THE EUROPEAN UNION ENVIRONMENTAL POLICY AND INTEGRATED COASTAL ZONE MANAGEMENT

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Prof. Dr. Sencer Ayata
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science.

Assist. Prof. Dr. Galip Yalman
Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.

Assist. Prof. Dr. Şule Güneş
Supervisor

Examining Committee Members

Assist. Prof. Dr. Nilgün Görer Tamer	(Gazi, CRP)	_____
Assist. Prof. Dr. Şule Güneş	(METU, IR)	_____
Assoc. Prof. Dr. Sevilay Kahraman	(METU, IR)	_____

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Name, Last name: Tuğçe Bahadır

Signature:

ABSTRACT

THE EUROPEAN UNION ENVIRONMENTAL POLICY AND
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Bahadır, Tuğçe
MS., Department of European Studies
Supervisor: Assist. Prof. Dr. Şule Güneş

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In this thesis, it has been aimed to analyse the efforts undertaken by the *European Union (EU)* to stimulate and enhance *Integrated Coastal Zone Management (ICZM)* in the European coastal zone, within the context of the EU Environmental Policy. *ICZM* was formally accepted in the international community during the 1990s as an alternative to traditional sectoral coastal zone management approaches. It aims to establish an integrated management mechanism among different sectors to minimise resource use conflicts in coastal zones. *Sustainable development* constitutes the underlying idea of ICZM, the overall goal of which is to achieve sustainable development in coastal zones. Therefore, ICZM is founded on the internationally accepted principles of sustainable development. Chapter 17 of Agenda 21, which is a formal output of the United Nations Conference on Environment and Development, made an explicit statement of the need for integrated management of coastal and ocean areas to achieve their sustainability and called the participating nations to take the necessary steps. The EU, being at the forefront of such international

developments and embraced sustainable development as a broader policy objective, is devoted to take concerted action in terms of protecting the European coastal zone and fostering ICZM action at the EU and the Member States (MSs) level. Since the early 1990s, the EU institutions began to put substantial effort to achieve this goal, and initiated dedicated actions. Those existing and the foreseen EU actions are elaborated within the context of this thesis. For the time being, the EU ICZM action is a flexible one without a regulatory binding instrument for ICZM. The ongoing EU ICZM action is based upon the existing EU policies and legislation. Within this framework, the central aim of the EU is laid down as to ensure the coordination and integration of these diversified policy objectives and legislative instruments to contribute to sustainable management of the European coastal zone. Since they constitute the backbone of the current EU ICZM efforts, those policies and legislation are also investigated within the scope of this study. This thesis accentuates the importance of concerted EU action in terms of stimulating ICZM action in Europe and the probability of a future EU level devotion towards a more regulatory approach in the longer term.

Keywords: coast, coastal zone management, sustainable development, Integrated Coastal Zone Management (ICZM), European Union (EU), subsidiarity, EU Environmental Policy, environmental policy integration

ÖZ

AVRUPA BİRLİĞİ ÇEVRE POLİTİKASI VE
BÜTÜNLEŞİK KIYI ALANLARI YÖNETİMİ

Bahadır, Tuğçe
Yüksek Lisans, Avrupa Çalışmaları Bölümü
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Bu tezde, Bütünleşik Kıyı Alanları Yönetimi (BKAY) yaklaşımlarını Avrupa kıyılarında teşvik etmek yolunda Avrupa Birliği (AB) tarafından sarf edilen çabaların AB Çevre Politikası ekseninde ortaya konulması amaçlanmaktadır. BKAY, 1990'lı yıllarda geleneksel sektörel yönetim yaklaşımlarına alternatif olarak uluslar arası alanda resmi kabul görmüştür. Bu yaklaşım, kıyı alanlarında farklı kaynak kullanımlarından doğan çatışmaları en aza indirebilmek amacıyla farklı sektörler arasında bütünleşik bir yönetim mekanizması oluşturmayı amaçlamaktadır. Uzun dönemli hedefi kıyı alanlarında sürdürülebilir kalkınma idealini gerçekleştirebilmek olan BKAY yaklaşımın temelinde yatan düşünce de *sürdürülebilir kalkınma* kavramıdır. Bu nedenle BKAY yaklaşımı uluslar arası alanda kabul görmüş sürdürülebilir kalkınma ilkeleri üzerine kurulmuştur. Birleşmiş Milletler Çevre ve Kalkınma Konferansı'nın resmi bir çıktısı olan Gündem 21 ve onun 17. Bölümü, kıyı ve okyanus alanlarının sürdürülebilirliğini sağlayabilmek için bütünleşik yaklaşımların gerekliliğini açıkça ortaya koymuş ve konferansa katılan devletleri bu

konuda gerekli adımları atmaya davet etmiştir. Bu ve benzeri uluslar arası gelişmelerin merkezinde bulunan ve sürdürülebilir kalkınmayı politikalarının genel bir amacı olarak benimseyen AB, Avrupa kıyılarını korumak ve BKAY yaklaşımını gerek AB düzeyinde gerekse üye devletler düzeyinde desteklemek yolunda hedef belirlemiştir. 1990'lardan itibaren AB kurumları bu hedefe ulaşmak için önemli bir çaba başlatmışlar ve bu yolda bazı kararlı adımlar atmışlardır. Bu tez kapsamında AB'nin süregelen ve öngörülen çabaları incelenmiştir. AB'nin mevcut BKAY çabaları diğer topluluk politikalarının ve yasal düzenlemelerinin eksenine dayandırılmaktadır. Bu çerçevede, AB'nin Avrupa kıyılarında sürdürülebilir kalkınma hedefine ulaşmak doğrultusundaki temel yöntemi mevcut politikalarının ve yasal araçlarının bütünleştirilmesi ve aralarında eşgüdüm sağlanması olarak ortaya konulmuştur. Bu politikalar ve yasal düzenlemeler şu anki AB BKAY çabalarının iskeletini oluşturdukları için bu tez çalışması kapsamında incelenecek başlıca referans belgelerdir. Bu çalışma Avrupa'da BKAY yaklaşımlarının teşvik edilmesi yolunda AB düzeyinde sarf edilecek çabaların önemini vurgulamakta ve uzun vadede AB'nin daha kural koyucu bir yaklaşıma yönelme ihtimali üzerinde durmaktadır.

Anahtar Kelimeler: kıyı, kıyı alanları yönetimi, sürdürülebilir kalkınma, Bütünleşik Kıyı Alanları Yönetimi (BKAY), Avrupa Birliği (AB), aşamalı sorumluluk paylaşımı, AB Çevre Politikası, çevre politikası entegrasyonu

To My Dear Family

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BSEP: Black Sea Environmental Programme
BS-SAP: Black Sea Strategic Action Plan
CAP: Common Agricultural policy
CBSS: Council of the Baltic Sea States
CEC: Commission of the European Communities
CFP: Common Fisheries Policy
CPs: Contracting Parties
DG: Directorate General
DPT: Devlet Planlama Teşkilatı
EAGGF: European Agricultural Guidance and Guarantee Fund
EAP: Environmental Action Programme
EC: European Community
EEA: European Environmental Agency
EEC: European Economic Community
EIA: Environmental Impact Assessment
ELOISE: European Land-Ocean Interaction and Shelf Exchange Studies
ENCORA: European Network for Coastal Research
ERDF: European Regional Development Fund
ESDP: European Spatial Development Perspective
ESF: European Social Fund
EU: European Union
EUCC: European Union for Coastal Conservation
FAO: Food and Agricultural Organisation
FIFG: Financial Instrument for Fisheries Guidance
GEF: Global Environment Facility
HELCOM: Baltic Marine Environment Protection Commission
ICZM: Integrated Coastal Zone Management
IMO: International Maritime Organisation
IOC: Intergovernmental Oceanographic Commission
LOICZ: Land–Ocean Interactions in the Coastal Zone
MAP: MEditerranean Action Plan
MSs: Member States
NEAP: National Environmental Action Plan
OECD: Organisation for Economic Cooperation and Development
OJ: Official Journal
OSPAR: Convention for the Protection of the Marine Environment of the Northeast Atlantic
RBMP: River Basin Management Plans

RSP: Regional Seas Programme
SACs: Specific Areas of Conservation
SEA: Strategic Environmental Assessment
SDS: Sustainable Development Strategy
SMAP: Short and Medium Term Priority Environmental Action Programme
SPAs: Specially Protected Areas
SPO: State Planning Organisation
TEN-T: Trans-European Transport Networks
TROG: Turkish Republic Official Gazette
UNCED: United Nations Conference on Environment and Development
UNCHE: United Nations Conference on the Human Environment
UNCLOS: United Nations Convention on the Law of the Sea
UNDOALOS: United Nations Division for Ocean Affairs and the Law of the Sea
UNDP: United Nations Development Programme
UNECE: United Nations Economic Commission for Europe
UNEP: United Nations Environment Programme
UN: United Nations
VASAB: Vision and Strategies around the Baltic Sea
WCED: World Commission on Environment and Development
WCC: World Coast Conference
WFD: Water Framework Directive

CHAPTER 1

INTRODUCTION

Being located at the meeting point of the land and sea, the coastal systems represent one of the most significant and valuable ecosystems of our world. The coast is essentially a natural resource system, which provides space, living and non-living resources for human activities. As a result, the coasts attract vast human settlements from the beginning of human history and have historically been one of the most heavily exploited areas by vast human populations. They are now a focal point in many national economies, since a large number of social and economic activities are concentrated in these areas (van der Weide, 1993: 129). While the coastal space represents approximately 10% of the earth's surface, its coastal lowlands are inhabited by more than 50% of world population (Thia-Eng, 1993: 81), of which 37% lives within 100 km of the coast at a population density twice the global average[1].

The *coastal zone*[2] consists of the inner part of the continental shelf, the coastline and a hinterland of a few km width. The uniqueness of the coastal space

[1] 'http://www.unep.org/regionalseas/Issues/Coastal_Area_Management/Coastal_Development/default.asp'

[2] The two expressions of '*coastal zone*' and '*coastal area*' are often used interchangeably to refer to the transitional region between land and ocean. Usually, the term 'coastal area' has a more general meaning and refers to an undefined area of land and sea comprising a geographical entity (Boelaert-Suominen and Cullinan 1994: 1). Whereas the 'coastal zone' may have an implication that geographically defined planning zones will be established and become the dominant part of the coastal management process (Kay and Alder, 1999: 1). Similarly, the terms Integrated Coastal Area Management (ICAM) and Integrated Coastal Zone Management (ICZM) are used alternate to each other. Usually, many international initiatives (especially those affiliated to UN) prefer to use the term ICAM. However, since the focus of attention in this study is the European Union (EU), the term ICZM will be used in this study, as it is used by the EU institutions. Similarly, for consistency the term 'coastal zone' is preferred to be used throughout this study, except for the usage of the term 'coastal area' in direct quotations.

compared with other terrestrial spaces derives from the land/sea interface at the origin of very specific environments (wetlands, estuaries, open sea areas etc.), which have themselves generated multiple modes of use (Henocque *et. al.*, 1997: 9). At this interface, the interactions between these two ecological communities make the coast of a highly dynamic nature with frequently changing biological, chemical and geological attributes. Within this dynamism, coastal systems appear to be highly productive and biologically diverse ecosystems that offer crucial nursery habitats for many species. In nature, coastal systems maintain an ecological balance that assures the well functioning of the whole system including beach replenishment, shoreline stability and nutrient generation, all of which are of great ecological importance.

In addition to their ecological importance, the uniqueness of the coast is further enhanced by the economic value of its natural resources (such as fish and offshore mineral reserves), which are traditionally considered by the populace to be 'commons' (Kay and Alder, 1999: 8). Because of this consideration of coastal and marine environments to be 'commons', they have been particularly vulnerable to over-exploitation. The long term effect of uncontrolled human activity on the commons is generally to degrade or destroy it (FAO, 1998: 1). Today, a great deal of coastal systems suffers from severe degradation through mostly over-exploitation and severe pollution. A recent global assessment of the risks of coastal degradation from development activities shows that 34% of the world's coasts are at high risk and another 17% at medium risk. The most threatened regions are Europe with 86% and Asia with 69% of their coastal ecosystems at risk[3].

With their diversity of ecosystems, uses and interests, coastal zones are areas where conflicts arise and generate great risks. Such an important ecological and economical asset, which is subject to heavy degradation, requires an appropriate management mechanism to maintain its subsistence for present and future generations. *Coastal zone management* can be defined as the continuous management of the use of coastal lands and waters and their resources within a designated area (Jones and Westmacott (1993) quoted in Kay and Alder, 1999: 4). Major sectoral uses that are the subjects of coastal zone management can be summarised as follows: the use of land and sea resources (such as agriculture,

[3] 'http://www.unep.org/regionalseas/Issues/Coastal_Area_Management/Coastal_Development/default.asp'

forestry, fisheries, mariculture, mineral, oil and gas extraction), urban and industrial development activities (such as development of new infrastructure including housing, roads, upstream dam or barrage, ports/harbours, coastal industry/power stations), tourism development activities (such as secondary housing, hotel development, artificial beach construction, marinas), and environmental protection activities. Competition for land and sea resources and space by various stakeholders in coastal zones often result in severe conflicts and destruction of the functional integrity of these resource systems (Cicin-Sain and Knecht, 1998: 17). This competition has become a real threat to environmental quality, economic sustainability and social stability in coastal zones. Ideally, coastal zone management should act as the key for the planning of the activities that are taking place on the coast in order to minimise the problems arising from those activities.

The early conventional approach in coastal management between the 1950s and 1970s can be characterised as *a sectoral approach*, which primarily concerned with sectoral development. Most of these early management regimes inhered a *reactive man-against-nature approach* with the primary focus on economic development. There existed only limited ecological concerns. Besides, the two crucial components of the coast – *the terrestrial and sea sides* – were also treated independently under separate regimes by separate entities. In the course of time, especially from the 1960s onwards, the outcomes of intensified human activities such as the emerging pollution problems and heavy degradation of coastal resources, started to be observed and become recognised primarily in most of the developed coastal nations. The traditional sectoral approach proved to become ineffective in solving multiple use conflicts and maintaining functional integrity of coastal systems. The concept of coastal zone management firstly arose in the USA during the 1970s. The Federal Coastal Zone Management Act, the first of its kind in the international arena, was enacted in the USA in 1972. This can be marked as the beginning of a more integrated management effort in coastal zone management. Starting from the late 1970s onwards, it has been recognised that it is becoming increasingly difficult to conserve any one particular resource in the absence of a comprehensive, integrated framework for management. The need for an alternate and efficient management mechanism for coastal zones has been acknowledged throughout the international community. Since almost the last three decades, a new approach on coastal

management, known as '*Integrated Coastal Zone Management (ICZM)*' or *'Integrated Coastal Area Management (ICAM)',* started to be employed among planners, scientists and policy makers. It has been accepted as a viable alternative to the traditional sectoral management regimes, and declared as the most efficient management system for the world's coastal zones.

Undoubtedly, the attitudes and policies for coastal zone management evolved not in isolation from the developments in international environmental policy making in a broader context. The developments in coastal zone management are a reflection of the developments of the latter broader space. This statement holds particularly with the two notions of *ICZM* and *sustainable development*. The formulation of the ideas and practices of ICZM is an outcome of the broader goal of '*sustainable development*', which constitutes the framework idea of ICZM. The 1980s witnessed accelerated efforts in the formulation of a new conceptual framework to incorporate the two notions of '*economic development*' and '*environmental protection*' under the same banner, '*sustainable development*'. Sustainable development received global attention, with the publication of the report 'Our Common Future', in 1987, by the World Commission on Environment and Development (Brundtland Commission). The idea of sustainable development espouses a balance between the need for development and the need for environmental protection, by taking into account the carrying capacities of the world's ecosystems to ensure their maintenance for future generations.

The blueprint in terms of transforming these ideas and principles of the Brundtland Report into international policy making can be marked as the United Nations Conference on Environment and Development (the Earth Summit), held in Rio de Janeiro in 1992. There are two central concepts that underlie the major outputs of the Earth Summit: *interdependence* and *integration*. It laid down the inescapable fact that there is *interdependence between environment and development*, *among sectors and among nations*. This reality of interdependence necessitates integration: *integration between environment and development, integration among sectors, and among nations* (Cicin-Sain, 1993: 12-15). Agenda 21, which is one of the formal outputs of the Earth Summit, devoted its Chapter 17 to coastal and marine issues. Chapter 17 called for integrated management and sustainable development of coastal zones. The Earth Summit and its Agenda 21 gave

broad *political legitimacy to the concept of ICZM*. They represent a paradigm shift from sectoral multiple use frameworks to an integrated approach to managing the coastal zone. ICZM and sustainable development started to be perceived as inherent and necessary components of each other (Vallega, 1993: 149).

Integrated management in coastal zones is needed due to several deficiencies of the traditional approaches, including the lack of co-ordination among public agencies, insufficient planning and regulatory authorities, complex, conflicting and confusing laws in coastal zones, limited public participation in decision making process and resource decisions made primarily on the basis of economic considerations (Kenchington, 1993: 112). The ICZM approach has been formulised to partially or fully overcome these shortcomings. ICZM is *a dynamic and holistic resource management system*, and employs *a collaborative approach* by incorporating all stakeholders into the decision making mechanism, to minimise resource-use conflicts. It tries to maintain the *functional integrity* of coastal ecosystems, but at the same time facilitate the progress of *multisectoral development*, to enhance sustainable development in coastal zones. It is thus neither development nor protection oriented. It aims to provide the institutional and legal frameworks, focuses on environmental planning and management, coordinates various concerned agencies to work together towards a common objective (Thia-Eng, 1993 quoted in Clark, 1994).

In most of the countries, coastal zone management has evolved in isolation from the mainstream of national development plans and has not commanded substantial institutional development plans or financial commitments (Vallejo, 1993: 164). Usually, sectoral planning and development practices still prevail in most of the developing and some developed countries. The countries, which are considered to be implementing sustainable coastal resources management, integrated planning, or ICZM practices, can be laid down as the USA, Brazil, Coasta Rica, Israel, New Zealand, Japan and some of the developed European countries (the UK, Netherlands, Poland, Sweden, France, Cyprus, Norway, Greece) among others. Most of the developing countries tend to continue to embrace a sectoral planning and development scheme in their coastal zone management systems (Kay and Alder, 1999: 78).

The reality that the coastal ecosystems are among the most productive but highly threatened systems holds for the European continent as well. The *European Union (EU)*[4] and its Member States (MSs) are confronted with the old and new challenges facing coastal zones, including diverse types of pollution, over-exploitation of resources, population pressures translated both in urban sprawl and out of control tourism growth and port expansion among others. Throughout Europe, very rapid changes are experienced in both the terrestrial and marine components of the coastal zone and a great proportion of European coasts are marked to be under severe danger. One major outcome of change is the rapid increase in artificial surfaces in European coastal lands. In 2000, the share of area covered by artificial surfaces was 25 % higher on the coast than inland and trends showed that the growth rate of artificial surfaces is about 1/3 faster than inland (EEA, 2006: 15). Acknowledging that there is a strategic and growing importance of coastal zones for the future of European populace, it is time to both fully implement the existing policies and develop new tools and instruments to enhance coastal sustainability. At the EU level, there is the critical importance of incorporating coastal zones in future environmental policies as well as in any sustainable development strategies.

Particularly from the 1990s onwards, the embracement of *sustainable development* as an EU wide policy objective induced the need for integration of EU environmental policy into other sectoral policy objectives (*environmental policy integration*). This linked the environmental policy with the other policy objectives

[4] The origins of the EU goes back to 1957, when the *European Economic Community (EEC)* was established with the founding Treaty Establishing the European Economic Community (Rome Treaty) signed in Rome, with coming together of six European nations. Two other communities were also established during the same period: the European Coal and Steel Community (ECSC) by the Treaty of Paris (1951) and the European Atomic Energy Community (EURATOM) by a second Treaty of Rome (1957). The organisational structures of these three entities were brought together by the Treaty establishing a Single Council and a Single Commission of the European Communities (Merger Treaty) in 1965 and the term *European Communities* also came into use from this time onwards to refer to these three communities together. In 1992, with the Treaty on the European Union (Maastricht Treaty), the European Economic Community was converted to *the European Community (EC),* and the EU was created. The EC, along with the ECSC and EURATOM constitute the First Pillar (the Community Pillar) of the EU. The other two pillars of the EU are the Common Foreign and Security Policy Pillar, and the Justice and Home Affairs Pillar. In other words these three pillars became collectively referred as the EU. The Maastricht Treaty renamed the Treaty Establishing the European Economic Community (Treaty of Rome) to *Treaty Establishing the European Community (the EC Treaty).* The EC pillar is responsible for policy making in the EU in the areas the Community competence falls into, including the establishment of the common market, agriculture, fisheries, industry, regional development, energy, environment etc. Throughout this study the abbreviations EEC, EC (or referred as the Community) and EU are used in accordance to this historical context.

and the environmental policy became one of the central policies that sets the agenda of policy making at the EU level. A great deal of interest is attributed to the EU's environmental policy, in terms of achieving sustainable and harmonious development within EU territory. This idea was reflected in several policy statements of the Community, such as the Fifth and Sixth Environmental Action Programmes (EAPs), and the European Sustainable Development Strategy. This strong emphasis on sustainable development of the EU institutions and policy makers highly correlate with the need for a concerted EU action to attain sustainable development in the coastal zones of the EU territory.

