importance of taking present action to start the ICZM process, in view of promoting sustainable and durable medium and long term social and economic benefits. Specific ICZM legislation might then launch European level actions towards implementation of ICZM; the specific actions might include certain of the ideas presented in sections 4.1 through 4.3 of this document. Any modification of EU sectoral policies needed would require separate pieces of legislation.

#### **4.4.2 Action at national/regional/local level:**

New instruments might make recommendations or requirements directed at the Member States. Some elements that could potentially be included are:

- Adoption of a statement of goal / philosophy / commitment to ICZM in any policies affecting coastal zones, reaffirming commitment to proper implementation and enforcement of existing legislation that supports ICZM;
- Establishment of a national definition / identification of the coastal zone, including both land and sea elements;
- Establishment or adoption of a definition of what constitutes ICZM activity;
- Reporting on the status of coastal zones, and progress towards ICZM;
- Improved communication and exchange of ideas between different government sectors with competence in the coastal zone;
- Strengthened commitment at the national and regional level to improve the flow of information to the regional and local administrations about EU policies, programmes and opportunities in the coastal zones;
- Development of a consultation / participation mechanism to include all stakeholders in any ICZM activity;
- A long-term evaluation of needs in conjunction with any development activities in the coastal zone;
- Assessment of legal frameworks and evaluation of compatibility of sectoral legislative instruments at each administrative level within the Member States (and between levels). This might include use of the Strategic Environmental Assessment approach to assess existing sectoral policies (e.g. the taxation system) and their impact on the use and misuse of land with special reference to the coastal areas;
- National reflection about mechanisms best suited to meeting national needs for ICZM, such as national plans for management of the coastal zones, establishment of a national body / coordination center for ICZM, coordination of laws, or non-binding setups;
- Development or amendment of legislation or other instruments to enable cooperation between different levels and sectors of administration: cross-national, cross-regional, inter-level, and land/sea;
- Amendment of legislation to allow delegation, or devolution, of responsibility to local authorities for sectors that are presently nationally centralized (e.g. fisheries); and/or
- Clarification of the function that facilities to control and regulate land use and activity, systems of forward planning, and systems of property registration, have in relationship to ICZM.

## 5 *REFERENCES*

The references used in preparation of this document are included among the titles on the “ICZM Bibliography” page of the Demonstration Programme Web site

(<http://europa.eu.int/comm/environment/iczm/home.htm>).

**Our Web page (in English) also includes further information about each demonstration project, with contact names and links to project Web pages where available. The reports of the six thematic studies will also be available on this site as they are completed. Readers without access to the Web, may request hardcopies of these pages.**



## *ANNEX I*

### *GUIDELINES FOR CONSULTATION*

All interested individuals or organizations are invited to send written comments on this document to the attention of:

Mr. Bruno Julien  
DG XI-D-2  
European Commission  
Rue de la Loi, 200  
1049 Brussels  
BELGIUM

Or by email to Anne Burrill at [anne.burrill@cec.eu.int](mailto:anne.burrill@cec.eu.int)

Email submissions are particularly encouraged.

The deadline for receiving comments is 30 September, 1999.

In order to ensure that Commission staff will have the resources to properly consider all contributions, comments should be restricted to **two** printed pages. Longer contributions may not be examined.

We would particularly encourage comments that:

- Specifically address ideas presented (or omitted) in this document, particularly those highlighted in bold characters.
- Help define the role of the European Union in Coastal Zone Management.
- Provide concrete examples to support your recommendations or suggestions, by reference to other documents if appropriate.

Please note that any comments you send will be considered non-confidential, and may be quoted and/or made available to the public.