This study aims to undertake an analysis of the context and characteristics of the ongoing EU efforts to stimulate and enhance ICZM in the European coastal zone, within the framework of its environmental policy. Especially from the 1990s onwards, the EU has been an important international actor in stimulating and bolstering world wide efforts for environmental protection. With the Agenda 21, the EC made a political commitment in terms of initiating efforts to facilitate integrated management and sustainable development of European coasts. Being very much at the forefront of current international agenda, concern about European coastline has led to a number of EU initiatives, which build on the concept of ICZM since the beginning of the 1990s. At the EU level, it has been realised and acknowledged that problems encountered in European coasts are of a European dimension and there should be some common approaches at the Community level, which will guide the MSs to implement ICZM practices at the national level. With this realisation, the Community started to take action to foster ICZM in Europe. Despite the absence of any reference to the 'coast' in the EC Treaty, the legal competence of the Community is wide enough to embrace the concept of ICZM, and this has been strengthened by the inclusion of sustainable development into the EC Treaty and the requirement to integrate environmental protection into other EC policies. Therefore, the Community efforts for ICZM should not be perceived in isolation from the broader Community objectives of sustainable development and the principle of environmental integration. This thesis tries to emphasize the high correlation between the specific goal of sustainable development in the European coastal zone through the initiation of ICZM and these broader Community objectives of sustainable development and environmental policy integration.

This thesis is confined to the actions taken by the EU institutions such as the European Commission, the Council of Ministers and the European Parliament. Therefore, the individual efforts at the MSs levels will not be elaborated, which is beyond the scope of this study. The concrete efforts by the EU institutions for ICZM were started at the beginning of the 1990s, when two Council Resolutions in 1992 and 1994 called for a Community strategy on ICZM. Subsequently, during 1996-1999 the European Commission initiated a Demonstration Programme (DP) on ICZM, to provide concrete information about the factors and mechanisms which either encourage or discourage sustainable coastal zone management in European coastal zones. The results of the DP on ICZM lead to a European Commission Communication on ICZM establishing a Strategy for Europe (*European ICZM Strategy*), and a proposal for a European Parliament and Council Recommendation concerning the Implementation of ICZM in Europe, in 2000. On 30 May 2002, the European Parliament and the Council issued this Recommendation (*EU ICZM Recommendation*). It is recommended that the MSs should formulate their national ICZM strategies according to the good practices identified as an outcome of the Commission's DP. The Commission issued a Communication on the Evaluation of ICZM in Europe entitled 'Report to the European Parliament and the Council: An Evaluation of ICZM in Europe' on 7 June 2007.

The central point in terms of the current EU ICZM action is the existing EU policies and legislation. The European ICZM Strategy and the EU ICZM Recommendation promote a flexible approach and they build EU ICZM action on existing Community instruments, such as the policies and legislation which may have direct or indirect influence on coastal issues. Therefore, the study is bolstered with an investigation of these existing policies and legislation of the EU in terms of their existing and potential correlation to environmental issues in general and to the coastal environments in particular. One major challenge stems from the fact that the ICZM issue is a relatively new concern at the EU level. The incorporation of ICZM by the MSs into their administrative and legislative structures has generally started from the 2000s onwards, primarily as a response to the EU ICZM Recommendation. This means that it is still early to have a thorough practical knowledge of the benefits, weaknesses and challenges of implementing ICZM and its interplay with relevant EU policies and legislation. For that reason, the literature on those EU

policies and legislation making a thorough investigation of their interplay with ICZM has only been recently developing. Since, there has been the weakness of secondary sources, mainly the primary sources such as the official documents for EC legislation and policies, and related reports produced by the European Commission have primarily been benefited in this study, which is based mainly on an interpretative-textual method.

As a country surrounded by three seas, the coastal zones are a significant natural and cultural heritage as well as an important area for economic development in Turkey. The issues of sustainable coastal development and ICZM in Turkish coasts have already been raised by several initiatives including academics, researchers and several public institutions. Some local and regional projects have been launched under the initiation and/or sponsorship of some international organisations. However, there is still a lack of awareness of the critical importance of coastal conservation and the need for wise management of coastal resources, primarily at the governmental level. Academic research activities and efforts by the non-governmental sector should be continued and strengthened to help bringing the subject towards a more central place in the governmental agenda. By making a thorough analysis of the EU ICZM initiatives, it is aimed to contribute to the existing ICZM literature in Turkey. The developments at the EU level are expected to be a simulative and guiding force, and a contribution for legislative and administrative reorganisation towards the establishment of a more integrated framework in Turkey's coastal management structure.

The structure of this thesis can be outlined as follows. The second chapter deals with the conceptual terrain of the coast, coastal zone management and ICZM. The physical definitions and main characteristics of the coast, the delimitation of the coastal zone, ecological and economic values of coastal zones, and main problems emanating from human activities in coastal zones will be examined in the first section. The second section is committed to an analysis of the historical evolution of coastal zone management towards ICZM. Within this context, the development of ICZM approach will be analysed within a broader context of international environmental policy making. The developments until the Earth Summit, the Earth Summit and Agenda 21, the international initiatives after the Earth Summit all of which culminated in the formation of ICZM thoughts and practices are explored

within the context of this section. The following section is devoted to the conceptualisation of ICZM. The factors that brought the need for ICZM, the identification of ICZM, the principles of ICZM, the functioning of ICZM programmes and the necessary institutional mechanism for ICZM will be analysed within the scope of this last section.

The third chapter deals with the EU ICZM initiatives. The chapter starts with a retrospect of EU environmental policy, including the underlying factors for the emergence of an environmental policy within the Community and the developments from this emergence onwards, to shed a light on how the attitudes and approaches have evolved in terms of environmental policy making within the Community. The legitimacy of ICZM within the context of EU environmental policy and the factors that generate the need for concerted EU action in the coastal zones of Europe will be explained within this section. The following section deals with the evolution of coastal zone management at the EU level and provides an outlook of ICZM within the EU. It will cover the development until the European Commission's DP on ICZM, the DP and afterwards, including the EU ICZM Strategy and the EU ICZM Recommendation. Within this context, a general outlook of coastal management and ICZM in Turkey will be provided within the context of the EU ICZM Recommendation, since Turkey was included within the evaluation process that was undertaken to investigate the implementation of the EU ICZM Recommendation. Additionally, the efforts at the regional seas level, in which the EU has been taking part, and other EU supported initiatives will be summarised as well within this section. An evaluation of ICZM in Europe, within the context of the by the European Commission Communication to fulfil its requirement emerging from the EU ICZM Recommendation, will be provided at the end of the chapter.

The fourth chapter discusses the existing EU policies and legislation with their relevance to environmental protection and ICZM. The policies which are discussed include the Common Agricultural Policy, Common Fisheries Policy, Transport Policy, Sustainable Tourism Policy, Regional Policy and the Structural and Cohesion Funds, the Cardiff Process, the Sixth Environmental Action Programme, Sustainable Development Strategy, European Spatial Development Perspective and the Governance White Paper. The legal frameworks investigated in this Chapter are Bathing Water Directive, Dangerous Substances Directive, Shellfish Waters

Directive, Urban Waste Water Treatment Directive, Nitrates Directive, Integrated Pollution Prevention and Control Directive, Water Framework Directive, Proposed Marine Strategy Directive, Birds Directive, Habitats Directive, Environmental Impact Assessment Directive, Strategic Environmental Assessment Directive, Directive on Freedom of Access to Information on the Environment, Directive on Public Access to Environmental Information and Directive Providing for Public Participation in Respect of the Drawing up of Certain Plans and Programmes Relating the Environment. The Chapter ends with an evaluation of these policies and legislation with their potential benefits within the context of EU ICZM action.

Finally, the concluding remarks are put in the fifth chapter. It is emphasized that the EU role in terms of stimulating ICZM in Europe must be continued and strengthened. For the foreseen future, the EU demonstrates decisiveness in terms of initiating ICZM in Europe, but plans to continue the process on a flexible basis. This study stresses the fact that the future direction of EU action will depend on the effectiveness of the existing approach and its physical outcomes in the European coastal zone. Therefore, if the deteriorating situation prevails, depending on the political will and public pressures in MSs, it is probable that the EU will pass to a more regulatory approach for ICZM.

CHAPTER 2

INTEGRATED COASTAL ZONE MANAGEMENT IN THE WORLD

In this chapter, the aim is to generate a basic and general idea about the concepts of '*coast*', '*coastal zone management*' and '*Integrated Coastal Zone Management*' (ICZM) by discussing the conceptual underpinnings of these subjects. The fundamental definitions, characteristics, and principles will be introduced in order to construct a conceptual domain, before passing to the central analysis that this study tries to undertake.

A structural outline of this chapter can be laid down as fallows. In the first section, it is aimed to acquaint the reader about the coast and its peculiarities. The section begins with an introduction of the basic definitions and main characteristics of the 'coast/coastal zone' both as a geographical entity and as a planning unit. It will be mentioned then how the lines of demarcation of a coastal zone are determined for management purposes. The primary human uses in coastal settlements and main human induced problems emerging from these uses will be mentioned in subsequent sub-sections. Afterwards, a historical overview of the approaches in coastal zone management will be provided within the broader context of the developments in international environmental policy making, in order to lay down the roots and underlying factors of the idea of ICZM. In the final section of this chapter, the fundamental definitions, key characteristics, triggering factors, overall goals and objectives, main principles and the functioning of ICZM approaches will be analysed.

2.1 Identification of the 'Coast' and Problems Encountered

2.1.1 Physical definitions and main characteristics of the 'coast'

In order to discuss coastal management, we need first to clarify the area which is intended to be managed. The simplest definition describes the coast as "the area where land, water and air meet" (Klee, 1992: 2). The coastal zone is usually understood as *the transition zone between the land and the sea*, with two principal axes, the first one parallel to the shoreline and the other one cross shore. From an environmental science perspective, a coastal zone covers seven different environments: the surface of the land, the surface of the water, the airspace above the land, the airspace above the sea, the water column, the continental shelf and the deep sea bed (Becet and Le Morvan quoted in Boelaert-Suominen and Cullinan, 1994: 14). As a transition zone between the marine and terrestrial environments, the components of the coast can include river deltas, estuaries, coastal plains, wetlands, beaches and dunes, reefs, mangrove forests, lagoons and other coastal features.

Another fundamental demarcation of the coastal zone is put forward by Cicin-Sain (1993: 27), who identifies five main zones in the coastal-marine spectrum as follows:

> *Inland areas*, which affect the oceans mainly via rivers and non-point sources of pollution; *coastal lands* (wetlands, marshes etc.) where human activity is concentrated and directly affects the adjacent waters, *coastal waters* (estuaries, lagoons and shallow waters generally) where the effects of land-based activities are dominant, *offshore waters* mainly out to the edge of national jurisdiction (200 miles offshore) and *high seas* beyond the limits of national jurisdiction. (Cicin-Sain, 1993: 27)

The coastline is being continually subjected to the process of natural change, which emanates from land and sea interactions. The transfer of matter, energy and living organisms between land and sea systems creates highly dynamic ecosystems, which is the primary characteristic peculiar to coastal systems. Kay and Alder (1999: 2) explain this dynamism as follows:

> The coast is where the land and ocean meet. If this line of meeting did not move, defining the coast would be easy – it would simply be a line on the map – but the natural processes that shape the coast are highly dynamic, varying in both space and time. Thus the line that joins land and ocean is constantly moving, with the rise and fall of tides and the passing of storms, creating a region of interaction between land and sea. (Kay and Alder, 1999: 2)

It is therefore this interaction between these two environments that makes the coast unique, as well as uniquely challenging to manage (Kay and Alder, 1999: 7). It is this transition among land and ocean producing diverse and productive ecosystems, which have historically been of great value to human populations. The coastal systems are overwhelmingly complex and vulnerable ecosystems as a result of this peculiarity. Within this complexity, the coast maintains a functional integrity, which assures the regeneration of the system within its natural functioning. This ecological balance of coastal systems ensures the shoreline stability, beach replenishment and nutrient generation and recycling, all of which have great ecological and socioeconomic importance (Post and Lundin, 1996: 3). However there is unavoidable and severely damaging human interference, which causes an eventual interruption and destruction of the functional integrity of coastal zones.

2.1.2 Setting the boundaries for coastal zones

Because of the dynamism and the diversity in function and form of coastal ecosystems, they do not lend themselves well to definition by strict spatial boundaries (FAO, 1998: 10). Therefore, there are no exact natural boundaries that unambiguously delineate coastal zones. In addition to this indefiniteness and complexity, there is the notion that besides the physical or ecological definitions, a coastal zone is also necessarily defined in terms of management or planning boundaries (Klee, 1999: 2). Even though it is possible to agree on several physical definitions of the coast, it is usually not so practical to set forth the whole ecosystem within the management area of a particular programme. Therefore, there may not be a one-to-one correspondence between the artificial boundaries demarcated by a particular management programme and the geographical boundaries specified by scientific definitions.

The matter of question here is how these boundaries should be determined. It is one of the most challenging issues for a coastal zone management plan or programme. For practical planning purposes the management authorities of a particular programme may determine the line of demarcation of a particular coastal zone according to several criteria. It may depend on political, administrative, legal, pragmatic and ecological considerations, because there is a broad array of possible coastal issues, and because the zone can be affected by remote activities. A narrow coastal zone could be appropriate if the area of concern is limited to the shoreline and intertidal areas. If watershed issues are of concern, than an inland extension would be necessary (Clark, 1994: 6). Therefore, choosing the thresholds which define the landward and seaward limits of a coastal zone depends to a large extent on why the definition is needed and this approach to coastal zone definition is called as need-driven approach[5] (Kay and Alder, 1999: 4).

From the legal perspective, the nations have the necessity to define and set the seaward and landward limits to their coasts within their national coastal legislation for practical administrative and planning purposes. In establishing national coastal legislations, coastal states may have various applications in terms of setting the seaward and landward limits to their coasts. Although in practice there is no single criteria of determining the seaward boundary of a particular coastal zone, several national coastal zone management laws take as the maximum seaward boundary the outer limits of the nation's territorial sea[6] (Boelaert-Suominen and Cullinan, 1994: 21). With respect to the landward boundaries, there is much less uniformity among nations. It is usually preferred to demarcate a landward boundary fairly close to the shoreline, typically a determined distance inland from the baseline.

As to sum up, the determination of a coastal zone may depend on several factors. The jurisdictional limits set by international legal standards, the institutional

[5] They define this approach as 'definition according to use', which means that the coastal area is defined according to the use to which that definition will be put. Apart from 'definition according to use', they formulised three other ways to define the limits of coastal areas at a policy level: fixed distance definitions; variable distance definitions; hybrid definitions. For detailed information on these different approaches, see Kay and Alder (1999: 4-5).

[6] The United Nations Convention on the Law of the Sea (UNCLOS), which was adopted in 1982 and ratified in 1994 as the constitution for the seas, sets the limits of national jurisdiction in the oceans and establishes the international rights and obligations beyond those limits. According to UNCLOS; the territorial sea of a nation state may extend to a maximum of 12 nautical miles from the baseline (Part II, Article 3) and a state may exercise sovereign rights over an Exclusive Economic Zone of up to 200 nautical miles from the baseline (Part V, Article 57) (UNCLOS, 1982).

structures of the national and local authorities, ecological characteristics of the coastal ecosystem at stake, and the overall aim and specific interests of a particular coastal management programme are the main determinative factors. By integrating all these different variables, the limits to coastal zones are often artificially defined.

2.1.3 Ecological and economic importance of coastal zones

The ecological importance of coastal ecosystems stems from their ecological functions, which constitute an invaluable part for the functional integrity of the world ecosystem as a whole. These ecological functions produce a number of environmental goods and services, which are of great benefit for human populations. As an outcome of their dynamic nature, the coastal ecosystems tend to have profoundly high levels of biological diversities. Several ecosystems in a coastal system, such as estuarine areas, coral reefs, coastal mangrove forests and other wetlands, tidal flats and seagrass beds, provide essential nursery areas for many coastal and oceanic aquatic species. It is estimated that 90 percent of the world's fish production is dependent on coastal waters at some time in their life cycle. Additionally, these areas support large numbers of migratory and non-migratory waterflow and shorebirds, and endangered reptiles, such as turtles and alligators (FAO, 1998: 13). Therefore they constitute important habitats for wildlife for the world's ecosystem. Besides their biological diversity, most of the coastal formations act as a safety barrier, as a natural shelter for the inhabitants, for example barrier islands, beaches, dunes and cliffs buffer residents along the coast from high winds and seas (Klee, 1999: 2). Moreover, these natural formations help to mitigate the effects of some natural disasters, such as storm-tide surges, floods, shoreline retreat and to control coastal erosion and other damage arising from wind and wave action. Besides all these, as a meeting point of the sea and land, the coastal regions exhibit an inexpressible beauty, which gives a feeling of peace and tenderness to mankind. As Klee (1999: 2) claims, "the coast is a source for psychological and spiritual renewal". Although it is subjective, the aesthetic value stemming from this natural beauty is another very important dimension of coastal zones.

Since prehistoric times, favourable biophysical and climatic conditions, together with the ease of communication and navigation frequently offered by coastal

sites have encouraged human settlements. In addition to their ecological importance and the provision of the appropriate geophysical conditions for human settlement, there is as well as an important economic value of the goods and services provided by the coastal ecosystems. The coastal zones are crucial in terms of economic resource uses. There are two kinds of resource uses in the coastal region: land side resource use and sea side resource use. On the land side, the major activity is agriculture, which mainly takes place on the highly fertile areas of river deltas and estuaries. Forestry is another kind of economic activity taking place on coastal lands. On the sea side, the most important economic activity for coastal residents is coastal fisheries and aquaculture, which provide an important food source for the inhabitants and for inland markets as well. Other primary resource uses on the sea side include minerals, oil and gas extraction.

Besides resource uses, the coast also provides port and harbour facilities generating significant monetary benefits from shipping for overseas commerce and navigation. Since ports have historically been considered as the link between inland and marine transport, thousand of ports have been built around the world. As the technology advances, ports have expanded form the natural sheltered waters to the open ocean (Kay and Alder, 1999: 31). The coast is also highly valued for recreational and tourism activities. As a recreation site the coast may provide an open space for beach-combing, sunbathing, swimming, boating, fishing etc. (Klee, 1999: 2). Therefore the coastal regions are preferred as the most popular places for secondary housing throughout the world. This is followed by the development of new infrastructure including roads, bridges, marinas, and several kinds of recreational areas. Besides their economic benefits, all these activities and developments could bring major economic losses, which should be taken into account as a whole within a planning process.

In brief, the economic value generated by coastal uses has been of great importance to human populations since the beginning of human history. What the economic value of coastal resources means for humankind and why these resources should be protected from a human centric view is expressed by Post and Lundin (1994: 4) in below paragraph:

> The intrinsic economic value of coastal resources represents a "capital" investment for humankind by nature. The goods and services derived from them are the "interest" generated by the investment. Hence, the destruction of the resource base means depletion of the "capital" and therefore less interest and the ultimate exhaustion of what nature has freely provided. (Post and Lundin, 1994: 4)

2.1.4 Main human-induced problems and management concerns

Because of the economic values generated by coastal resources, the coasts have been subject to change due to anthropogenic intervention from the beginning of human settlements. This concern is fairly well expressed through only one sentence by Beatley *et. al.* (1994: 3), who state that "just the fact that people live in the coastal area is a form of pressure itself". All the human activities mentioned above have an impact on a different scale on the well-being of these vulnerable ecosystems. One certain thing is that *the growing population* is the heaviest burden, because it pushes beyond the limits of the carrying capacities[7] of coastal ecosystems. *Rapid and unplanned urbanisation* with fragmented management approaches on coastal lands may have dramatic outcomes, and without any possibility for recovery in most cases. One major and unavoidable outcome of rapid and unplanned urbanisation is the modification of coastal morphologies by human activities. Increasing human needs and increasing competition for land have brought about the need for more coastal space for the establishment of the necessary infrastructure (housing, industry and port development, recreation). To create new space and partially solve this problem, the reclamation of coastal land has been widely applied in coastal settlements. However, due to inappropriate and insufficient management regimes and plans, the coastal morphologies have been changed drastically. The activities that affect water flows (such as building dams, increased water extraction, deviation of rivers, swampland filling) and activities that cause erosion (mostly that of deforestation) also modify the dynamics of alluvial landscapes and natural sedimentation patterns, which are decisive for the nutrient and energy flows in that system. In turn, the functioning of the whole coastal system may be damaged in a dramatic way. The urbanisation process may have other socio-economic outcomes as well, such as the

[7] The carrying capacity of a particular ecosystem may be defined as the maximum number of individuals of any species that can be supported by a particular ecosystem on a long-term basis (http://highered.mcgraw-hill.com/sites/0070294267/student_view0/glossary_a-d.html).

disappearance of coastal agricultural land, the loss of coastal wildlife habitats and loss of coastal village or small town character (Klee, 1999: 3-4). Therefore all these different human activities necessitate a comprehensive cost-benefit analysis, by taking all these different aspects and sectors into consideration, to ensure that the losses will not exceed the benefits in the longer term.

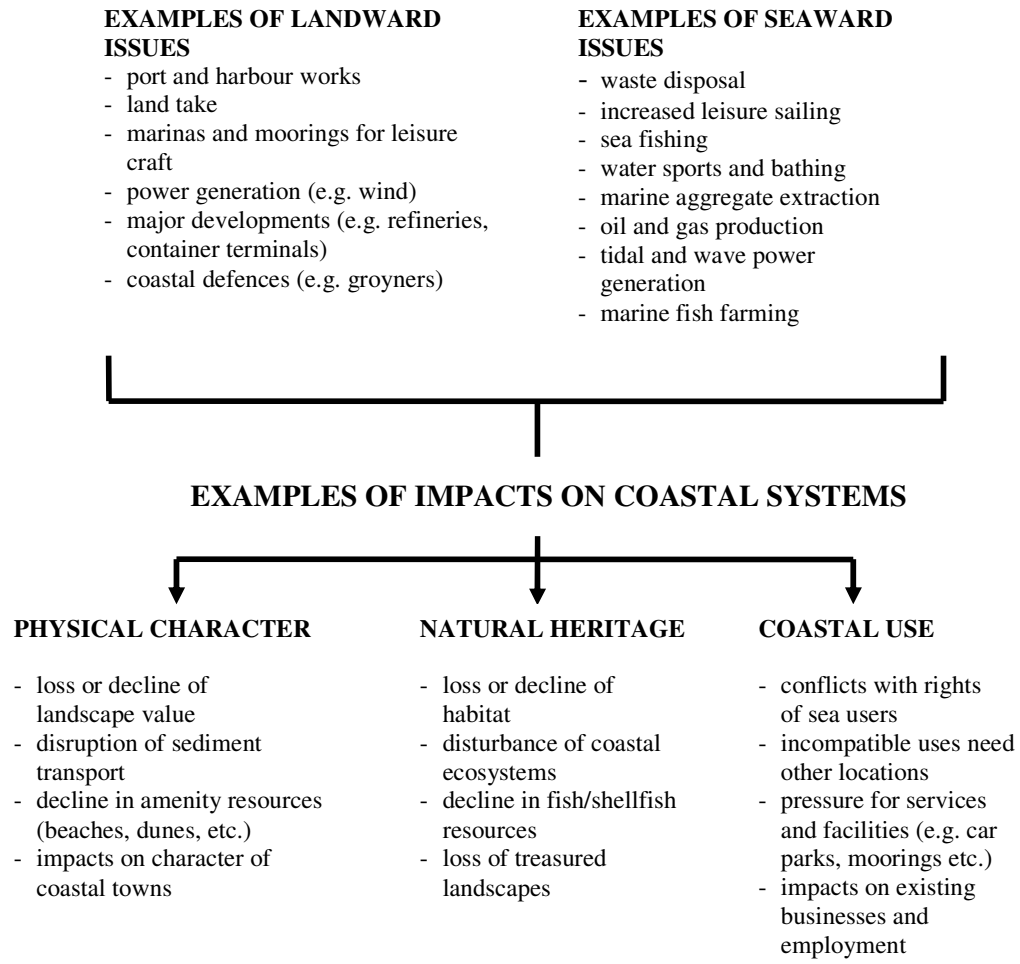
Another major outcome of intensified human settlements in coastal zones is the resource degradation in the long term. All kind of resource uses, whether renewable or non-renewable, would lead to an ultimate degradation of resources in the long term, if the carrying capacities and renewal rates of natural systems are not respected. Coastal resources, especially the agricultural and fisheries resources are the subject of congestion and very intensive use. Therefore the loss of mangrove forests, coral reef destruction, and deforestation are the outcomes generated by over exploitation of coastal resources all over the world.

Pollution is another serious outcome of human activities. The oceans and the coastal zone have been used as dumping grounds for years, and it has been hoped that the assimilative capacity of the ecosystem will take care of the problem (Beatley *et. al.,* 1994: 4). However, the world is now faced with numbers of problems emanating from waste disposal, which culminate in pollution of coastal waters and degradation of water quality. There are two major sources of coastal pollution, point sources and non-point sources. Point sources of pollution include sewage outfalls, pollutants from marinas, industrial wastewater, whereas non-point sources emanate from agricultural lands, urban areas and marine debris. Physical and hydrological modifications may also cause pollution, such as harbour dredging, groundwater withdrawal, irrigation, and all kind of activities that exacerbate saltwater intrusion (Klee, 1999: 3). One major outcome of pollution, especially from domestic sewage, is eutrophication (or overfertilization), which is caused by excessive nutrients from organic waste and in turn disturbs the delicate balance maintained among the species in the ecosystem (Clark, 1994: 23).

Another more recent concern of coastal management programmes in coastal nations is the feared climate change, which is the result of a mix of human and natural causes. The coastal zones are the first places to be effected by this global temperature rise (greenhouse effect), via “sea-level rise, changes in ocean coastal

processes, modifications of river runoff patterns and sedimentation and from the expected increases in floods, storms and hurricanes" (Clark, 1994: 26).

Figure 1 below summarizes the issues mentioned in the last two subsections. Examples of landward and seaward issues and their impacts on coastal systems in the United Kingdom (UK) are demonstrated in the Figure. The impacts are grouped under three major categories: impacts on physical character, natural heritage and coastal uses of coastal systems. Although this figure has been drawn particularly for the UK by the Local Government Management Board, these are common problems, which do exist in almost every urbanized coastal nation throughout the world.



Source: Local Government Management Board (1995) (Kay and Alder, 1999: 19)

Figure 1: Examples of Impacts on Coastal Systems in the UK

2.2 Evolution of Coastal Zone Management towards ICZM

A brief history of the development of the idea and practices of coastal management will be presented in this section. This is important because it will provide a framework to understand not only the evolution of the management and planning practices of coastal systems but also the evolution in the way of thinking in terms of environmental conservation and policy making from a global perspective. Undoubtedly, the evolution in the attitudes and policies for coastal management towards ICZM approach was a reflection of the developments in international environmental thought and policy making. Therefore it is crucial to have an insight on major developments in terms of global environmental policy making to understand the contemporary trends in coastal management. This may give us a fully understanding of behind factors in the emergence of the idea of ICZM.

2.2.1 Coastal zone management from the outset until the 1992 United Nations Conference on Environment and Development

Coastal zone management can be defined as planning for, and reacting to, environmental change within the coastal zone (Klee, 1999: 32). It involves the continuous management of the use of coastal lands and waters, and their resources within some designated area. The overall goal of coastal management can be defined as to preserve, protect or enhance coastal zones for humans as well as other species. It is the key for planning of the activities that are taking place on the coast in order to minimise the problems arising from those activities.

Actually, coastal management started with ancient civilizations, although they did not need to use this term or think about it. They changed the environment of the coast in a way or another, by building ports, seawalls, diverting river water flowing into the sea etc. Nevertheless, their impacts on the functioning of the coastal ecosystems were very limited, because of very small number of inhabitants, abundant resources and the limited technology (Kay and Alder, 1999). The rapid growth of human populations through centuries, and the invention of new technologies started to alter this picture gradually towards a tragic direction. Humankind became able to exploit natural resources more intensely and modify natural environments for the

sake of economic development. Population levels started to reach or even exceed the carrying capacities of most of the natural ecosystems, more severely the coastal ecosystems. Especially with the beginning of the industrial revolution and after, there was the dominant attitude that economic growth is the only crucial tool for ending poverty, enabling the wealth of the nations and raising standards of living. The accompanying view to this argument was that the natural resources were infinite and they can be exploited in an everlasting way. With some exceptions, there was no 'scarcity' concern for natural resources and there existed almost no global environmental concern in the political agendas of the international community during the first half of the 20$^{th.}$ century[8].

The traditional approaches to coastal management between the 1950 and 1970s were shaped within this general framework. They took place mainly on a human centric basis and exhibited a 'man against nature approach'. Those traditional segmented approaches functioned principally on a sectoral basis without a consideration of the complicated and dynamic structure of coastal systems. Different agencies within a national authority concentrated on one of the coastal and sanctuary issues (such as fishing, agriculture, tourism, oil and gas exploitation and nature conservation). This sectoral structure was not able to meet most of the needs driven by the heavy use of coastal systems. Another very important characteristic of the earlier approaches is the fact that in the past, "coastal resource managers" dealt strictly with the terrestrial part of the coastal zone (the land), while marine biologists and oceanographers limited their concerns to nearshore and offshore waters (the sea) (Klee, 1999: 47). Therefore the two central parts of the coast (land and sea) were dealt as two separate entities.

When we come to the late 1960s, a debate about exhaustion of natural resources and overpopulation became apparent in the international arena. The primary reason for this realisation was the fact that the harm given to the valuable

[8] However, as countries industrialised mostly during the first half of the 20th. century, environmental pollution issues started to occupy national and international agendas. One of the most famous environmental disputes, the *Trail Smelter Arbitration,* began in the 1930s, when the United States complained that sulphur dioxide emissions from a smelter located in Canada damaged U.S. crops. The issue was first brought to the International Joint Commission, and then a three-member Tribunal was established by a Convention signed between two states. After a 13 years term, the Tribunal decided that damage had occurred from the operations of the Smelter and may occur in the future. Therefore it was decided that a regime or measure of control shall be applied to the operations of the Smelter. For more information, see Hunter *et. al.* (2002: 504).

natural assets of the planet started to become more and more visible and inescapable. The situation prevailed not only for coastal ecosystems but also for all kind of natural reserves and ecosystems throughout the world. This forced nations to a reconsideration of what they have been doing for centuries to the environment they are living in. The issue of a degrading environment was thrust onto the political agendas of most Western industrialised states in the 1960s by the efforts of environmental activists, whose aim was to attract political attention. The publication of Rachel Carson's[9] book *Silent Spring* in the USA in 1962 is often cited as a turning point in the environmental movement (Broadhead, 2002: 29-31). Publication of similar books and documents[10] and accelerated efforts of some protest groups joined with the activism of 1960s in major protest movements characterise the early efforts in terms of environmental protection during the 1960s and 1970s.

Within this new wave, the establishment of the Club of Rome[11] in 1968 can be considered as another important step in the international community in terms of opening the doors for a new way of thinking, by offering a new and different perception for economic, social, political and natural realities. In 1972, the Club published a report called *The Limits to Growth*, with the aim of gaining insights into the limits of the world system and the constraints it puts on human numbers and activity. They agreed on the fact that given the limited dimensions of the planet, the economic and demographic growth of human populations can not continue indefinitely. Therefore the initiation of new forms of thinking and a fundamental revision of human behaviour is needed. They called for "concerted international

[9] As a zoologist and marine biologist, Carson criticised in her book *Silent Spring* the pesticide policy of the USA by pointing out the harmful outcomes of toxic pollution at that time. Since she did it in a very poetic and literary strong way, the book caught the hearths of the majority of average citizens in the USA. For more, see Carson (1962).

[10] G. Hardin's essay '*The Tragedy of the* Commons' (1968), E.F. Schumacher's '*Small is Beautiful*' (1973), Benthall's '*The Limits of Human Nature*' (1973), Leiss' '*The Limits to Satisfaction*' (1976) (Broadhead, 2002: 32)

[11] The Club of Rome was formed as an informal organisation at a meeting in the Academia dei Lincei in Rome. Thirty individuals from ten countries-scientists, educators, economists, humanists, industrialists, and national and international civil servants- met under the leadership of Dr. Aurelio Peccei, an Italian industrial manager and economist, to discuss the subject of the present and future predicament of man (Meadows *et. al.*, 1972).

measures and joint long term planning on a scale and scope without precedent"[12] (Meadows *et. al.*, 1972: 194).

The field of international environmental law really took of during the early 1970s, when domestic law began to respond to increasing impacts of industrialisation. Environmental law had become a legitimate issue for national policy making. Many countries have passed national environmental laws and established institutions during the late 1960s and early 1970s. Particularly in Europe, since many environmental issues such as air and water pollution inherently present transboundary issues, the newly emerging environmentalism moved immediately to the international level (Hunter *et. al.*, 2002: 170-171). All these efforts paved the way for the first major development in terms of environmental protection in the international realm. The first major intergovernmental environmental conference, the United Nations Conference on the Human Environment (referred as the UNCHE or the Stockholm Conference), was held under the leadership of the United Nations at Stockholm, Sweden, in 1972. The Stockholm Conference was one of the most successive UN conferences ever held up to that time and one hundred and thirteen countries attended the Conference[13]. It was very important in terms of the fact that for the first time it legitimised environmental policy as a universal concern among nations. It highlighted the need to design and implement *environmental protection strategies* while promoting equitable *economic development*[14] (El-Sabh *et. al.,* 1998: 3). The formal output of the Conference includes the *Stockholm Declaration on the*

[12] However, it was not until the late 1980s that this new way of thinking was improved and conceptualised as '*sustainable development'*, and would become wide acceptance in the international arena.

[13] However, because the Stockholm Conference occurred in the middle of the Cold War, it was affected by the East-West politics. For more, see Hunter *et. al.* (2002: 173-174).

[14] The issue of economic development was one of the most disputed issues during the Stockholm Conference. The developed and developing nations (within this debate the developed nations are usually referred to as the 'North' and the developing nations as the 'South') were facing a different set of issues during the time that the Conference was held. The industrialised developed countries were mainly concerned with fighting the by-products of industrialisation, whereas most of the developing countries had only recently received their independence and were highly concentrated on their economic development. Therefore, the South did not want to give any concessions from their development paths for the sake of environmental concerns. During the Stockholm Conference, the linkage between *environment* and *development issues* was highly promoted, as well as emphasized in the *Stockholm Declaration on the Human Environment*. It was tried to be stressed that environmental issues would not simply be a backdoor way to slow development in the developing world. For more, see Hunter *et.al.* (2002: 170-178).

Human Environment[15] (a non-binding declaration of principles and referred as the Stockholm Declaration) and the *Action Plan for the Human Environment* (includes 100 Recommendations and referred as the Stockholm Action Plan). The Stockholm Declaration emphasized the need for the protection of natural ecosystems *for the benefit of present and future generations* through careful planning and management (UNCHE, 1972a: Principle 2). It also called for an *integrated and coordinated approach* in the development planning of resources to achieve more rational management and resources and ensure that development is compatible with the need to protect and improve the human environment (UNCHE, 1972a: Principle 13). These two fundamental statements paved the way for the development of the idea of sustainable development and the principle of integrated management, which later will become the two central concepts of environmental policy making. Although the Stockholm Action Plan spanned the entire spectrum of environmental issues, in many respects ocean and coastal issues were emphasized throughout the Stockholm Conference. It was a comprehensive effort to identify the environmental issues that required international action. Within the Stockholm Action Plan, there is a section of Marine Pollution, under which the Recommendation 92 is directly related to the protection of marine and coastal resources. The following statement of objectives agreed on at the second session of the Intergovernmental Working Group on Marine Pollution was endorsed by the participating governments collectively:

> The marine environment and the living organisms which it supports are of vital importance to humanity, and all people have an interest in assuring that this environment is so managed that its quality and resources are not impaired. This applies especially to coastal nations, which have a particular interest in the management of coastal area resources… Proper management is required and measures to prevent and control marine pollution must be regarded as an essential element in this management of the oceans and seas and their natural resources. (UNCHE, 1972b: Recommendation 92)

[15] From an international legal perspective, the Stockholm Declaration was the most important achievement of the Stockholm Conference. It seemed to suggest a human right to a healthy environment in several of its principles and thereby has had an important influence on the growth of environmental human rights in national constitutions (Hunter *et. al.,* 2002: 176-177). Furthermore, Principle 21 of the Declaration, which states that states do have "the responsibility to ensure that activities within their jurisdiction do not cause damage to the environment of other States or areas beyond the limits of national jurisdiction" (UNCHE, 1972a), becomes one of the fundamental principles of international environmental law (Halpern, 1992).

Another major outcome of the Stockholm Conference was the establishment of the United Nations Environment Program (UNEP) in 1972. UNEP is a catalyst and coordinating unit under the UN system. It is the primary UN organ with general authority over environmental issues. It has been an important actor in the international arena since that time, initiating global activities such as the *Regional Seas Programme*[16] and playing important roles in ozone depletion and biodiversity issues (Cicin-Sain and Knecht, 1998: 73). It also has played a critical role in the development of major international environmental treaties, serves as the secretariat for several treaties and is generally responsible for gathering and distributing global environmental information (Hunter, 2002: 174-175).

The ideas formulated in 1972 laid the bases for many subsequent gatherings and multilateral environmental agreements[17] (El-Sabh *et al.*, 1998: 3). These efforts can be considered as the beginning of regime formation by means of international agreements designed to pool energies and resources in the common fight against environmental degradation (Broadhead, 2002: 39).

The idea of integrating environmental protection with the issue of economic development became dominance in the international community since 1980s. It was apparent that the existing tendency towards continuous economic growth without any environmental or social concern would be leading to a countdown for a catastrophe in the long term. In the international arena it was widely accepted that the issue of social and economic development should be integrated into environmental policy making, since development cannot simply be subordinated to environmental protection and vice versa. The process of integration lies at the hearth of this new approach, which was conceptualised with the term '*sustainable development*' (Hunter *et. al*., 2002: 180).

Sustainable development received global attention through the publication of the report 'Our Common Future' (or the Brundtland Report), which was the report

[16] See infra p. 33.

[17] These include the Convention on International Trade in Endangered Species in 1973, the International Convention for the Prevention of Pollution from Ships in 1973 (amended as the Convention for the Prevention of Marine Pollution from Ships (MARPOL) in 1978), the Convention on Long-Range Transboundary Air Pollution in 1979, the Convention on the Conservation of Migratory Species of Wild Animals in 1979, the United Nations Convention on the Law of the Sea (UNCLOS) in 1982, the establishment of the Intergovernmental Panel on Climate Change in 1988 initiated by the World Meteorological Organisation (WMO) and the UNEP.

published in 1987 by the World Commission on Environment and Development (referred as the WCED or the Brundtland Commission)[18]. Although the term sustainable development was not originated by the Brundtland Commission, the Brundtland Report popularized the term and placed it in the centre of international policy making. The term 'sustainable development' was described in the first part of the Brundtland Report as follows: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987: 43). The Report formulises three components of the essence of sustainable development: "*the interdependency of ecological, social and economic issues*; the global dimension, or *the interdependency of the north and the south*; and *the rights of future generations*" (Schrama and Sedlacek, 2003: 10). Within this framework, three major aims of sustainable development can be formulised: First, economic development to improve the quality of life of people; second, environmentally appropriate development or development that protects essential ecological processes, life support systems and biological diversity; and third equitable development, including intrasocietal, intergenerational and international equities (Cicin-Sain, 1993: 16).

After the publication of the Brundtland Report, the notion of sustainable development has turned to be the central concept and has been settled into the agendas of national and international policy makers. It has been one of the strongest initiator of many subsequent international events and proliferated efforts, which aimed the further enhancement of sustainable development policies.

The transformation of the traditional segmented approaches to coastal zone management started after the 1970s, with the transformation in global environmental thought. Through time human activities started to place burdens on the natural resources of the coastal zone beyond their collective capacity to neutralize the negative impact without adverse reaction. The prevailing methods and practices became inadequate in mitigating the negative impacts emerging from human

[18] The WCED is known as the 'Brundtland Commission' after its chairperson, former Norwegian Prime Minister Gro Harlem Brundtland. The WCED was established by the UN General Assembly in 1983 with an aim of initiating the preparation of the Environmental Perspective to achieve sustainable development by the year 2000 and beyond. In its Mandate, officially adopted in 1984, the Commission "invites suggestions, participation and support in order to re-examine the critical issues of environment and development and formulate innovative, concrete and realistic action proposals to deal with them" (The Brundtland Commission, 1987: 356).

activities; they even exacerbated the existing situations. Different streams of human endeavours in coastal zones, such as ecological management, resource management, engineering intervention and urban/industrial development operated relatively independently for many years. It was not until the late 1960s and 1970s that these disciplines were brought together under the banner of *'coastal zone management'*, a phrase credited to those involved in the development of the US Federal Coastal Zone Management Act, which was enacted in 1972[19] (Kay and Alder (1999: 10-11). It was first recognised by the international community at the Stockholm Conference in 1972 that the coastal zones, including both land and sea, require special protection. During the 1980s and after, the idea of sustainable development started to penetrate into the idea of coastal management as well. This new approach on coastal management was formulised as *Integrated Coastal Zone Management* (ICZM). The idea of ICZM is based on the notion of sustainable development and therefore the principles of ICZM were shaped in accordance with the founding principles of sustainable development.

Since the publication of the Brundtland Report, there have been considerable international discussions, particularly in the first half of the 1990s, on the subject of ICZM, and there has been a worldwide proliferation of ICZM efforts (El-Sabh *et al.*, 1998). The international event, which has highlighted the need for establishing integrated management processes and institutions to protect valuable coastal/marine ecosystems and to achieve sustainable development, was the United Nations Conference on Environment and Development (referred as the UNCED, the Rio Conference, or the Earth Summit), held at Rio de Janeiro, Brazil, in 1992. In the following section, the UNCED process and the post UNCED period will be discussed.

2.2.2 The Rio Conference and after: the emergence of ICZM as a tool for coastal zone management in the international arena

The Brundtland Report was a significant guiding force in the preparation of the Rio Conference. Shortly after its publication, the UN General Assembly asked the Secretary-General to consider organizing a conference to take stock of the global

[19] In 1996, it was amended as the Coastal Zone Protection Act.

environment twenty years after Stockholm. It was agreed that such a conference would elaborate strategies to fight with environmental degradation and promote sustainable and environmentally sound development in all countries (Halpern, 1992). After a long preparatory process, the Rio Conference, which is considered as a milestone in terms of environmental protection, was successfully convened with the broadest participation ever[20]. The Rio Conference tried to reconcile the environmental and development issues under the term sustainable development. It is characterised as the marriage between environment and development, and the first effort in the international law to develop a common language and a common purpose in this reconciliation[21] (Williams Silveria, 1995: 9). There are five major outputs of the Rio Conference: *Rio Declaration on Environment and Development* (a statement of principles); *Agenda 21*; the Framework Convention on Climate Change; the Convention on Biological Diversity; and a set of non-binding forestry principles[22].

The Declaration on Environment and Development[23] (the Rio Declaration) specifies within the framework of *sustainable development* many *fundamental principles*[24] in the field of environmental law, which are confirmed by consensus among States. Therefore in spite of the nonbinding character, those principles have been significantly influencing the development of international environmental law

[20] It brought together 115 the heads of state and government, 7,000 delegates from 178 nations, hundreds of officials from UN organisations, municipal governments, businesses, over 1,400 NGOs (almost 20,000 grassroots environmentalists from 166 countries), nearly 9,000 journalists, and scientific and other groups.

[21] At the very beginning, there was the basic question whether the UNCED was an environment or development conference. The serious division between the North and the South has been explicitly on display and central to decisions at Rio (Shabecoff (1996) quoted in Hunter *et. al.* (2002: 188)). The North wanted all the countries of the world to take action to protect the global environment, whereas the South interpreted it as a situation in which those who had been developed and polluted up to that point were now asking the rest to pay for their mistakes. Therefore, the South demanded for financial and technological assistance, but the North did not want to accept any obligations to gain the cooperation of South (Halpern, 1992). Although these issues remained to be the major disputes during the Conference, the controversial issues of environment and development were meant to be reconciled by the concept of sustainable development.