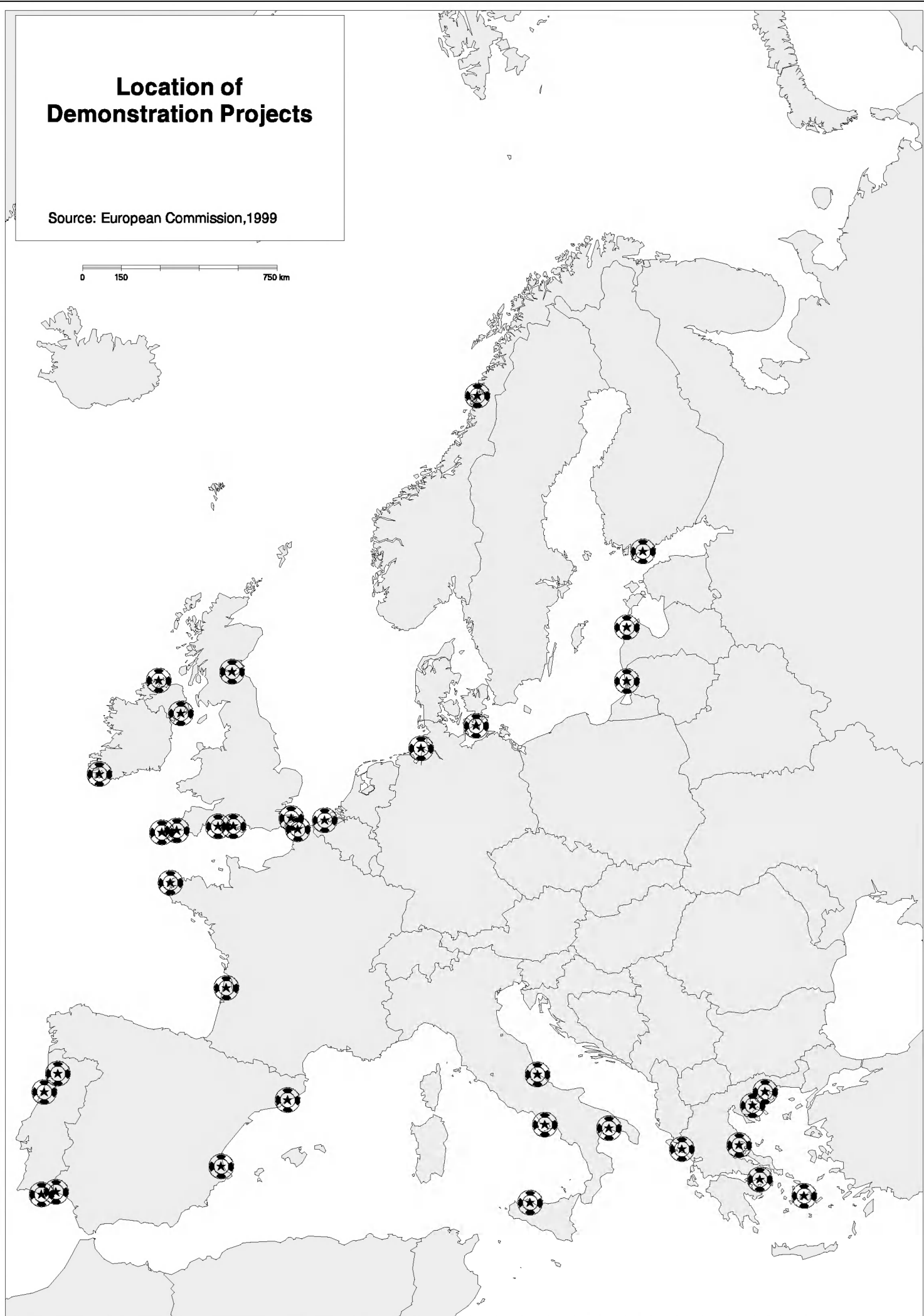
## *ANNEX II*

### *LOCATION OF DEMONSTRATION PROJECTS*

## Location of Demonstration Projects

Source: European Commission, 1999

0 150 750 km



### ***ANNEX III***

#### ***TPOLOGY MAPS***

- A)      **Land Cover**
- B)      **Degree of Urbanization**
- C)      **Land Use Change**
- D)      **Fragmentation of Natural Habitat**
- E)      **Sites of Major Importance for Nature Conservation**
- F)      **Coastal Geomorphology and Slope Class**
- G)      **Coastal Erosion / Accretion Rates and Presence of Coastal Defense Works**
- H)      **Average Income Levels**
- I)      **Tourism and Fishing Activities**
- J)      **Population Change**
- K)      **Structure of the Population**



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