[22] 'http://www.un.org/geninfo/bp/enviro.html'

[23] The Rio Declaration may be understood as a bargain between the North and South in settling the disputes mentioned above. In general, through the Declaration, the North acknowledged that it holds most of the responsibility for global environmental problems, and agreed to provide new and additional funding to assist the South, and in return the South agreed to cooperate in protecting the global environment. For more, see Hunter *et. al.* (2002: 196).

[24] For more information on the principles of sustainable development, see infra p. 31.

and they have been the underlying principles in the development and conceptualisation of ICZM as well.

2.2.2.1 Agenda 21 and its Chapter 17: first formal output of ICZM

Agenda 21 is a forty-chapter action plan that resulted from the Rio Conference. It is a comprehensive and detailed blueprint for the future implementation of sustainable development. It is divided into four major sections: (I) Social and economic dimensions, (II) Conservation and management of resources, (III) Strengthening the role of major groups, and (IV) The means of implementation (UNCED, 1992b).

Within Section II, Chapter 17 is completely devoted to oceans, seas, coastal areas and living resources. Seven programme areas are determined, which are as follows: (a) Integrated management and sustainable development of coastal areas, including exclusive economic zones, (b) Marine environmental protection, (c) Sustainable use and conservation of marine living resources of the high seas, (d) Sustainable use and conservation of marine living resources under national jurisdiction, (e) Addressing critical uncertainties for the management of the marine environment and climate change, (f) Strengthening international, including regional, cooperation and coordination, (g) Sustainable development of small islands (UNCED, 1992b: Chapter 17.1). It is stated that "coastal states commit themselves to integrated management and sustainable development of coastal areas and their marine environment under their national jurisdiction". Therefore, it is necessary to "provide for an integrated policy and decision-making process, including all involved sectors, to promote compatibility and a balance of uses" (UNCED, 1992b: Chapter 17.5). Preventive and precautionary approaches in project planning and implementation are called for. Additionally, coastal states are invited to establish appropriate coordinating mechanisms (such as a high level policy planning body) at both the local and national levels for integrated management and sustainable development of coastal and marine areas. The academic and private sectors, non-governmental organisations, local communities, resource user groups and local people should be included within this coordinating mechanism (UNCED, 1992b: Chapter 17.6). States are also called for international cooperation to support national

efforts of coastal states and to prepare national guidelines for ICZM[25] (UNCED, 1992b: Chapter 17.10-11).

As it can be understood from the above stated principles, Agenda 21 constitutes the strongest international commitment and stimulated a great boast to the concept of integrated management and sustainable development of maritime and coastal zones. Although it has been criticized as being too soft, as setting forth vague and general goals and some not well defined strategies, these shortcomings should not detract from UNCED's very significant achievements relative to oceans and coasts (Cicin-Sain and Knecht, 1998: 93). Agenda 21 specifies the major problems in the oceans and coastal arenas and sets forth the fundamental principles and characteristics of ICZM approach and sustainable development of coastal areas, which guide the nations in formulising their national programmes. One significant input of the UNCED process is the emphasis put on incorporating the seaward extent of the coastal zones into the management system, in order to integrate the landward and seaward issues within a single management framework (Vallega, 1993: 150). The most crucial aspect of Agenda 21 in terms of ICZM is the fact that it gave political legitimacy to the concept of integrated ocean and coastal management, underscoring the importance of *integration* (Cicin-Sain and Knecht, 1998: 93).

2.2.2.2 The principles of sustainable development established in the Rio Declaration

The Rio Conference marked the formal acceptance of sustainable development in the international arena. The concept of sustainable development was almost fully endorsed by the international community, and the principles that are mentioned in the formal outputs of the Conference have been acknowledged as the founding principles of sustainable development.

According to the Rio Declaration, the principles of sustainable development involves: (1) *the principle of preventive action*, which obliges States to prevent damage to the environment (Principle 2), (2) *intergenerational equity*, which requires that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations (Principle 3), (3) *the*

[25] For further information on the articles of the six remaining programme areas, see UNCED (1992b).

principle of integration, which foresees environmental protection as an integral part of the development process (Principle 4), (4) *intragenerational equity,* which requires cooperation to eradicate poverty as an indispensable requirement for sustainable development and decrease the disparities in the standards of living, (Principle 5), (5) *the reduction of unsustainable production and consumption*, which obliges States to reduce unsustainable patterns of production and consumption, (6) *public participation and access to information*, which requires States to facilitate and encourage public awareness and participation (Principle 10), (7) *the precautionary principle*, which requires that States should not postpone cost-effective measures to prevent environmental degradation even there is the lack of scientific knowledge (Principle 15), (8) *the polluter pays principle*, which obliges States to promote the internalization of environmental costs and the use of economic instruments (Principle 16), (9) *environmental impact assessment*, which requires that States should undertake environmental impact assessment for proposed activities that are likely to harm the environment (Principle 17), (10) *the involvement of all groups of people*, which foresees full participation (youth, women, indigenous people, and other local communities) in the environmental management and development process (Principles 20-22), (11) *the principle of international cooperation*, which requires States to cooperate in case of emergencies and natural disasters, to provide timely notification to potentially affected States in the case of a transboundary environmental effect, and to cooperate in the development of international laws in the field of sustainable development (Principles 19, 20 and 27) (UNCED, 1992a).

These principles of sustainable development became the underpinning principles for sustainable coastal management as well. They form the basis in the formulation of the conceptual framework of subsequent ICZM guidelines of several international initiatives, which were prepared in the post-Rio period.

2.2.2.3 The role of other international initiatives in the development of ICZM

After the Earth Summit, significance international efforts started to be undertaken in order to stimulate the idea of ICZM among nations and improve the theoretical and methodological terrains of ICZM to strengthen capacities in the

international arena. One major international organisation, which has undertaken such efforts, is the Organisation for Economic Cooperation and Development (OECD). In 1992, the Council of the OECD called on member states to develop and implement ICZM in order to achieve sustainable development and integrated resource management. In 1993, the OECD published the results of a three years study, which was started prior to the UNCED. It is a series of recommendations for designing and applying new coastal zone management models that incorporate environmental and socioeconomic concerns. In 1993, another important international event took place, which was the World Coast Conference (WCC) held as a response to a mandate of Agenda 21, in Noordwijk, the Netherlands, in 1993. It brought together 90 coastal states with a major objective of "contributing to the development of common concepts, techniques, and tools in preparing coastal zone management plans" (WCC, 1993: 7). It is recognised by the Conference that:

> ICZM has been identified as the most appropriate process to address current and long-term coastal management issues, including habitat loss, degradation of water quality, changes in hydrological cycles, depletion of coastal resources, and adaptation to sea level rise and other impacts of global climate change. (WCC, 1993: 7)

To be presented during the WCC, the *Noordwijk Guidelines*[26] for ICZM were developed by the World Bank and "they identify the need for ICZM to move beyond traditional approaches to management which tend to be sectorally oriented and fragmented, and to the management of the coastal zone as a whole using an ecosystem approach" (WWF, 1994).

In addition to these, a number of UN bodies, the Intergovernmental Oceanographic Commission (IOC), United Nations Division for Ocean Affairs and the Law of the Sea (UNDOALOS), Food and Agriculture Organisation of the United Nations (FAO), United Nations Development Programme (UNDP), International Maritime Organisation (IMO), the World Bank and the Global Environment Facility (GEF) have made substantial contributions to the field of ICZM by conducting

[26] These guidelines were later republished as: 'Guidelines for Integrated Coastal Zone Management. Environmentally Sustainable Development Studies and Monograph Series', 1996 (Post, J.C. and Lundin, C.G., (Eds.), No.9, Washington, D.C., World Bank).

research, publishing guidelines, initiating coastal management programmes, providing funding and so forth (Cicin-Sain and Knecht, 1998: 109-112).

2.2.2.4 Two important Regional Seas Programme within the context of UNEP: the Mediterranean Action Plan and the Black Sea Environmental Programme

Concerning regional developments with respect to ICZM, UNEP *Regional Seas Programme* (RSP) has a significant place. Since the establishment of UNEP, the issue of oceans has been among the top priority issues of UNEP and short after the establishment, the Governing Council launched the RSP in 1974. The RSP aims to address the accelerating degradation of the world's oceans and coastal areas through the sustainable management and use of the marine and coastal environment. The pressures of coastal development are faced by all the RSPs, many of which address them through programmes for ICZM. Recently, there exist 13 RSPs (e.g. Carribean Region, East Asian Seas, Eastern Africa Region, Mediterranean Region, Black Sea Region etc.) under the auspices of UNEP[27].

Being the first action plan under the RSP, the *Mediterranean Action Plan* (MAP)[28] was approved in 1975 and one year later the Convention for the Protection of the Mediterranean Sea against Pollution (*Barcelona Convention*) was adopted and constitutes the legal framework for the MAP[29]. The initial aim of the MAP was to

[27] For more, see 'http://www.unep.org/regionalseas/About/default.asp'.

[28] The recent 22 Contracting Parties to the MAP are: Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, European Community, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Morocco, Serbia and Montenegro, Slovenia, Spain, Syria, Tunisia, and Turkey.

[29] There are six Protocols to the *Barcelona Convention*: the Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft (*Dumping Protocol*) (revised in 1995 as the Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea); the Protocol Concerning Cooperation in Combating Pollution of the Mediterranean Sea by Oil and other Harmful Substances in Cases of Emergency (*Emergency Protocol*); the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources (*LBS Protocol*) (revised in 1996 as the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities); the Protocol Concerning Mediterranean Specially Protected Areas (*SPA Protocol*) (revised in 1995 as the Protocol Concerning SPAs and Biological Diversity in the Mediterranean (*SPA and Biodiversity Protocol*)); the Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (*Offshore Protocol*); and the Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (*Hazardous Wastes Protocol*). For more information on these Protocols, see 'http://www.unep.ch/regionalseas/main/hconlist.html'.

take all appropriate measures to prevent, abate and combat pollution in the Mediterranean region. Under the realm of sustainable development, and the UNCED influence, the MAP was reshaped and MAP Phase I (1975-1995) was replaced by MAP II in 1995, which was an incorporation of sustainable development into the MAP process. In the same year, the Barcelona Convention was amended and became the new title of 'Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean', and entered into force in July, 2004. As an important outcome of the UNCED, the Agenda 21 was incorporated into the process of MAP and MED Agenda 21 was adopted at the Conference "MED 21" on Sustainable Development in the Mediterranean at Tunis in 1994 (Güneş, 2005: 99). In 1995, the Mediterranean Commission on Sustainable Development was established as an advisory body with the principal aims of implementing the Agenda MED 21, encouraging co-operation on sustainable development in the Mediterranean basin, and preparing a long term Mediterranean Strategy for Sustainable Development, which is planned to be completed by 2005 (Güneş, 2005: 99).

After the revision to the Barcelona Convention in 1995, the sustainable development of coasts started to play a central role within the MAP process. With the beginning of 1990s, the Coastal Area Management Plans (CAMPs) were started to be initiated with an aim of creating suitable conditions for the process of ICAM to be introduced and applied in the Mediterranean region. Numerous guidelines, working papers and action papers have been produced afterwards, to strengthen sustainable development practices in coastal areas of the Contracting Parties (CPs)[30]. However, since those non-obligatory documents are instruments of soft law, their implementation depends on political will. This induced the need for a more feasible and solid approach for the establishment of sustainable coastal management in the Mediterranean region. At the 12th. Meeting of the CPs in Barcelona in 2001, the CPs were invited to "work on a feasibility study of a *regional legal instrument* on sustainable coastal area management". The Feasibility Study (FS), prepared in 2002-3, demonstrated the need for a *regional legal instrument*, at both the technical and environmental levels. It was concluded that this legal instrument should be a binding

[30] These include: 'Guidelines for Integrated Management of Coastal and Marine Areas - With Special Reference to the Mediterranean Basin', 1995, (UNEP Regional Seas Reports and Studies No. 161. 80 p.) and 'Good Practices Guidelines for Integrated Coastal Area Management in the Mediterranean', 2001, (UNEP MAP PAP-RAC, 58 p.).

one instead of a 'soft' instrument. During the 13th. Meeting of the CPs in Catania in 2003, it was decided to prepare a draft text of the regional protocol on Integrated Coastal Area Management (*ICAM Protocol*). A broad process of consultation among experts and all other interested parties was started afterwards, and a Working Group was set up to prepare the text of the *ICAM Protocol*. The first draft of the *ICAM Protocol* was ready by the end of 2004. After several amendments to this first draft, the final draft was presented to the MAP Focal Points Meeting in September 2005 in Athens. At the 14th meeting of the CP, it was decided to establish a governmentally designated Working Group composed of legal and technical experts to develop a draft text of the ICAM Protocol, and was foreseen to be approved in the 15th meeting of the CPs in 2007. The Working Group of experts designated by the CPs has been working on the draft document since then, and has eventually decided on the final version of the draft *ICAM Protocol* during their fourth meeting held in Split, in June 2007[31].

Another example for the RSP is the Black Sea Environmental Programme (BSEP), which is developed under the auspices of the Global Environmental Facility (GEF) and jointly managed by the UNDP, UNEP and the World Bank. The BSEP is based on the Convention for the Protection of the Black Sea against Pollution *(the Bucharest Convention)* and the *Odessa Declaration*[32], signed at Bucharest, in 1993. The initial aim of the Bucharest Convention was to prevent, reduce and control pollution in the Black Sea region. The signatory states of the Bucharest Convention are a party to the BSEP as well. The objectives of the BSEP can be summarised as to improve the capacity of Black Sea countries to assess and manage the environment, to enhance the development and implementation of new environmental strategies and

[31] For additional information, see 'http://pap-thecoastcentre.org/'.

[32] The Convention was signed during the Diplomatic Bucharest Conference in 1992 by six Black Sea countries (Turkey, Ukraine, Bulgaria, Romania, Georgia and Russian Federation), and ratified by all the six legislative assemblies in 1994. The Convention includes a basic framework of agreement, three protocols (the Land-based sources Protocol, the Emergency Response Protocol, and the Dumping Protocol), and several resolutions. The implementation of the Convention has been overseen by a Commission with a permanent Secretariat in İstanbul (the İstanbul Commission). In order to agree on policy objectives, and establish clear goals with a timetable, a Ministerial Declaration on the Protection of the Black Sea Environment was signed in Odessa in 1993 (Odessa Declaration). The Declaration was an innovative policy statement with the objective of guiding and stimulating implementation of the Bucharest Convention. The document is largely based on Agenda 21 and the Ministers declared their commitment to integrated management and sustainable development of coastal areas and the marine environment under their national jurisdiction.

policies, to help to take the necessary measures to attain sustainable development in the whole region, and to facilitate the preparation of sound environmental investments (Duru, 2003: 286).

The first phase of BSEP, started in 1993 and ended in 1996, was administered by a Coordinating Unit set up in İstanbul and focused at the protection of the Black Sea and its environmental management. The functioning of the BSEP was based on a system of Working Parties, through which each Black Sea country agreed to host one Activity Centre. Within this system, the Activity Centre for the Development of Common Methodologies for ICZM[33] was established in Krasnodar, Russian Federation. Coastal zone management (CZM) in the framework of BSEP has four main components: delineation of the national coastal zone boundaries; creation of the national network for CZM; preparation of the national report; execution of at least one pilot project by each country related to CZM (Özhan, 1996: 173).

With the support of the BSEP, *the Black Sea Strategic Action Plan* (BS-SAP) was signed in 1996. The overall aim of the BS-SAP is to rehabilitate and protect the Black Sea ecosystem and the sustainable development of its resources. It is a comprehensive and modern approach to environmental policy making, through which the principles, policies and actions to save the Black Sea were agreed upon. With the BS-SAP the second phase for the BSEP started and focused on the implementation of the BS-SAP. With the BS-SAP the institutional structure of BSEP was incorporated into that of the İstanbul Commission. One of the most important achievements of the BS-SPA was its support to the countries for the preparation of National Strategic Action Plans. It helped also reinforce national programmes and create networks. Advisory Groups were established to provide the İstanbul Commission with the best possible advice and information on topics which are key to the implementation of the BS-SAP and the Bucharest Convention. They have been supported by Activity Centres based upon those created by the BSEP.

An *Advisory Group for the Development of Common Methodologies for ICZM* was established with the following objectives: a Regional Black Sea Strategy for ICZM developed by the year 2005; each Black Sea coastal state to adopt and

[33] The remaining five Activity Centres are as follows: Emergency Response Activity Centre in Varna, Bulgaria; Routine Pollution Monitoring Activity Centre in İstanbul, Turkey; Special Monitoring Programmes, Biological and Human Health Effects, And Environmental Quality Standards Activity Centre in Odessa, Ukraine; Protection of Biodiversity Activity Centre in Batumi, Georgia; and Fisheries Activity Centre in Constantza, Romania.

implement ICZM by 1999; inter-sectoral committees for ICZM established by the end of 1997; and a survey of coastal erosion problems in the region to be conducted by 2005 (Dablas, 2005).

In recognition of the Black Sea's importance to Europe, the European Commission has been providing technical and financial assistance to the BSEP. The BSEP and the BS-SAP have been financially supported by the Tacis and Phare[34] Programmes of the European Commission. One of the central aims of the European Commission's Tacis support to BS-SAP is to enhance the practical implementation of coastal zone management guidelines of the EU in the Black Sea area. The expected outputs of the most recent Tacis support, which covered the period 2002-2004, include the preparation of the *Regional Black Sea Strategy for ICZM*, *guidelines for the preparation of National Codes of Conducts for the coastal zones of the Black Sea states*, and *the Best Practices for ICZM* (Dablas, 2005). The Draft *Regional Black Sea Strategy for ICZM* was published on the web-site of the Black Sea Commission[35]. It proposes priority actions that are needed at the short term (2004-2006)[36] to overcome the negative trends and contributes to regional collaboration, harmonization and integration, and is expected to provide the basis for the preparation of a long term Strategic Action Plan for ICZM in the Black Sea region for the period 2007-2012 (Black Sea Commission, 2004).

All these international efforts gave a pace to development and implementation of ICZM practices, particularly in most of the developed nations. Since the establishment of Agenda 21, there is a growing recognition of countries of

[34] The Tacis Programme of the EU was launched in 1991 with the aim of providing grant-financed technical assistance to 12 countries of Eastern Europe and Central Asia (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan), and mainly aims at enhancing the transition process in these countries. Promotion of environmental protection and management of natural resources is one of the areas of interest within the Tacis programme. Originally created in 1989 to assist Poland and Hungary, the Phare Programme is designed to assist the applicant countries of Central and Eastern Europe in their preparations for joining the European Union. For more, see 'http://ec.europa.eu/external_relations/ceeca/tacis/; http://ec.europa.eu/enlargement/financial_assistance/phare/index_en.htm'.

[35] 'www.blacksea-commission.org/OfficialDocuments/Draft_ICZM_Strategy.htm#_Toc82426820'

[36] A Strategic Action Plan (2004-2006) for ICZM was annexed to the Draft ICZM Strategy. Six separate policy objectives have been established (improvements for the adoption of ICZM, creation of ICZM institutional framework, development of informational, analytical and economic ICZM instruments, development of local pilot projects on ICZM implementation, ICZM training and education, establishment of ICZM monitoring and reporting system), and short term goals have been scheduled for the achievement of each policy objective.

the importance of coastal zones in national development. As Vallejo maintains (1993: 170), the tasks involved in Agenda 21 implied an interplay between coastal zone management and national development planning. Therefore with the beginning of 1990s and especially after the formulation of Agenda 21, there is a proliferation of ICZM efforts in coastal communities. However, the sectoral traditional approach is still reflected in government planning and institutions in many countries, which proves that much remains to be done for the coming years.

2.3 Conceptualization of ICZM

In the literature of ICZM there exist several definitions, each of which underlining different aspects of ICZM. One reason for this is the fact that ICZM is a multidisciplinary, dynamic and evolutionary approach. It is not an end-state but a continuous process, and therefore need to be readapted under the light of new information and techniques. Additionally, there is the fact that the coastal zones in different regions of the worlds maintain different characteristics and the particular characteristics of a particular coastal system (e.g. the physical, socio-economical, cultural, political features) would be decisive in terms of policy formulation under ICZM. However, in spite of all these differences, there are some fundamental concepts and principles, upon which an ICZM mechanism is founded.

The purpose of this section is to identify the fundamental characteristics of ICZM. The factors that brought upon the need for ICZM will be mentioned at the outset, which is followed by an identification of ICZM. Afterwards the general goals and objectives, main principles, and functioning mechanisms of ICZM will be analysed subsequently. The chapter ends with an analysis of the creation of the institutional mechanism for ICZM

2.3.1 Need for and identification of ICZM

The factors that trigger the need for ICZM in coastal zones emanate mainly from the socio-economic factors as well as the physical characteristics of coastal zones. The dynamism in the socio-economic and physical characteristics of coastal zones requires a dynamic and holistic management approach due to intensified and

diversified use of coastal resources. The efforts culminated in the formulation of ICZM, which evolved hand in hand with the idea of sustainable development.

The early approaches of coastal management during the 1960s were generally designed for sectoral development in coastal regions. They usually focused on the management of a single or a few sectors, and delimited their area of concern with near shore and land-side issues. During the 1970s and 80s, rapid urbanisation in most of the coastal regions were followed by socio-economic changes emanating from the interrelated forces of population pressures and social demands, increasing economic activities, and growing resource consumption. The sectoral coastal uses were becoming diversified, as a result of which competition for coastal space and conflicts among sectors became accelerated. This rapid change in socio-economic structure in coastal zones culminated in the depletion of coastal resources, ecosystem damage and threatening levels of pollution. There emerged the need for more comprehensive coastal management plans so as to include all separate uses within a single mechanism. With the beginning of 1970s, the realisation that environmental protection issues should be incorporated to coastal management and planning became apparent. This view became strengthened throughout the 1980s, and the conservation of special and fragile areas became an important part of coastal management. The major challenge was to weigh up or reconcile the two conflicting forces, development and conservation, in the management mechanism. The concept of '*balance*' became the dominant philosophy, which underpinned the coastal management programmes during that time period. However, with the beginning of 1990s, balancing the opposing conservation and development issues became viewed as being essentially fixed in time. The danger with this approach was the fact that the balancing decisions was not taken in a long-term context of overall changes to the coast that are generated by a possible disturbance of the balance due to incremental promotion of one side, usually the development side. This was one of the several reasons why the concept of *sustainable development*, which is effectively the concept of balance extended to also include the notion of time dependency and combine elements of social justice, became the underpinning principle of coastal management programmes after the 1990s (Kay and Alder, 1999: 61). Sustainable development can only be respected through a dynamic and adaptive integrated management

mechanism, which takes into account the long term dynamics and brings all sectoral components together as part of a functional whole.

In addition to the socio-economic factors, the physical peculiarities of coastal zones have also been accelerating the need to establish an integrated approach in coastal management. The traditional approaches, which primarily focused on land-side issues, proved to become inadequate in answering the needs of these highly dynamic ecosystems, which are part of an infinite process of land and sea interactions. Therefore, the activities on the land or the sea-side would inescapably affect the activities on the other, and cannot be approached in isolation from each other. There should be a holistic approach, which takes account of the land and sea-sides issues simultaneously within a single management mechanism.

ICZM is designed with the aim of answering all these needs. It is a *dynamic*, *interactive* and *continuous planning process*, which is offered as the blueprint for attaining the goals and objectives of sustainable development in coastal zones (Thia-Eng: 1993: 84). These goals are maintaining essential ecological processes, life support systems and biological diversity in coastal and marine areas, reducing resource use conflicts and facilitating the progress of multi-sectoral development. It therefore tries to maintain a balance among the use, development and protection of the coastal zone and its resources, by bringing together all different sectoral elements into an overall system. The *holistic systems perspective* and a *multisectoral approach* are the two distinguishing characteristics of ICZM (Sorensen, 1993: 50). This multisectoral approach seeks to establish a balance among the conflicting activities of different sectors, in order to optimize the costs and benefits arising from those conflicting uses. To achieve this, ICZM practices attempt to build a *collaborative management system*, which tries to involve all the *stakeholders*[37] (government sector, private sector, citizens and interest groups) within the decision making mechanism. ICZM practices try to incorporate the input of all important stakeholders in order to establish a management structure for the equitable allocation of space and resources.

[37] The term is used to indicate those who have a 'stake' in the future of the coast, either because they live there or earn a living there, or it is their job to administer rules and regulations to control coastal uses. Stakeholders include the vicarious users who may never use or access the coast but still value it, and those who may not reside on the coast but still value it (Kay and Alder, 1999: 71).

Within this mechanism, *cooperation* among the stakeholders, *public participation*, and the *decentralisation of power*[38] are the essential components.

Another important characteristic of ICZM, which distinguishes it from the earlier approaches, is the fact that it maintains an *ecosystem approach*, which is a strategy for integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Therefore it tries to integrate the sea-side issues, which have been ignored by earlier approaches, into the planning process. This is a crucial element for an ICZM programme.

As a system of *coordinated management*, the planning decisions of an ICZM regime should coordinate three different systems: *the economic system*, *the biophysical system* and *the social system*. In order to establish a well functioning co-ordinated management mechanism, there should be a sound and clear understanding of the linkage between these three different systems. The coastal zone is viewed in its entirety as a special geographic area, and its productive and natural defence functions are intimately linked with the physical and socioeconomic conditions far beyond its physical boundary. Therefore a sound understanding of the productive capacity of the natural systems, the assimilative capacity[39] of the environment, the political, socio-cultural and economic conditions, present and future demands as well as social costs should underpin any management plan and activity within a coastal zone (Thia-Eng, 1993: 91).

Besides these three systems, four major decision-making forums, among which a coordinated mechanism is also crucial, can be identified during a costal management process: *the economic and market sector*; *the political and legislative sector*; *the bureaucratic and administrative sector*; and *the legal and judicial sector*. Moreover, these forums may exist in a four-level hierarchy of governmental jurisdiction: *international, national, regional* and *local* powers. In order to establish this coordinated mechanism, and correct the failures of the market sector, the functioning of the "*political and legislative*" sector and the "*bureaucratic and administrative sector*" need to be integrated across these different hierarchical levels (OECD, 1993: 50). An appropriate government structure, which allows for

[38] Decentralisation briefly means transfer of authority form central authority towards local authorities.

[39] The assimilative capacity of an ecosystem may be defined as the ability of a natural body of water to receive wastewaters or toxic materials without harmful effects and without damage to aquatic life (http://www.green-networld.com/facts/glossary.htm).

cooperation among different levels of governmental jurisdiction (*vertical integration*) and different sectoral administration (*horizontal integration*)[40], is required to establish this coordinated mechanism.

Actually, all these fundamental characteristics of ICZM mentioned in this section stem from and can be summarised under the realm of '*integration*'. In short, ICZM can be characterised as an *integrated approach*, which necessitates integration among sectors (among coastal/marine sectors, between coastal/marine sectors and other land-based sector), integration between the land and the water sides of the coastal zone, integration among different levels of government (national-subnational-local), integration between nations and integration among different disciplines.

2.3.2 Main principles of ICZM

The principles that are set forth by the Rio Declaration on Environment and Development[41] are designed to guide national and international actions on environment, development and the social issues, and guide nations in the pursuit of sustainable development (Cicin-Sain and Knecht, 1998: 52). Since the idea of ICZM is based upon the sustainable development concept, the sustainable development principles, such as the principle of preventive action, the principle of integration, the precautionary principle, the polluter pays principle, environmental impact assessment (EIA), the involvement of all stakeholders in decision making etc., constitute the guiding principles for ICZM as well.

Apart from them, there are some principles and premises which are more specific to ICZM. They are listed in Table 1 below (the items more specific to ICZM appear at the beginning and those of more general application towards the end of the table).

[40] For more information on the horizontal and vertical integration, see infra p. 50.

[41] See supra p. 31

Table 1: Principles and Premises of ICZM

Principle/Premise	Content/Characteristics
1. The coastal zone is a unique resource system which requires special management and planning approaches.	Traditional land-based or marine-based forms of management and planning must be modified to be effective for the coast, at the transition between land and sea.
2. Water is the major integrating force in coastal resource systems.	Because it operates at the upland/water interface, every aspect of ICZM relates to water in one way or another. The water influence establishes special conditions and compels institutional arrangements.
3. It is essential that land and sea uses be planned and managed in combination.	The ICZM process recognizes dryside (land) and wetside (water) components of a coastal ecosystem as a single interacting and indivisible resource unit and designed to manage them together.
4. The edge of the sea is the focal point of coastal management programmes.	The boundary line between land and sea is where some of the richest aquatic habitat is found, where storms hit, waterfront developments locate, the greatest competition and conflicts between users is found and governments need to develop the type of social policies and programmes that ICZM offers.
5. Coastal management boundaries should be issue based and adaptive.	The boundaries of a coastal zone should be delineated on the basis of the particular problems that ICZM attempts to solve. They should be adaptive to the goals and objectives.
6. A major emphasis of coastal resources management is to conserve common property resources.	A major purpose of ICZM is the caretaking of common property resources of the wetside of the coast, e.g. coastal waters, coral reefs, or mangrove forests.
7. Prevention of damage from natural hazards and conservation of natural resources should be combined in ICZM programmes.	Full comprehensive ICZM programmes include both natural hazards prevention and coastal resources conservation using similar methods to accomplish both objectives.
8. All levels of government within a country must be involved in coastal management and planning.	Coastal zones are governmentally complex because of the degree of shared jurisdiction and the amount of common property resources. ICZM activities should involve all levels of government (from national to local)

Table 1 (Continued)

Principle/Premise	Content/Characteristics
9. The nature-synchronous approach to development is especially appropriate for the coast (design with nature approach).	This approach means that the most cost effective approach to coastal development and engineering is one that respects the strengths of natural coastal forces.
10. Special forms of economic and social benefit evaluation and public participation are used in coastal management programmes.	The ICZM process examines the effects of 'externalities' of any one sector on other sectors, especially the effects of shoreland private activities upon the common resources of the wetside.
11. Conservation for sustainable use is a major goal of coastal resources management.	Coastal renewable resources should be managed to produce benefits on a long-term, sustainable, basis.
12. Multiple-use management is appropriate for most coastal resource systems.	ICZM favour a balance of multiple uses whereby economic and social benefits are maximised, and conservation and development become compatible goals.
13. Multiple-sector involvement is essential to sustainable use of coastal resources.	To optimise resource conservation, public use, and economic development, ICZM approaches coordinate the initiatives of the various coastal economic sectors , including resolution of use conflicts and beneficial trade-off.
14. Traditional resource management should be respected.	ICZM should recognise that often the most socially desirable and efficient approach to resource management is allocation according to traditional approaches worked out for specific cultures in specific locations.
15. The environmental impact assessment (EIA) approach is essential to effective coastal management.	EIA should be carried out to predict environmental impacts, to coordinate aspects of planning, and to submit development proposals for review.

Source: Adopted and schematized from Clark (1994: 34-49)

2.3.3 The functioning of ICZM programmes

Each ICZM programme in different locations under different physical and socio-economic conditions would have its own special characteristics and therefore special tasks to be accomplished. In this section, it is intended to give the general idea of the functioning of ICZM programmes and therefore only the fundamental stages in this process will be mentioned here.

The processes within an ICZM programme can be specified in six separate stages, which are given below (Cicin-Sain and Knecht, 1993: 58):

- Stage I: Identification and assessment of issues
- Stage II: Programme planning and preparation
- Stage III: Formal adoption and funding
- Stage IV: Implementation
- Stage V: Operation
- Stage VI: Evaluation

Stage I starts with an initiation of efforts. The issues of concern which generate the need for management action (e.g. an environmental crisis, a multiple-use crisis, or perceived economic opportunities) should be clearly specified (several issues which require ICZM plans are summarised in Table 2 below). This is very important in terms of formulising functional operational goals. Key agencies and stakeholders come together through consultative meetings, and the need for improved management is recognised. A concept paper outlining the need for ICZM is prepared and approved and a team will be created to formulate an ICZM plan through review of institutional capabilities. All of the key local and national agencies should be represented in the plan formulation team, and ideally it should be managed by a representative of higher policy level in the central government (Cicin-Sain and Knecht, 1998: 58-59; Post and Lundin, 1996: 10).

Table 2: The Problems Requiring ICZM Plans

Category I: Problems generated by the direct effects of anthropogenic activities on the local environment 1. Quality of the local environment, in its compartments, water, sediments, biota and atmosphere 2. Natural integrity of the littoral space, hydrosystems, ecosystems, landscapes. 3. Stability of the coastline, erosion or accretion 4. Viability of renewable or non-renewable natural resources
Category II: Problems generated by the effects of natural phenomena on human settlements 1. Floods 2. Volcanoes 3. Erosion 4. Cyclones 5. Tidal waves
Category III: Problems generated by the interaction of the multiple activities developed in coastal zones 1. Conflicting spatial occupations 2. Contradictory uses 3. Discordant regulations

Source: (Henocque *et. al.*, 1997: 11-12)

During Stage II, all the necessary data and information on the physical, economic, social, cultural, legal and administrative characteristics of the coastal zone is gathered[42]. It is crucial that an ICZM programme is based upon adequate information. Some part of the necessary data can be obtained from national environmental action plans, national development plans, specialised resource inventories and the like. In cases where data of fundamental importance to the programme development process are lacking, a new initiative to collect primary data

[42] Data of the following types are needed: coastal resource base (existing coastal resources, present use and present status of coastal resources, potential for present and future use); social organisation in the coastal zone (existence and character of human settlements, economic basis for human settlements, existence of indigenous people and their traditional activities, social issues); existing environmental and resource related programme (environmental regulatory programmes, resource management programmes, protected area programs, beach/erosion management programs, pollution control programs, other environmental management programs); institutional, legal and financial capacity (relevant national, regional/provincial level and local- institutions, survey of legal authorities relative to coastal and ocean activities, existing capacity building efforts, including those funded by external sources).

can be undertaken. A plan for public participation is prepared. Management problems with their causes, effects and solutions are analysed and priorities are set for addressing those problems. Feasibility of new economic development opportunities is analysed. Coastal zone management boundaries are considered and new measures are recommended, such as zonation schemes, strengthened regulatory programmes and the like. Institutional capacities are assessed and options are set for the development of suitable governance arrangements and the establishment of an interagency coordinating mechanism[43]. Policies, goals and projects to be included in the ICZM programme are formulised and recommended. Appropriate monitoring and evaluation systems are designed and a time schedule, the approach and the division of labour are established (Cicin-Sain and Knecht, 1998: 59; Post and Lundin, 1996: 10).

In Stage III, the necessary tasks for formal adoption and funding are carried out. The interagency coordinating mechanism is established and other government arrangements are established. Management policies, goals, new measures, principles are adopted and coastal zone management boundaries are enacted, often by legislation. The funding allocation is approved and staffing and other organisational changes are approved (Cicin-Sain and Knecht, 1998: 59-60; Post and Lundin, 1996: 10).

The last three stages are the implementation, operation and evaluation phases. The interagency coordinating mechanism begins to oversee the ICZM process. New regulatory programmes and management mechanisms are enforced. Individual sector line agencies continue to perform their regulatory and management responsibilities as a part of the whole ICZM programme. Specific projects concerning new economic opportunities are designed and undertaken. Finally, a monitoring and evaluation programme is initiated (Cicin-Sain and Knecht, 1998: 60; Post and Lundin, 1996: 10).

The elements of an ICZM plan are summarized by Cicin-Sain and Knecht (1998: 212) in Table 3 below.

[43] For more information on the interagency coordination mechanism, see infra p. 52.

Table 3: Elements of an ICZM Plan

• A clear description of the coastal zone to be managed
• A clear description of the problems to be addressed and the goals and objectives to be sought
• A clear description of the policies and principles that will guide the programme
• A statement of the initial management actions to be taken
• A description of the proposed institutional arrangements, including assignment of responsibility for various parts of the programmes, e.g., the interagency coordinating mechanism and supervision and support for the ICM programme as a whole
• Funding and staffing requirements
• A listing of formal actions needed for official adoption of the plan and a suggested timetable for completing those actions

Source: (Cicin-Sain and Knecht, 1998: 212)

2.3.4 Creation of the institutional mechanism for ICZM

Any system of management only survives in the long term when its administration is properly designed. This statement holds particularly for coastal zone management, where the range and complexity of issues involves many players within the management process (Kay and Alder, 1999: 71). An ICZM programme should be a part of government action, which necessitates the creation of the proper institutional mechanism within the governmental structure.

Institutional arrangements include the laws, customs, organizations and management strategies of a particular government system. There is no 'best' way for making the institutional arrangements for coastal zone management. Coastal nations should develop their particular ICZM structures, which uniquely suits to that nation's nature of coastal zones, institutional and governmental organisation, and to its traditions and socio-economic conditions (World Bank (1993) quoted in Kay and Alder (1999: 72). Therefore, any organisational structure for a particular region should be in consistence with these existing characteristics to be functional and stable in that region.

In the establishment of the appropriate institutional mechanism for ICZM, two basic considerations should be given primary attention. First of all, coastal zone

management programmes should be identifiable within a government's administrative system and second they should be designed to focus the activities of many different government sectors in an integrated manner. These two conditions form the basis of the issue.

The establishment of an administrative mechanism which facilitates institutional integration in coastal zone management is one of the most challenging issues. A useful way of describing institutional arrangements for coastal management is to divide the nation's system of government into '*vertical*' and '*horizontal*' components (Kay and Alder, 1999: 75-76). Therefore, institutional integration has two dimensions: *vertical and horizontal integration*. The *vertical* dimension of government structure refers to different levels of governmental authority, including the national (or federal), provincial (or state) and local levels. In coastal management, the area of concern for these different level authorities includes five main zones in the coastal/marine spectrum: inland areas, coastal lands, coastal waters, offshore waters and high seas. The levels of government authority and the nature of property in these five zones are demonstrated in Table 4 below. It is no doubt that integration among the management regimes across these five zones will be difficult to achieve because the diversity in nature of property and the nature of government interests in these different zones. The *horizontal* dimension refers to different sectors (e.g. construction, fisheries, agriculture, environment, tourism, transport, international affairs) comprising a single level of government. The horizontal dimension is reflected in division of government into various agencies and departments, which can lead to responsibility gaps and overlaps among them. Usually, roles and responsibilities for coastal zone management are divided both horizontally and vertically, and this horizontal and vertical differentiation is a complex issue. This complexity necessitates the development of a coastal management system at the first hand, followed by the establishment of a *cooperation* and *coordination mechanism* within that system (Kay and Alder, 1999: 76).

Table 4: Nature of Property and Government Interests in Coastal/Ocean Areas

	Coastal/ocean spectrum				
	Inland areas	*Coastal lands*	*Coastal waters*	*Offshore waters*	*High seas*
Nature of property	private	public/ private	predominantly public		
Levels of government	local/ provincial	mix of local / provincial national		mainly national	mainly international

Source: Adopted from Cicin-Sain (1993: 27)

In order to achieve this institutional integration in *vertical* and *horizontal* dimensions, the design of institutional arrangements should include fostering *cooperation,* which can be defined as the involvement and collaboration of all the administrative partners at different levels of government and in different sectoral branches of the administration. One of the objectives of *cooperation* is the coordination of policy. Generally, *cooperation* is one of the most expensive and time consuming elements of an ICZM mechanism. There is the need for an explicit strategy on how cooperation is achieved in coastal zone management (CEC, 1999a: 21). Legislation may be used as a tool for the achievement of cooperation in government sector in coastal zone management. In this approach, new specific ICZM legislation is enacted, and new institutions are established. This method may have some advantages in terms of the enforcement of the new mechanism designed to facilitate cooperation. In an alternative method, no new specific legislation for coastal zone management may be enacted, the existing government sectors and institutions remain, but a kind of a networked system is established, which binds together a range of pre-existing approaches to the management of coastal resources into a well defined coastal zone management programme. Then coordination among sectors is improved through networking of existing legislation and policies. A networked system may seem to be less efficient in terms of the fact that there is no legislative enforcement. However, in practice such systems may be more efficient than a fixed, legislative mechanism in several aspects (Kay and Alder, 1999: 75-79). In any case, an *interagency coordinating mechanism*, *coordinating body,* or *a lead agency* with real powers, which could whether be an existing institution or a newly

established, is needed to oversee the overall functioning of ICZM process. There is no single and common way for the establishment of a coordinating body, it will be different for each country depending on several factors. However, most preferably this coordinating body is a high level governmental office. It should be initiated by the main political bodies, either at the national or at the regional level. Three ways are offered for the establishment of this coordinating mechanism: (1) use of an existing national planning, budget, or coordination office; (2) formal establishment of an inter-ministerial or interagency coordinating council or committee; (3) designation of an existing ministry or department as the coordinating body (Cicin-Sain and Knecht, 1998: 210). It would be ideal that this ICZM coordinating agency must be part of, or have influence over, economic development sectors for the efficiency of the functioning of the system. The major functions of this mechanism are to promote and strengthen interagency and intersectoral collaboration, provide a forum for conflict resolution among government sectors, minimise duplication of functions of line agencies, and monitor and evaluate the overall ICZM process (Cicin-San and Knecht, 1998: 210). Therefore, the coordinating body is considered as a crucial part within the administrative structure for ICZM.

Usually, *coordination at vertical levels* is much more difficult than resolving horizontal differentiation problems. Political, administrative and budgetary conflicts often lead to confusion in allocating responsibilities among the different levels of government. One central issue in the vertical dimension is the degree of centralization/decentralization in decision making. Ideally, in an ICZM mechanism, the decision making power is delegated to the lowest level of decision making. However, the overall ICZM programme should be undertaken under the will and power of higher level authorities, since the coastal zones are highly influenced by higher level plans and strategies. The issue of consistency between different levels of administration can only be achieved trough *subsidiarity*[44]. It ensures the effective vertical coordination of sectoral activities as well. Mechanisms are needed to ensure vertical communication and that the local individuals and organisations have a voice in any higher level decisions. Such mechanisms may include synchronisation of key

[44] Subsidiarity is the idea that matter should be handled by the lowest competent authority. This approach necessitates that a central authority should have a subsidiary function, performing only those tasks which cannot be performed effectively at a more immediate or local level. For additional information, see infra p. 62.

planning operations in hierarchical context and a priori vertical and horizontal consultation in preparing of all planning operations (CEC, 1999a: 26). This vertical cooperation mechanism should involve cooperation across the land-sea boundary as well as cooperation between neighbouring territorial authorities. Cooperation in the *horizontal* structure of government is another challenge, since sectoral pressures and conflicts are widespread in coastal settlements. Development of mechanisms which facilitate cooperation at horizontal level is a gradual process, which may require changes in legal competences. Additionally, convincing public of the long term interest of finding common solutions to existing problems may put a pressure on sectoral administrations to work together. Therefore there should be a proper decision making mechanisms with the broadest public involvement possible. Furthermore, the public involvement will balance the competition for development among sectors by addressing issues such as the quality of life, cultural and social heritage and leisure time pursuits.

The creation of the necessary administrative governmental mechanisms is crucially important before the implementation stage; because the success of an ICZM programme may be strictly linked to this mechanism. Therefore there is the need for a consistent government policy at national and regional level that provides clear direction and support for integration in general and the creation of an administrative mechanism in particular (OECD, 1993: 52). As to sum up, it is crucial for an ICZM plan to be effective, to have an *institutional coordination mechanism* that allows for *institutional integration* (*vertical and horizontal integration*), and that incorporates the public and private sector in the management mechanism. A balanced management perspective, in which intersectoral relationships are fully understood, trade-offs recognised, benefits and alternatives critically assessed, and appropriate management interventions are implemented, is the essence for administrative structure of ICZM (FAO, 1998: 24).

CHAPTER 3

EUROPEAN UNION INTEGRATED COASTAL ZONE MANAGEMENT INITIATIVES

The coastal zones are of strategic importance for the European Union (EU). They are a major source for economic activity and income generation all around Europe. For centuries, primarily due to deficient, limited and fragmented management regimes, the coastal resources have been heavily degraded in Europe. With the generation of the idea of sustainable development, ICZM has started to be accepted widely as the most appropriate tool to achieve sustainable coastal management among the EU policy makers. Chapter 17 of Agenda 21 called for sustainable management of coastal areas, which puts an obligation on the EU to take the lead to initiate ICZM at the EU level.

In this chapter the efforts taken at the EU level to achieve ICZM in the European coastal zone will be analysed. The chapter starts with a retrospect of the EU environmental policy, including the legitimacy of and the need for the EU ICZM action, as well as a general analysis of the state of the European coastal zone. The subsequent section analyses the developments at the EU level in terms of EU ICZM action, including the early efforts for ICZM, the EU Demonstration Programme on ICZM, the EU Strategy on ICZM, the EU Recommendation on ICZM (including a general information on ICZM in Turkey in the light of EU ICZM Recommendation), and other EU funded efforts to facilitate ICZM. The chapter ends with an evaluation of ICZM in Europe.

3.1 A Brief Retrospect of the EU Environmental Policy with Relevance to ICZM

3.1.1 Underlying factors for the EEC's involvement in environmental policy making

When the EEC was established with the Treaty of Rome in 1957, the main focus was the establishment of a common market. As it is noted by Jordan *et. al.* (1999: 379), "the EEC was primarily an intergovernmental agreement between six like-minded states to boost economic prosperity and repair political relations in war-torn Europe". The primary focus of the EEC was to establish a common market, and approximation of national economic policies. The main task was to assure the free movement of goods, services, labour and capital. In order to eliminate national measures which may distort free trade, the EEC started to enact legislation to harmonise these national measures. During this initial phase, almost no Community concern prevailed for environmental issues, and furthermore the environment was not even mentioned in the Treaty of Rome. Consequently, an environmental policy, environmental bureaucracy or environmental legislation was not present during the first couple of decades within the EEC (Jordan *et. al.*, 1999: 379). The underlying reason stemmed from the fact that there was little or almost no concern for environmental issues at a global scale during the time when the EEC was established. During the late 1960s and with the beginning of 1970s, the idea that there might be natural limits to growth, and environmental concerns are tightly related to social and economic concerns became widespread all over the world, mainly under the leadership of the UN. Throughout the 1970s, the environmental debate gained a global prominence on the political agenda of the international community. These global developments were also reflected at the European level and drove the force for the EEC to deal purposively with the environmental repercussion of integration (Jordan, 1998: 16). However, the formation of an environmental policy within the Community was a challenging and long process, during which strong debates were taking place among the Community institutions, national governments as well as the pressure groups in Europe (Budak, 2000: 26).

Due to a rapid growth and reconstruction of the European economies during the post-war period of the 1950s and 60s, the environmental problems emanating from air, water and soil pollution started to be worsened in European nation states (Barnes and Barnes, 1999: 26). With a growing public concern, the Member States (MSs) of the EEC began to take some national actions especially to deal with those growing pollution problems. As a consequence, these national measures resulted in some kind of environmental protectionism, either in the form of administrative regulations or by means of economic instruments. This triggered the view that trade might be deteriorated via those national measures, which could in turn distort the accomplishment of the single market. Consequently, there emerged the urgent need of harmonising these diverse national environmental policies by taking concerted Community action in the field of environment. This was the main driving force of the EEC's involvement in environmental policy making, which entailed issues of market regulation in a broader sense (Weale *et. al.*, 2002: 29-32). Furthermore, another driving force for the Community's involvement in environmental issues was the fact that most of the examples of such modern pollution problems have a transboundary character. The boundaries of natural ecosystems do not necessarily match with the artificial political boundaries of nation states, which mean that one problem originating from one state can in turn affect several others. This necessitates the development of a European wide policy, which enables a more coherent approach for the protection of physical regions crossing national borders (Barnes and Barnes, 1999: 9).

In the course of time, it was getting truely recognised that environmental issues are closely linked to the single market, agriculture, transport, energy, industrial and social policies. Over the years, the role of the Community has been increased with a growing concern about environmental issues among European people, and an increasing confidence in the capability and effectiveness of joint action at the European level. It has been realised that it is impossible to achieve at the local or national level what can be done across the whole of the Community and the Community has a pivotal role to play in protecting Europe's environment (CEC, 1996: 4). As it is claimed by Jordan (1998: 14), even during the times when there was growing resistance to faster and deeper integration, many people in EU countries

had more faith in that body's environmental institutions than they do in those of their own governments.

3.1.2 Environmental policy of the EEC during the 1970s and 1980s: from command and control approach towards integrated approach

The first formal step by the EEC towards the formulation of an environmental policy was taken a couple of months after the Stockholm Conference in 1972, during the summit meeting of the Heads of the Governments in Paris, where the EEC first determined to have a role in environmental policy making. The Paris Summit is considered as a landmark date in the emergence of an environmental policy in the Community, since it activated a process of change that would formalise and institutionalise environmental policy at a supranational level (Weale *et. al.*, 2002: 56). This effort culminated in the adoption of the First Environmental Action Programme (EAP) (1973-1976), which had given environmental policy a sound political and intellectual platform from which to develop (Jordan, 1998: 14). The major driver was the motive of preventing the emergence of trade barriers due to diverse environmental standards of the MSs and the main objective of the EAP was to provide a place in the European legal system for those environmental regulations and standards (Schrama and Sedlacek, 2003: 11). The First EAP established the argument that economic development, prosperity and the protection of the environment are mutually interdependent. Prevention of environmental damage and pollution, the conservation of an ecological equilibrium, and the rational use of ecological resources were among the main objectives of the First EAP (European Environmental Bureau, 2005: 19).

The Second EAP (1977-81), which was principally a restatement of objectives of the First EAP, was initiated in 1977. The range of the problems to be dealt with was widened, and nature protection received special attention. The First and Second EAPs advocated quality values for air and water, and a number of directives were established for air, water, and waste during the term of these two EAPs (European Environmental Bureau, 2005: 19).The 1970s may be characterized as being reactive meaning that environmental problems were treated as isolated

issues, and priority was given to repairing damage caused in the past and preventing further pollution through regulating *end-of-pipe*[45] emissions of pollutants.

During the 1980s, the interdependency of environmental problems has been gradually acknowledged. A more preventive approach became to be dominant in the EEC (Schrama and Sedlacek, 2003: 8). This was strongly reflected in the Third EAP (1982-1986) as well. In the Third EAP there was a commitment to reduction of pollution at source. It laid down among its guiding principles the 'prevention rather than cure' approach, which aims prevention of pollution before it is created. There was a shift from the quality-approach towards the emission standards[46] approach and development of new filter technologies to curb pollution at source was promoted within this framework. Besides being more preventive, the Third EAP concentrated on the issue linkage between the internal market and the environmental policies as well, and emphasized the potential risks and benefits of environmental policy in the achievement of the internal market. Therefore it promoted the harmonisation of environmental measures to avoid distortions in industry competitiveness (European Environmental Bureau, 2005: 19-20). Integration of environmental concerns into other Community sectors as a new policy focus was first raised explicitly in the Third EAP. It noted the need for greater awareness of the environmental dimension in the fields of agriculture, energy, industry, tourism and transport (Herodes *et. al.*, 2007: 8).

The leading institution of the environmental policy within the EEC, the former Directorate General (DG) XI, now the DG for Environment[47], was established

[45] The traditional measures for combating pollution are characterized as end-of-pipe technology, i.e. treatment of waste and polluting streams. Trough time, the inadequacy of this approach have been realised and measures for preventing pollution at source (from pollution abatement towards pollution prevention) gained prominence. This approach is called 'cleaner production' (El-Kholy, 2002).

[46] The Third EAP proposed formulating emission limit values for stationary and mobile sources. According to this approach, environmental emission standards need to be harmonised within the EEC.

[47] The DG are established under the framework of the European Commission, which is the technical organ of the EU. It is the manager and executer of the EU policies. It has an important role in the legislative process as well, since it drafts proposals for new legislation. The Council of Ministers has the authority to adopt or reject Commission's proposals for new legislation after consulting with the European Parliament. 20 sub-councils, including the Environment Council that was established in 1973, do exist within the framework of the Council of Ministers. The European Parliament has a legislative role, which is shared with the Council of Ministers. It has limited power in comparison to other organs, but efforts have been carried out to increase the Parliaments role in the decision making mechanism. The members of the Parliament are elected by European wide elections. For more, see 'http://europa.eu/institutions/index_en.htm'.

in 1981. The 1980s witnessed a rapid and profound transformation in terms of Community's environmental policy, and by 1987, the organisation had adopted more than 200 pieces of environmental legislation and four action programs of steadily increasing complexity. In 1987, via the Single European Act (SEA) several amendments had been made to the Treaty of Rome, with a major aim of adding new momentum to European integration. With those amendments, the Community powers were expanded in several areas, including the field of environment. The SEA incorporated an environment title, Title VII, into the Treaty of Rome (SEA, 1987, Article 25). This is generally acknowledged as the turning point for the Community's environmental policy, bringing it into the Community treaties for the first time. For the first time the environmental policy was given legal underpinning and was reinforced by the pledge that 'environmental protection requirements shall be a component of the Community's other policies' (Wilkinson, 1990). Within Title VII, the Article 130(r) lays down the Community objectives relating to the environment as "to preserve, protect and improve the quality of the environment, to contribute towards protecting human health, and to ensure a prudent and rational utilisation of resources". Under the same Article, the principles that preventive action should be taken, that environmental damage should as a priority be rectified at the source, and that the polluters should pay, were set forth as the basic principles of Community action relating to the environment. It is also stated that environmental protection requirements must be a component of the Community's other policies and the Community shall take action relating to the environment to the extern to which the objectives referred to in paragraph I can be attained better at Community level than at the level of individual MSs (SEA, 1987: Article 25). Although not explicitly denominated, this is the first reference to the principe of *subsidiarity*[48]. The SEA enhanced the role of DG XI's position within the Commission, with the requirement that environmental protection measures must be a component of the Community's other policies. Furthermore, the SEA eased the adoption of environmental standards by introducing qualified majority voting (QMV) in the Council of Ministers for environmental measures that are linked to the single market (Jordan, 1998: 17).

[48] For more information on the subsidiarity principle, see infra p. 62.

To achieve the objectives set by the SEA, the Fourth EAP (1987-1992) upgraded the integration approach and devoted a whole subsection to discussing 'Integration with other Community Policies'. It announced that the Commission will develop internal practices and procedures to ensure that integration of environmental concerns to other policy areas takes place routinely in policy making (Herodes *et. al.*, 2007: 8). It acknowledged that the earlier approaches (quality policy, emission orientation) were inadequate to bring real solutions to existing pollution problems. For the first time environmental protection was perceived as an integrated activity within the whole production process. Part of this approach, the aim is to reduce the input of energy or materials and to minimise waste streams in the production process. This is the outcome of the principle that the damage should as a priority be rectified at the source. Pollution control was reorganised to incorporate water, air and soil control under one system and involve an evaluation of problem causing substances. It therefore started to discuss a sectoral approach, analysing the impact of key economic sectors on the environment. New, incentive based instruments, e.g. taxes, subsidies or tradable emission permits, were announced. The Fourth EAP marked the beginning of a shift from 'trade orientation' to a 'sustainability frame' (European Environmental Bureau, 2005: 20).

3.1.3 EU environmental policy from the 1990s onwards: sustainable development as the new wheel for environmental policy making

After the adoption of the SEA, environmental action by the MSs, the European Commission, and the international community united at the European level to create a new momentum for a more innovative and activist approach to environmental policy (Weale *et. al.*, 2002: 46). The 1990s can be marked as a new stage in terms of environmental policy making at the Community level, which evolved under the light of the improvements in international environmental policy making. The attainment of sustainable development and the integration of environmental policy with other policy sectors can be marked as the focus of attention of this era (Schrama and Sedlacek, 2003: 8). In 1992, the Treaty on the European Union (Maastricht Treaty) brought about further amendments to the Treaty of Rome. The Article 3 of the Treaty was amended to oblige the European

Community (EC) to include amongst its activities a *policy* in the sphere of the environment (The Maastricht Treaty, 1992: Article G(B.2)). With the use of the term '*policy*' rather than 'actions to protect the environment', the Maastricht Treaty raised the profile of environmental policy within the EU (Barnes and Barnes, 1999: 17). In other words, environmental protection was upgraded to full-scale status. Maastricht Treaty amended the pivotal Article 2 of the EC Treaty. Previously, this Article referred to the promotion of continuous and balanced expansion as one of the key goals of the EC Treaty, whereas with the amendment it referred to the need for a 'harmonious and balanced development of economic activities, sustainable and noninflationary growth respecting the environment' (Weale *et. al.*, 2002: 47). The Maastricht Treaty inserted a new Article, Article 3b into the EC Treaty. This Article states that the Community shall act within the limits of the powers conferred to it with the EC Treaty and any action by the Community shall not go beyond what is necessary to achieve the objectives of the EC Treaty, which is known as *proportionality*. Moreover, the *subsidiarity principle*[49] was explicitly referred in Article 3b, which states that in areas which do not fall within its exclusive competence the Community shall take action, in accordance with the principle of *subsidiarity,* only if the objectives of the proposed action cannot be sufficiently achieved by the MSs and can therefore be better achieved by the Community (The Maastricht Treaty, 1992: Article G(B.5). Additionally, the Maastricht Treaty added the precautionary principle into the Article 130(r), which states that environmental protection requirements must be integrated into the definition and implementation of other Community policies (The Maastricht Treaty, 1992: Article G(B.5). The aim was to strengthen environmental policy integration via this clause. However, there remained some ambiguities. In particular the phrase 'other Community policies' was considered as being insufficiently precise and leaving open the possibility that it only applied to some policies. Furthermore there was also confusion whether the Community or the MSs were responsible for securing integration and there was no

[49] Any measures taken by the Community in relation to environment must be compatible with these principles of subsidiarity and proportionality. This implies that the measures taken by the Community should leave as much scope for national decisions as possible, and care should be taken with respect to the organisation of MSs legal systems. However, these are imprecise legal principles and are difficult to interpret in practice. It brought about the perception that the subsidiarity principle may be used as a weapon in favour of states' rights, and may therefore counteract to effectiveness of EU environment policy (Wilkinson, 1990; Gibson, 1999: 46). See supra p. 53.

explicit link between integration and the broader commitment to sustainable growth (IEEP (2006) quoted in Herodes *et. al.* (2007: 6)).

During the late 1990s, it became more apparent that the environmental problems and challenges had been worsened. With this new realisation the enactment of new legislation has been slowed down and the question of effective implementation and enforcement became central. Environment policy since 1992 has been firmly grounded on the principles of *shared responsibility*[50] and *subsidiarity*. That resulted in a slowing down of the introduction of new descriptive legislation and increased use of framework directives in line with these principles (Barnes and Barnes: 1999: 16).

A radical change in the EU environmental policy came with the Fifth EAP (1993-2000), which was entitled as 'Towards Sustainability' and included a strategy for achieving sustainable development in the long term. It combined the EU's own concerns about the developments of its environmental policy and its response to the issues raised in the international community. It can be conceived as the European Commission's response to the Rio Conference and Agenda 21. It was the first EAP to use a targeted approach, in which five target sectors were identified as the main source of pollution: industry, energy, agriculture, transport and tourism (Barnes and Barnes, 1999: 42). The Fifth EAP provided a concrete framework to attempt to give substance to environmental policy integration as well. It emphasized the need for integrating environmental factors into these five target sectors to achieve sustainable development (Herodes *et. al.*, 2007: 8). It led to a number of integrated policy formulations, new environmental indicators and institutions, and new advisory units within existing bodies and sectors (Schrama and Sedlacek, 2003: 14). The Fifth EAP called for a bottom-up, participatory approach rather than attempting to regulate integration. The approach advocated by the Fifth EAP was one of sharing responsibilities and active participation. The Fifth EAP can be considered as a starting point of a process of change to achieve sustainable development. This process has gradually been becoming pace with subsequent Community actions, i.e.

[50] Shared responsibility involves a mixing of actors and instruments at the appropriate levels, without calling into question the division of competencies between the EU, the MSs, regional and local authorities ('http://ec.europa.eu/environment/env-act5/chapt5.htm').

the Cardiff Process, the Sixth EAP and the European Sustainable Development Strategy[51].

In 1997, the amendments made to the EC Treaty with the Amsterdam Treaty strengthened the EU's commitment to achieve sustainable development and environmental policy integration (Jordan and Fairbrass, 2001: 110). Sustainable development was added to the existing economic and social goals of Article 2 (ex Article 2)[52], where it is stated that the Community, "…shall promote a harmonious, balanced and *sustainable development*[53] of economic activities…" (The Treaty of Amsterdam, 1997: Article 2). Furthermore, the Amsterdam Treaty moved environmental policy integration into Article 6 (ex Article 3c), which states that, "environmental protection requirements must be *integrated* into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development" (The Treaty of Amsterdam, 1997: Article 2). It clarified the vagueness of which Community policies should be addressed to progress with environmental policy integration. The Treaty of Amsterdam made an explicit link between integration and sustainable development and gave the integration principle a much higher profile (Herodes *et. al.* 2007: 7). Environmental integration became an increasingly prominent role within the environmental policy.

Concerning the institutional developments during the 1990s, the establishment of the European Environment Agency (EEA) in 1990 was significant. It is an autonomous agency with its own management structure and is not part of the DG XI. The Agency provides information to the European Commission. The EEA aims to support sustainable development and to help achieve significant and measurable improvement in Europe's environment. The work of the EEA is to record, collect and assess data; to draw up reports on the environment; to produce

[51] All of these policy formulations will later be discussed with their relevance to ICZM in Chapter 4.

[52] The Amsterdam Treaty renumbered the EU and EC Treaties. The three provisions on the Title on the Environment, the ex Articles 130r, 130s and 130t have respectively become 174, 175, and 176 with the Amsterdam Treaty.

[53] See supra p. 26.

timely objective information on the quality of the environment, the pressures to which it is subject and its sensitivity[54].

The EU has also been utilising several instrument within the context of environmental policy. Legislative instruments (i.e. directives, regulations, decisions, recommendations, and opinions) and market based instruments (i.e. taxes, charges, fiscal incentives, state aids, eco-management and audit scheme[55], eco-labelling[56]) are effectively used in environmental management. Financial support instruments constitute another significant tool for the EU in the field of environment. The EU funding for environment has been nourished by primarily the Structural and Cohesion Funds[57], the LIFE[58] and the SMAP. The SMAP (Short and Medium Term Priority Environmental Action Programme) is a framework programme of action for the protection of the Mediterranean environment, within the context of the Euro-Mediterranean Partnership, initiated in 1997. The SMAP is not a separate funding instrument, but a framework programme for policy and funding orientation with a participatory approach by all partners. Five priority fields of action were established within the context of the SMAP: Integrated Water Management, Waste Management, Hot Spots (covering both polluted areas and threatened biodiversity elements), ICZM and Combating Desertification. SMAP actions are mostly technical assistance, pilot or demonstration projects. They are financed by the European Commission through MEDA, which is the financial instrument of the Euro-Mediterranean Partnership. Within this context, the Third Programme (SMAP III) was adopted in 2004 with a

[54] For more information, see 'http://www.eea.europa.eu/'.

[55] For more information, see 'http://ec.europa.eu/environment/emas/about/summary_en.htm'.

[56] For more information, see 'http://ec.europa.eu/environment/ecolabel/index_en.htm'.

[57] By November 1989, the Council had also approved a dedicated regional and coastal environmental fund for particularly environmental projects in the less developed regions, ENVIREG. It had a budget of 500 Million ECU for the period 1990-1993 and a specific focus on sewage infrastructure (Weale *et. al.*, 2002: 362).

[58] One another important contribution to the environmental policy was the appropriation of a modest amount of funds under the LIFE (L'instrument financier pour l'environnement) program, in 1992 to finance environmental and nature conservation projects throughout the EU, as well as in some candidate, acceding and neighbouring countries. Since 1992, LIFE has co-financed some 2,750 projects, contributing approximately €1.35 billion to the protection of the environment. The third phase of LIFE, LIFE III, was terminated in 2006, and recently a new phase for LIFE, LIFE +, will cover the 2007-2013 period to provide specific support for the development and implementation of Community environmental policy and legislation, in particular the objectives of the Sixth EAP. For more, see 'http://ec.europa.eu/environment/life/index.htm'.

duration of three years to assist Partners' environmental administrations in their efforts to prevent environmental degradation, improve environmental standards and integrate environmental considerations in all other relevant policies; and encourage ICZM around the Mediterranean[59].

3.1.4 The legitimacy of ICZM within the framework of EU environmental policy

The emergence of the idea of sustainable development in the international community during the second half of the 1980s was followed by several international initiatives with the aim of establishing new policy options and specific measures in order to adapt the principles of sustainable development to the economic and social life. The formulation of the idea and the practices of ICZM are a reflection of this new way of thinking in coastal policy making. The spread of the idea of ICZM became pace throughout the 1990s. ICZM is a dynamic, continuous and iterative process designed to promote sustainable management of coastal zones. *Sustainable development* and *the principle of integration* are two central concepts in ICZM. In the previous section, it is stressed that with the beginning of the 1990s, the achievement of sustainable development became one of the most crucial economic and social goals of the EU. Therefore if looked from a wider perspective, it can be added that the achievement of ICZM actions at the EU level is part of this broader goal, which is the attainment of sustainable development in the economic and social lie. However, that is not an easy goal to achieve. The gravity and complexity of the problems of the coastal zones complicates the implementation of sustainable development in those regions. Therefore specific joint action by the EU and the MSs is necessary to improve the effectiveness of the existing legislation and the financial and planning tools. The most crucial need is the formulation of a common strategic understanding of how the European coastal zone and its resources can be utilised in the most sustainable way (CEC, 1999b: 17).

The international legal principles for environmental protection and sustainable development (i.e. principle of preventive action, precautionary principle, polluters pay principle, principle of environmental integration) have become a legal

[59] For additional information, see 'http://www.smaponline.net/'.

basis within the EC Treaty. All these principles are the fundamental principles for EU ICZM action as well. Particularly the emphasize within the EC Treaty of environmental policy integration and its direct linkage to the attainment of sustainable development give high legitimacy to ICZM as a policy tool to achieve sustainable management of European coastal zones. However, EU ICZM action must be compatible with the principles of subsidiarity and proportionality. Especially due to the complexity of national legislation for coastal zones, and the principle of subsidiarity, no descriptive legislative ICZM measures are present at the EU level yet. However, there is still much space for the EU to take several measures to promote ICZM among its MSs.

Starting from the 1970s, the EU began to take part in marine and coastal affairs trough international conventions covering the regional seas of Europe. It is more recent that the EU has begun to take action specifically oriented for coastal affairs (EEA, 2006: 75). Although there are only a few EU measures targeted specifically the coastal regions; there is a wide ranging influence of the EU sectoral policies and legislation on the functioning of the coastal zones. They are whether directly or indirectly affecting the functioning and status of coastal systems. That is the central point of the integrated management approach, which is the fact that coastal zones cannot be managed sustainably through a single body of legislation or policy. An appropriate blend of different policy instruments are needed, accompanied by a holistic vision targeting the sustainable development of coastal zones (EEA, 2006: 76). For the time being, no single DG acts as a policy planning body for ocean and coastal affairs separately. Each DG is being involved on a case by case basis. However, in 1990, a unit charged with Environmental Quality and Nature Resources, Nature Protection, Coastal Zones and Tourism was established under the DG XI (Belfiore, 1996: 222). Under the light of this information, the subsequent subsection will analyse the principal factors, which trigger the need for Community action and policy issues in the coastal zone of Europe.

3.1.4.1 The need for EU ICZM action and a general analysis of the state of the European coastal zone

The coastal zones have been the most appropriate places to settle down since early times, creating cultures focused on trade, economic development and natural resource exploitation. The coastline of the European continent has been described as one of its last wilderness that is of international importance (Smart (1992) quoted in Dixon-Gough (2001a: 1)). European coasts are a natural environment that attract socioeconomic development; thus being the central focus for development for European societies over centuries. It is estimated that almost half of the EU's population lives within the 50 km of the sea and coastal resources produce the considerable part of the Unions wealth (CEC, 2001a: 3).

There is almost a 185.000 km coastline and 560.000 km^2 of coastal zones[60] (terrestrial part) in 22 coastal EU MSs[61] plus Norway and Iceland (EEA, 2006: 11), and the European coastal zone covers 8.4 % of the world coastal zone surface area (Gazeau *et. al.*, 2004: 674). Many of the largest cities in Europe are located whether directly on the coast or very close to the coast. By post-World War II, a clear metropolitan corehad had been fully developed in the West, and most of the coastal zone of the metropolitan core regions is urbanised, with large ports and high levels of recreational development. Activities are particularly concentrated around the major ports developments of south east England, northern France, Belgium, the Netherlands, northern Germany and northern Italy (Ballinger *et. al.*, 1993: 48). This concentration of population and economic activities along the coastline generate a constant pressure on coastal ecosystems. Estimations showed that as much as 86 % of the European coastline is highly threatened as a result of direct and indirect impact of these human activities[62]. Direct impacts emanate from industrial, commercial,

[60] These estimations are based on the Corine land cover data base (CLC), which is a powerful information base aiming at collecting comparable and consistent land cover data across Europe. The CLC data base defines the coastal zone as the 10 km. landwards from the coastline. For detailed information, see (EEA, 2006).

[61] The 22 coastal MSs are Sweden, Finland, Estonia, Latvia, Lithuiania, Poland, Denmark, Germany, the Netherlands, Belgium, the United Kingdom, Ireland, France, Portugal, Spain, Italy, Slovenia, Malta, Greece, Bulgaria, Romania and Cyprus.

[62] 'http://www.unep.org/regionalseas/Issues/Coastal_Area_Management/Coastal_Development/default.asp'

agricultural and service infrastructure, whereas the indirect impacts originate from tourism activities and the increasing needs for quality residential developments. Under these circumstances, one major criticism concentrates on the lack of particular legislative frameworks for coastal zone management in many European countries. However, what is indisputable is that there is a 'state of conflict' within the coastal zone, which has now reached the political arena, including the EU agenda as well (Dixon-Gough, 2001a: 3-4).

Particularly from the 1990s onwards, there is a substantial effort at the EU level to be an effective actor in the management of the coastal zones in Europe. Within this context, three fundamental reasons are to be summarised for the Union's interest in the fate of its coastal zones. First, many of the problems faced by Europe's coastal regions are of a European dimension. For example, if an oil tanker were to sink in the English Channel, the UK would not be the only country affected by the resulting slick (CEC, 2001a: 3). Besides these cross border pollution flows, there are several other issues with a multi-national character such as transfer of sediments, common natural and cultural heritage, tourist flows, maritime safety, which are recognised to be of high relevance for Europe. Therefore, such problems cannot be solved by the MSs individually and it has been claimed that the EU should take the leading role in resolving such issues. Secondly, there is a large impact of the EU's sectoral policies and actions on the status and development of coastal zones in Europe (CEC, 1999b: 18). Especially in the fields of agriculture, fisheries, environment, regional development, tourism, transport, energy, and industry the measures taken at the EU level are directly or indirectly affecting the status of coastal regions. Thirdly, there is substantial public and political demand for the conservation of the coastal zones and their sustainable development at the EU level. There is a need for an exchange of experience and know-how in this field, which can be coordinated at best by EU wide initiatives. These are the principal factors for the EU's involvement in coastal matters. It has been widely acknowledged that Europe's coastal regions require special attention from the EU's policy makers and efforts continue to introduce a coordinated Union wide policy in the field of coastal zone management (CEC, 2001a: 4).

Although there is a wide variety of types of coastal zone with different natural, economic and social conditions, the coastal systems around Europe are

suffering from several common problems. Principle areas of concern can be summarised as degradation of resources; reduced water quality and quantity; widespread coastal erosion often exacerbated by inappropriate human infrastructure; accumulation of pollution; loss of natural habitats; loss of biodiversity and cultural diversity; predicted sea-level rise; competition for space; and seasonal variations in human pressures (CEC, 2000a: 6; CEC, 2001a: 3; Burbridge and Humprey, 2003: 121). During almost the last two centuries, the European coastline has particularly been under the twin threats of urban development and land reclamation (Dixon-Gough, 2001b: 52-53). The land uptake for artifical surfaces for mainly housing, services and recreation; and industrial and commercial sites are cited as the two main drivers of urban and infrastructure development by the EEA (2006: 24). At European level more than 2 720 km^2 of agricultural land and semi-natural and natural land were lost to those artificial surfaces between 1999 and 2000 (EEA, 2006: 12). Though varying according to the countries and regions, the process of land uptake for urban development in coastal regions is continuing, even in areas already highly urbanised. Land reclamation from the sea is another extensive practice in most European countries. The reclaimed land is used for a variety of purposes like the engineering constructions to facilitate navigation, to prevent floods and to fix existing sedimentary buffers, which have consequently been disturbing the natural sedimentary process responsible for maintaining the shoreline (Dronkers, 2006: 1). Furthermore, economic development of the hinterland has often reduced the supply of fresh water and sediments to the coastal zone and the physical foundation and the ecological carrying capacity of the coastal zone have been affected irreversibly. Therefore an increasing management effort is required to ensure the sustainability of coastal resources in Europe.

There are five main bodies of water surrounding the EU MSs and the candidate countries: the Baltic Sea, the North Sea, the Atlantic Ocean, the Mediterranean Sea, and the Black Sea[63]. A map of Europe demonstrating the bodies

[63] Eight EU MSs have a coast with the Baltic Sea: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden. Belgium, Denmark, Germany, the Netherlands, Sweden and the United Kingdom are the countries having adjacent waters to the North Sea. The MSs which are bordering the Atlantic Ocean are the UK, Ireland, France, Spain and Portugal. Seven MSs have a coast with the Mediterranean Sea: Cyprus, France, Greece, Italy, Malta, Slovenia and Spain. There are also two candidate countries on the Mediterranean coast, Croatia and Turkey. Bulgaria and Romania are the two MSs and Turkey is the candidate country bordering the Black Sea.

of water is given below, in Figure 2. The Atlantic coast is the largest region (56 % of the EU coastal zone) reflecting the large area of the North Sea and the extended shelf that surrounds the UK. The next largest region is the Mediterranean (21 %). The coastal zone of the Baltic Sea and the Black Sea represent 17 % and 6 % of the EU coastal zone. Nearly 50 % of the European coastline is in the Atlantic domain (including the North Sea), 27 % in the Baltic Sea, 20 % in the Mediterranean Sea and less than 5 % in the Black Sea (Gazeau *et. al.*, 2004: 674-75). The population density is the highest in the Mediterranean coastal zone and minimal along the Baltic coast (Gazeau *et. al.*, 2004: 676).

Source: (http://worldatlas.com/webimage/countrys/europe/europec.htm) (Accessed on May 8, 2007)

Figure 2: Bodies of Water in Europe

The individual characteristics and relevance of the threats to coastal area environments tend to vary from region to region, and from sea to sea (CEC, 2006a: 70). The geographical and cultural differences result in a variety of priorities in coastal issues. This complicates the issue of formulising a single and unified coastal policy that can answer the needs of all geographical regions. For example, the assimilative capacity of an open ocean is expected to be much higher than that of a closed sea (i.e. such as the North Atlantic Ocean vs. the Baltic Sea), and therefore the amount of pollution that these two different water bodies can tolerate differs sharply. Consequently, the measures that should be taken by bordering states to prevent pollution in those seas will vary accordingly. Therefore, these physical, as well as socio-economical conditions and necessities should be taken into consideration in any EU wide coastal policy measure. For such factors, during the efforts of formulising a coastal policy and future ICZM actions, the European Commission utilizes a regional approach, which is considered to be the most effective method for governance of the European coastal zones.

Five main zones (Baltic Sea, the North Sea, the Atlantic Coast, the Mediterranean Sea and the Black Sea) are considered within this framework. For the Baltic Sea in general, eutrophication and for the southern part of the Baltic Sea, sea level rise seem to be the major problematic issues. Major issues around the North Sea are the takeover of traditional fishing industry by maritime shipping, resulting in biodiversity loss and toxic contamination (CEC; 2006a: 98-99). There are around 2,000 ships at the North Sea any one moment in time, which accounts for 15 % of the world's cargo transportation. Oil transport has been an important activity, thus oil pollution from ships remains a constant problem here. Oil has killed seabirds, and had a substantial harm on benthic communities (EEA, 2006: 22). For the Atlantic coast, water quality is considered a principle issue of concern, especially in relation to pollution from oil and river born sources of nutrients and heavy metals originating from outside coastal areas (CEC; 2006a: 123). The lack of sustainable fisheries management is another problematic issue on the Atlantic coasts (EEA, 2006: 22). The Mediterranean Sea has one of the richest fauna and flora in the world. Wastewater discharge into the sea, pollution from land-based or riverine contaminants, reduced fish stocks, and loss of biodiversity are common issues of concern along the Mediterranean coast. Another major problem is the heavy

artificialisation of the coast mainly due to the pressure by tourism development, which results in a widespread beach and coastal erosion (CEC, 2006a: 144-145). Major issues around the Black Sea include marine pollution, coastal erosion, landscape degradation, loss of biodiversity, saltwater intrusion, over-settlement, lack of law enforcement, mass tourism, and non sustainable fisheries and agriculture (CEC; 2006a: 171-172). Increased salinity and pollution of coastal lakes and estuaries represents a major threat to coastal wetlands, especially in the Sea of Azov (EEA, 2006: 23). Table 5 below summarizes the main issues and their spatial relevance, as well as the drivers behind change, with some policy responses at the European level. As it can be observed from the Table, eutrophication, overfishing and loss of biodiversity, toxic contamination and habitat loss are the major common concerns that are observed in almost all seas in Europe. Several measures have been taken at the EU level to address some of these coastal and marine issues. The fourth chapter of this study is devoted to an analysis of major examples of those EU policies and legislation.

In addition to environmental issues resulting from the intensified human activities, there is a number of socio-economic coasts as well, including unemployment and social instability resulting from the decline of traditional or environmentally-compatible sectors, destruction of cultural heritage and dilution of the social fabric following uncontrolled development, loss of property and development options as the coast erodes; and lost opportunities for durable employment, as resources are degraded (CEC, 2000a: 6).

Table 5: Major Environmental Issues in European Coastal Waters and Associated Drivers and Responses at the European Level

Environmental Issues (Impacts)	Drivers	Pressures	Spatial Extent	Response at European Level
Eutrophication	Agriculture, urbanisation, industry	Diffuse pollution (N,P) waste emissions	Most seas, relatively less important in North Atlantic Ocean, Norwegian, Barents and White Seas	Water Framework Directive, Nitrates Directive, Urban Waste Water Directive
Overfishing, loss of biodiversity	Fisheries, population growth	Fish catches, fishing gear	All seas, especially Nort Sea, Wadden Sea, Black Sea	Common Fisheries Policy
Deterioration of bacteriological quality, health impacts	Agriculture, urbanisation, industry	Waste emissions, Agricultural run off	Mediterranean, Black Sea, North Sea	Bathing Directive
Habitat loss	Agriculture, tourism, climate change (atmospheric emission)	Habitat conversion (e.g. drainage), ports and touristic development, coastal erosion, sea level rise	European regions with high tourism and intensive agriculture, low lying coasts and deltas (sea level rise)	Birds and Habitats Directives
Toxic contamination (loss of biodiversity, health risk)	Industry, urbanisation, transport	Emissions of contaminants (heavy metals, synthetic organic compounds), contaminated sediments	All seas, especially around major European estuaries (less Barent and Norwegian sea)	Water Framework Directive, Dangerous Substances Directive, Seveso II Directive
Oil spill related ecological impacts	Maritime transport	Dumping, shipping accidents	Mediterranean, Black, Caspian, Norwegian, North Sea	Regulation on prohibition of transport of heavy oils in single-hulled tankers

Source: Adapted from Stanners and Bourdeau (1991) by Ledoux *et. al.* (2005: 5)

3.2 Evolution of Coastal Zone Management at the EU Level and the Outlook of ICZM

3.2.1 The developments until the European Commission Demonstration Programme on ICZM

There has been a growing concern for coastal issues and problems in the international community especially from the second half of the 1980s onwards. These proliferations of international efforts have led to some concrete developments in terms of EU action in European coastal zone.

In October 1981, during the Conference of the Maritime Peripheral Regions of the EC (with its Commissions of the islands, of the North Sea, the Atlantic Arc, the Mediterranean, and the Eurisles network) held in Greece, the European Coastal Charter was adopted. It was accentuated that the coastline of the European continent is particularly threatened and individual action by the European States was not sufficient. Therefore, the European institutions were called to take responsibility and concrete action. It was important; since it stressed the need for action at the European level and the harmonisation of EU law. It also contributed to the integration of policies, which became a pace after the 1980s.

In 1987, at a European Conference in Leiden, coastal managers, planners, scientists, and ecologists from 12 countries agreed to establish a coastal network, resulting in the establishment of the European Union for Coastal Conservation (EUCC)[64] in 1989. Two years later, in 1991, the European Coastal Conservation Conference was organised as a joint effort by the EUCC and the Dutch government. It brought together high level representatives of the European Commission, the Council of Europe and the government representatives of all of the coastal states of the EU. As an outcome, it has been declared that a comprehensive European strategy and an action plan should be developed; and the European Commission was asked to prepare a Community Strategy for ICZM (Ducrotoy and Pullen, 1999: 9).

[64] EUCC is an NGO, and was founded with the aim of promoting coastal conservation by bridging the gap between scientists, environmentalists, site managers, planners and policy makers. It has grown since then into the largest network of coastal practitioners and experts in Europe. The area of concern is Europe, the Mediterranean, the Black Sea, and other neighbouring regions. For more information about the EUCC and its activities, see 'http://www.eucc.nl/en/index.htm'.

With the new environmental remit brought by the Maastricht Treaty, and as a response to the European Coastal Conservation Conference, a Council Resolution[65] on the future Community policy concerning the European coastal zone was adopted on 25 February 1992 (OJ of the EC, 1992a). The Council had recognised that the European coastal zone is a fragile and vital common heritage, which should be safeguarded for its biological diversity, landscape value, ecological quality, and its capacity to sustain life, health, economic activities, and social well-being. It was emphasized that a key to sustainable use and development of coastal zones lies in the full integration of economic, physical planning and environmental policies. Thereby, it was concluded that by taking into account the subsidiarity principle, there is a clear need for a Community strategy for integrated planning and management of the coastal zones based on the principles of sustainability and sound ecological and environmental practice and high priority should be given to specific action in this field. So, the Commission was invited to propose for consideration a *Community strategy for ICZM* and to incorporate this initiative into the Fifth EAP (OJ of the EC, 1992a). This was an important breakthrough in terms of European commitment in integrated coastal management and shortly after this spirit was incorporated into the Fifth EAP of the EC (Ducrotoy and Pullen, 1999: 9).

As a response to the Council resolution of 25 February 1992, the coastal zones have been included among the themes and targets of the Fifth EAP[66] (1993-2000). Five target sectors (industry, agriculture, transport, energy and tourism) and seven themes (climate change, acidification and air quality; urban environment; coastal zones; waste management; management of water resources; and protection of nature and biodiversity) were specified within the framework of the Programme. It reaffirmed the Commissions' obligation for adapting a *strategy for the integrated management of European coastal zones*. The target area for the strategy was characterised by "the entire ambit of the coastal zones, including fore-shore, coastal waters and estuaries, together with coastal land up to the limit of marine or coastal influence" (OJ of the EC, 1993: 56). The general objective of the strategy was laid down as "the sustainable development of coastal zones and their resources in accordance with the carrying capacity of coastal environments" (OJ of the EC, 1993:

[65] Council Resolution of 25 February 1992, (92/C59/01)

[66] See supra p. 63.

57). The targets up to 2000 were formulised as higher priority to the environmental needs of coastal zones, through better coordination between relevant EC policies, and between policies at the Community, national and regional levels; operational framework for integrated planning and management; development of criteria for a better balance of land use and conservation and use of natural resources; and awareness raising of the public, competent authorities and economic sectors. It was also emphasised that the Community could give financial support from the Structural Funds to the effective implementation of the proposed Strategy.

One year after the formulation of the Fifth EAP, the Council adopted its Resolution[67] on a Community Strategy for Integrated Coastal Zone Management, in May 1994. This time it was calling on a *Community strategy for ICZM* (OJ of the EC, 1994). By recalling its former resolution, the Council renewed its invitation to the Commission to propose within six months at the latest, a *Community Strategy for the integrated management of the whole of the Community coastline* that will provide a framework for its conservation and sustainable use. It also invited the MSs to strengthen their own efforts with a view to further increasing the protection of coastal zones within the Community (OJ of the EC, 1994).

In October 1995, as a response to these two Council Resolutions, the Commission issued a Communication[68] on the integrated management of coastal zones. The Communication includes a review the state of European coastal zones and an analysis of the justification of EU action in this field (Belfiore, 1996a: 229). It admits a long recognised need to conserve coastal zones as an element of the Community's natural and cultural heritage as well as an essential basis for economic and social development. It recognised the need for joint action by the EU and the MSs to strengthen the implementation of sustainable development at all levels (Ducrotoy and Pullen, 1999: 10). Additionally, it announced a three-year Demonstration Programme (1996-1998) on ICZM to "show the practical conditions that must be met if sustainable development is to be achieved in the European coastal zones in all their diversity" (CEC, 2000a: 7).

[67] Council Resolution of 6 May 1994, (94/C 135/02).

[68] Communication from the Commission to the Council and the European Parliament of 29 November 1995, COM (95) 511

3.2.2 The European Commission Demonstration Programme on ICZM (1996-1998)

The Demonstration Programme (DP) of the European Commission was a joint initiative of three DG (Environment, Fisheries and Regional Policies) with the participation of the DG for Research and the Commission's Joint Research Center (CEC, 2000a: 5). The fundamental aim of the DP was to provide concrete technical information about the factors and mechanisms which either encourage or discourage sustainable coastal zone management and stimulate a broad debate and exchange of information among the various actors involved in the planning, management and use of European coastal zones. As an outcome of this debate, it was planned to establish a consensus regarding the appropriate measures and practical conditions at the European and other levels to promote ICZM throughout Europe[69]. The DP also aimed at providing results and experiences useful to define a *European ICZM strategy*, based on the principle of subsidiarity[70] (Belfiore, 2000b: 123). It was designed around 35 demonstration projects and 6 thematic studies on topics of Legislation, Participation, Technology, Sectoral and Territorial Cooperation, and EU Policy and Information. The demonstration projects have looked at many interrelated biological, physical and human problems presently facing the coastal zones and have studied the operation of integrated management and cooperation procedures, and their efficiency[71]. Besides the demonstration projects, the DP included inputs from relevant research and information activities of the Commission, and the European Environment Agency, and regular workshops with the project leaders and members of the national expert groups had been carried out (CEC, 2000a: 8). In 1999, the lessons and experiences emerging from these activities were put together and

[69] 'http://ec.europa.eu/environment/iczm/overview.htm'

[70] See supra p. 62.

[71] The demonstration projects were funded through existing programmes and budget lines, primarily the LIFE environment programme. The projects included in the DP were selected to represent the diversity of conditions (physical, cultural, institutional etc.) in the coastal zones of Europe. All of the projects have followed a similar general methodology. Each started by assessing the state of their coastal zones, and undertaking an analysis of the cause and effects relationship present. They afterwards entered into a phase of concertation, where options were discussed by all stakeholders. On the basis of these debates, results were disseminated and plans and programmes of actions were launched (Julien, 2000: 33). For more information on these DP projects, see 'http://ec.europa.eu/environment/iczm/projects.htm#Baltic'.

published by the Commission as two separate documents: “Lessons from the European Commissions Demonstration Programme on Integrated Coastal Zone Management (ICZM)” (CEC, 1999a) and “Towards a European Strategy for ICZM: General Principles and Policy Options - A Reflection Paper” (CEC, 1999b). The results of the six thematic studies were also published as separate reports.

The hypothesis presented in COM (95) 511 was that the continued degradation and mismanagement of many of Europe’s coasts can be traced to problems related to insufficient or inappropriate information about the state of the coastal zones and human impacts; insufficient coordination between the different levels and sectors of administration and their policies; and insufficient participation and consultation of the relevant stakeholders (CEC, 1999b: 5). The DP was designed to test this hypothesis as well. As the result of the DP, the historical mismanagement practices that lie at the hearth of unsustainable management patterns in the European coastal zone have been laid down.

First of all, management of the coast has lacked vision, and is based on a very limited understanding of coastal processes. Furthermore, scientific research and data collection have been isolated from end-users. Secondly, planning decisions, policies and legislation have usually been designed on a sectoral basis. Those inappropriate, isolated and uncoordinated sectoral policies and legislation have often worked against the long-term interests of sustainable management of the coastal zones. Furthermore, there has been inadequate involvement of all the relevant stakeholders in formulating and implementing solutions to various problems at the coast. Another problem is that the rigid bureaucratic systems and the lack of coordination between relevant administrative bodies at different levels (national, regional, local) have limited local creativity and adaptability. Finally, local initiatives have lacked adequate resources and political support from higher administrative levels to design sustainable coastal policies This lead to the ineffectiveness of action taken at the local level, which lies at the hearth of sustainable coastal management (CEC, 1999b: 9; CEC, 2000a: 8-9).

The DP illustrates that the coastal zones are complex areas with multiple users and uncoordinated individual sectoral policies tend to conflict with each other, which usually results in policy gridlock. To avoid such gridlock and ensure the effective implementation of many individual EU sectoral goals, an integrated

territorial approach is offered as the best means (CEC, 2000a: 9). It was concluded that:

> There is a need for a common strategic understanding of how European coastal areas can be utilised 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 ICZM. (CEC, 1999b: 17)

The DP also indicates that integrated solutions to concrete problems can only be produced and implemented at the local and regional level, but also integration of policies at these levels is only possible if the higher levels of administration provide an integrated legal and institutional context (CEC, 2000a: 9). Therefore, coordinated action at the Community level is needed, if concerted action is to be achieved at the European level. The DP confirms the need for a *European IZCM strategy*. The justifications for such a strategy are laid down as the large impact of EU sectoral policy on European coastal zone, the need to ensure a "level playing field", the importance of guaranteeing environmental health, the obligation to foster social and economic goals of the coastal zone, the need to ensure the best use of EU funds, and the EU role in resolving cross-border issues (CEC, 1999b: 18).

Within this context the EU could define the framework for ICZM, trigger ICZM, stimulate ICZM and support ICZM. The question here is whether legislation at the EU level would be necessary or not, in order to fulfil these objectives (Humphrey *et. al.*, 2000: 281). There has been an ongoing debate on the possibility and the necessity of an EU wide legislative instrument particularly designed for ICZM. To promote ICZM through legislation, the EU can choose one of the three alternatives among the legislative instruments: Directive; Decision, or Council Resolution, each having different advantages and disadvantages. A Directive is legally binding on MSs, and thus enforceable. The terms of a Directive should be specific enough, since compliance with its requirements must be verifiable. However, a legally binding Directive requiring MSs to establish national systems of ICZM would face considerable practical difficulties, and should thus be designed in the most general terms to be applicable. However, this may reduce the practical impact, and a Directive cannot be expressed in too general terms. Moreover, MSs have been demonstrating sensitivities as the question of subsidiarity have grown since the early 1990s. The EU's role in land-use planning remains contested.

Therefore, a Directive will probably be politically the most difficult to agree. (CEC, 1999b: 75). A Decision is binding for those to whom it is particularly addressed. Therefore it is of limited utility, since it is generally used when there is a specific issue to be addressed, for only one or a group of MSs. A Council Resolution in the form of a Code of Guidance is a flexible mechanism without any legal enforcement. Therefore its implementation depends on political will, which would be the weakest part of it. The advantage of such an instrument would be the fact that such non-statutory advice can be made more persuasive through financial incentives (CEC, 1999b: 23; Humprey *et al.,* 2000: 281).

The role of the EU in coastal zones is derived from the European Treaties. The strongest legal base stems from Article 6 of the Amsterdam Treaty, which foresees the integration of environment into all other policies. ICZM is a valid tool for meeting other Community objectives (i.e. regional cohesion, fisheries, social affairs, transport, energy etc) in coastal zones and have therefore a very strong relevance to the environmental integration principle (CEC, 1999b: 19). However, the EU ICZM action should be in coherence with the principle of subsidiarity. There is a great diversity among MSs in terms of their administrative structures and national laws governing their coastal zones as well as among the physical and socioeconomic characteristics in different coastal regions. Therefore, there should be national discretion for the MSs to fulfil the objectives of ICZM in ways that suit their own geographical conditions and legal and administrative mechanisms (Gibson, 2003: 130). As a result, the development of a regulatory legal instrument (such as an ICZM Directive) for ICZM at the EU level is not considered to be an efficient and practical tool. So, it is concluded that the central point for the EU is to take care of its coastal zones in view of the significant impact of existing policies, programmes and legislation on the coastal zones. Therefore, it should be ensured that those Community policies are coherently conceived at the EU level and coherently applied at the local level through integrated management. Horizontal integration of EU sectoral policy goals affecting the coastal zones is set a prerequisite for a healthy ICZM process and foreseen as the primary EU action in the field of ICZM. Besides, the overall role of the EU should include *providing leadership and guidance* by establishing a framework to enable action at other levels (CEC, 1999b: 23).

3.2.3 The European ICZM Strategy

All the efforts of the DP culminated in a Communication from the Commission to the Council and the European Parliament[72], which establishes an ICZM Strategy for Europe. The European ICZM Strategy aims "to promote a collaborative approach to planning and management of the coastal zone, within a philosophy of governance by partnership with civil society" (CEC, 2000a: 2), and is intended "to advance the European Treaty objectives concerning sustainable development and the integration of environment into all other EU policies, for the significant and strategically important coastal zone" (CEC, 2000a: 5)

The European ICZM Strategy builds on eight principles for good management of Europe's coastal zones, which are formulised as an outcome of the DP. They are demonstrated with their brief explanation in Table 6 below.

The Strategy is expected to improve collaboration between the services of the Commission, the implementation of a wide range of EU legislation and policies affecting the coastal zones. It is also stressed that the Strategy can serve as a model for introducing the principle of sustainable development in other parts of the European territory (CEC, 2000a: 2-5).

The European ICZM Strategy consists of a series of concrete action in the following general areas of action based on the conclusions of the DP (CEC, 2000a: 11-23):

- *Promote ICZM Activity within the MSs and at the "Regional Seas" Level:* Great differences exist between MSs in terms of administrative, legal and cultural contexts, as well as in terms of the implementation of ICZM. Therefore there should be a flexible approach which considers this diversity. The EU will promote ICZM at lower administrative levels, through providing guidance and financial support for the implementation of local initiatives. MSs will have complete flexibility in terms of the means to implement ICZM within their territoires. The EU should also promote activity at the regional seas level.

[72] Communication from the Commission to the Council and the European Parliament on Integrated Coastal Zone Management: a Strategy for Europe of 27 September 2000, COM (2000) 547

Tablo 6: Eight Principles of ICZM in Europe

Principle	Explanation
(1) A Broad "Holistic" Perspective (Thematic and Geographic)	The coastal system should be managed in its entirety, including both the marine and terrestrial portions.
(2) A long term perspective	The needs of both present and future generations must be taken into account concurrently and equally.
(3) Adaptive Management during a Gradual Process	Rather than being an end-state , ICZM is a process and works towards the integration of policies, programmes and activities
(4) Reflect Local Specifity	ICZM must be rooted in a thorough understanding of the specific characteristics of the area in question, and specific solutions should be offered to specific problems.
(5) Work with Natural Processes	A proper understanding of the natural processes is needed. Instead of an understanding of "battle against the sea", the idea of working with these natural processes should be promoted.
(6) Participatory Planning	The perspectives and opinions of all the relevant stakeholders should be incorporated into the planning process through collaborative involvement.
(7) Support and Involvement of all Relevant Administrative Bodies	ICZM should be supported by all levels of administration units and their sectoral branches in line with the principle of subsidiarity, with the aim of improved coordination.
(8) Use of a Combination of Instruments	Multiple instruments should be employed (a mix of laws, economic instruments, voluntary agreements, research and education etc.) designed to facilitate coherence between sectoral policy objectives and between planning and management.

Source: Schematized from CEC (2000a: Annex I) and OJ of the EC (2002a: Chapter II)

- *Make EU Sectoral Legislation and Policies Compatible with ICZM*: It was emphasised that the EU sectoral policies which have an impact on coastal zones should respect all of the principles for good territorial management. There will be an ongoing process to ensure that these policies are compatible with ICZM. Various guidelines will be developed to assist the varios services for this stocktaking. It includes monitoring the local impacts of EU legislation and programmes, in collaboration with national and local authorities. Particular attention should be taken for the areas of nature protection and environment, transport, external policy, fisheries, water and marine management, and rural development policy. More efforts will be put on for better implementation and enforcement of existing EU legislation. The Commission should also ensure the collaboration between Commission services and EU institutions, and among stakeholders. The horizontal sectoral policy process should improve the collaboration of policies that influence the coastal zones.
- *Promote Dialogue Between European Coastal Stakeholders:* A European Coastal Stakeholders Forum is needed to be established to improve coordination between the various actors in order to agree on a European vision for the planning and management of the coastal zone. It would be a political body with participation of all the relevant stakeholders on the coast, and representatives from different sectors and levels of administration in the MSs. The Commission will coordinate cooperation with other EU institutions to determine how such a Forum could be constituted and coordinated.
- *Develop Best Practice in ICZM:* The EU can support the development of best practice through encouragement, funding, and structures, and logistics. The EU will also contribute towards developing a common understanding of ICZM among practitioners in local administrations and related organisations, by means of facilitating the exchange of experiences and expertise. The Commission is expected to support the creation of a coastal zone practitioners' network, which will be a forum to exchange knowledge on best practice.

- *Support the Generation of Factual Information and Knowledge about the Coastal Zone*: The Research Policy of the Commission will promote research for effective coastal management. The EEA is required to provide appropriate information to EU institutions to support policy making and evaluation. The Commission and the EEA will prepare an update to the CORINE Land Cover 2000[73] project, to provide information on the evolution of land based pressures in the European coastal zones. The EEA will complete the work on the definition of indicators for the coastal zones. The Commission will accomplish the study on the socio-economic value of coastal zones and of ICZM. The Commission's training policy may provide a horizontal instrument to develop capacity in ICZM.
- *Diffuse Information and Raise Public Awareness*: Responsibility hangs on the Commission to ensure wide diffusion of the knowledge produced as a result of the projects which were carried out through the Commission's funds, and targeted diffusion to coastal planners. The Commission should also promote the public diffusion of information on ICZM, through the preparation of materials explaining the lessons from the DP on ICZM.

The Strategy was planned to be treated as a flexible, evolving instrument. Therefore, it was foreseen that it will need amendments in the course of time. The Commission services were required to conduct an initial review of the Strategy after three years, and afterwards an assessment was foreseen to be conducted in conjunction with the assessment of the State of the European Environment conducted at regular intervals by the EEA. Although the Strategy was targeted towards the coastal zones for the implementation of ICZM, it helped to develop a more general culture of territorial management. Within this context, the Commission is expected to be studying how this Integrated Territorial Management Approach could be extended to the whole territory of the EU (CEC, 2000a: 23-24).

[73] See supra p. 68.

3.2.4 Council of Ministers Recommendation on the Implementation of ICZM in Europe

After the formulation of the European ICZM Strategy, the Commission issued a Proposal for a Recommendation[74] concerning the implementation of ICZM in Europe, on 8 September 2000. Having regard to this Proposal, the Council and the Parliament issued the Recommendation concerning the implementation of ICZM in Europe[75] (EU ICZM Recommendation), on 32 May 2002.

The European ICZM Recommendation reaffirmed the conclusions from the DP on ICZM. Chapter I of the ICZM Recommendation invites MSs making a commitment to a strategic approach for the future of their coastal zones and adopting the principles of ICZM identified in the ICZM Strategy. Chapter III advised MSs to conduct a national stocktaking to analyse the laws that influence the planning and management of their coastal zones. In Chapter IV, the MSs are called to elaborate and implement *a national ICZM strategy* on the basis of this national stocktaking. The National Strategies on ICZM should follow the eight principles of ICZM formulised as a result of the DP, and they might whether be specific to the coastal zone, or be a part of a geographical broader strategy. They should identify the roles of the different administrative actors within the country, identify the appropriate mix of instruments for implementation of these principles, develop or maintain national, regional or local legislation or policies, or programmes; identify measures to promote bottom-up initiatives and public participation; identify sources for durable financing for ICZM initiatives; include adequate systems for monitoring and disseminating information to the public; and determine how appropriate national training and education programmes can support implementation of ICZM. Additionally, they should ensure full coordinated implementation and application of existing EU legislation related to the coastal issues (OJ of the EC, 2002a: Chapter IV).

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[74] 'Proposal for a European Parliament and Council Recommendation Concerning the Implementation of Integrated Coastal Zone Management in Europe, COM (2000) 545'.

[75] Recommendation of the European Parliament and of the Council of 30 May 2002 Concerning the Implementation of ICZM in the EU, (2002/413/EC)

The 20 coastal MSs of the EU together with the four candidate countries[76] were invited to complete their national stocktaking and national ICZM strategies by February 2006. They were also invited to report to the Commission on the progress made in the implementation of the ICZM Recommendation in relation to the development of an ICZM strategy. The Commission was required to present an evaluation report to the Council and the Parliament on the implementation of ICZM throughout Europe within 55 months following the date of the adoption of the EU ICZM Recommendation. The evaluation process was carried out by an independent team and primarily depended upon national ICZM reports and national stocktaking submitted by the coastal MSs and candidate countries as a response to the EU ICZM Recommendation. The final report was released in August 2006[77]. The results of this evaluation assisted the European Commission to review the EU ICZM Recommendation and to submit an evaluation report to the European Parliament and the Council for further Community action on ICZM.

3.2.4.1 EU ICZM Recommendation and Turkey

Turkey is a country having borders to three seas (the Black Sea, the Aegean Sea and the Mediterranean) and has an inland sea within its national territory (the Sea of Marmara). Including the islands, the country has a coastline of 8,333 kilometres, of which the longest coastline belongs to the Aegean Sea (41.8 %) (Günay (1987) quoted in Özhan (2005: 2)). Although similarities exist, each coastal region has its own distinct geographical and climatic characteristics, which enriches the types of coastal habitats and resources of the country. The coastal population started to increase rapidly during the 1980s and onwards. If it's considered that more than one third of the population resides on coastal provinces, the importance of coastal systems and their resources can be better appreciated (Doğan and Erginöz (1997) quoted in Dede *et. al.* (2004: 252)).

[76] During the time when the EU ICZM Recommendation was issued, Romania and Bulgaria, which became the EU membership from 1 January 2007 onwards, were still having a candidate status in addition to two other coastal candidate countries, Turkey and Croatia.

[77] 'Evaluation of Integrated Coastal Zone Management (ICZM) in Europe' (2006), Prepared by Rupprecht Consult GmbH & International Ocean Institute, Germany, 255p.

Being a candidate country[78] to the EU, Turkey was called (but not required) to submit an official report on the implementation of the EU ICZM Recommendation. Turkey has not officially reported. Information from other non-official sources was utilised in the evaluation report for ICZM that was prepared for the European Commission. The status of Turkey in terms of ICZM implementation was overviewed within the context of two regional seas (the Mediterranean and the Black Sea) and main achievements and shortcomings were laid down. The results of the evaluation report demonstrate that although there exist some efforts for the sustainable management of coastal zones, much remains to be done in the coming years to institutionalise those management efforts and to bring ICZM to a national legal status in Turkey.

In Turkey, there is neither a national ICZM strategy nor a specific legislation for ICZM. A legal framework for ICZM and an institutional mechanism have not yet been established (CEC, 2006a: 154). In addition to an independent Shore Law, several fragmented laws concerning different sectors with direct or indirect relation on coastal zones are in place. However there is the lack of a framework law, which covers all respects related to coastal zones and harmonise the existing laws to initiate an integrated management mechanism for the Turkish coasts. Furthermore, there is not any national legislation that includes the concept of ICZM either. According to the Article 43 of the Turkish Constitution (9.11.1982), which is devoted to shores and shore strips, shores are under the jurisdiction and responsibility of the State and benefit to the public is primarily sought in benefiting from the sea, lake and river shores and shore strips. It is also stated that the widths of the shores and shore strips, in relation to purposes of use, and possibilities and conditions for people for benefiting from these places, are established by law. The Shore Act number 3621 (*Kıyı Kanunu*)[79] appears to be the central piece of legislation in terms of coastal zone management in Turkey. It sets out principles for the protection of the sea, natural and artificial lakes, river shores and the shore strips. The Act also gives definitions of the shoreline, the shore, the shore edge line, and the shore strip. The shore strip is set to

[78] Turkey was officially recognised as a candidate for EU Membership on December 12, 1999, at the Helsinki Summit of the European Council.

[79] Turkish Republic Official Gazete (TROG), Date: 17/04/1990, Number: 20495

include a 100 m width horizontally starting from the shore edge line[80] (Özhan, 2005: 39).

In addition to these, there is a great deal of legislations, which are not specifically issued for coastal zones but still have a direct or indirect impact on the coastal environment and their management. This may be partially considered as a reflection of the complexity and fragmentation of the legislation related to environmental issues. This fragmentation results in a conflict among these different laws and regulations, as well as the duties and responsibilities among different public institutions authorised for their enforcement (Duru, 2003: 220). The major legislations, which do address different coastal issues, include the Environmental Act (*Çevre Kanunu*)[81], the By-law for Water Pollution Control (*Su Kirliliği Kontrol Yönetmeliği*)[82], the By-law for Environmental Impact Assessment (*Çevresel Etki Değerlendirmesi Yönetmeliği*)[83], the Harbours Act (*Limanlar Kanunu*)[84], the Forestry Act (*Orman Kanunu*)[85], the Fisheries Act (*Su Ürünleri Kanunu*)[86], the Tourism Incentives Act (*Turizmi Teşvik Kanunu*)[87], the National Parks Act (*Milli Parklar Kanunu*)[88], the Act for the Protection of the Cultural and Natural Wealth (*Kültür ve Tabiat Varlıklarını Koruma Kanunu*)[89], the Bosphorus Act (*Boğaziçi Kanunu*)[90], the

[80] According to the Shore Act, the shoreline is defined as "the line along which water touches the land at the shores of seas, natural or artificial lakes, and rivers, excluding the inundation periods". The shore is depicted as "the area between the shoreline and the shore edge line". The shore edge line refers to "the natural limit of the sand beach, gravel beach, rock, boulder, marsh, wetland and similar areas, which are created by water motions in the direction of land starting from the shoreline" (Özhan, 2005: 39).

[81] TROG, Date: 11/08/1983, Number: 18132; (last amendment), Date: 13/05/2006, Number: 26167

[82] TROG, Date: 04/09/1988, Number: 19919

[83] TROG, Date: 23/06/1997, Number: 23028; (last amendment), Date: 13/10/1999, Number: 23785

[84] TROG, Date: 20/04/1341, Number: 95

[85] TROG, Date: 08/09/1956, Number: 9402; (last amendment), Date: 18/11/2003, Number: 25293

[86] TROG, Date: 04/04/1971, Number: 13799; (last amendment), Date: 29/07/2003, Number: 25183

[87] TROG, Date: 16/03/1982, Number: 17635; (last amendment), Date: 01/08/2003, Number: 25186

[88] TROG, Date: 11/08/1983, Number: 18132; (last amendment), Date: 15/07/2005, Number: 25876

[89] TROG, Date: 23/07/1983, Number: 18113; (last amendment), Date: 30/05/2007, Number: 26537

[90] TROG, Date: 22/11/1983, Number: 18229

Coastal Security Force Act (*Sahil Güvenlik Komutanlığı Kanunu*)[91], the Settlements Act (*İmar Kanunu)*[92], the Council of Ministers' Decree for the Establishment of an Agency for Specially Protected Areas (SPAs) (*Özel Çevre Koruma Kurumu Başkanlığı Kurulmasına Dair Kanun Hükmünde Kararname*)[93] (Duru, 2003: 219-227; Özhan, 2005: 39-44)[94]. There is a lack of integrity among these fragmented legislations. They display clearly the sectoral character of the current system of coastal management in Turkey (Özhan, 1996: 174). The public authorities responsible for the enforcement of some of these legislations are demonstrated in Table 7, to lay down the fragmentation of authority in coastal issues.

Table 7: Main Public Authorities and Legislation Related to Coastal Zone Management in Turkey

Main public authority in charge	Related legislation
Ministry of Public Works and Settlement	Shore Act(*) Settlements Act
The Prime Minister's Office, Under Secretariat for Maritime Affairs	Harbours Act
Ministry of Transportation	Harbours Act
Ministry of Environment and Forestry (Environmental Protection Agency for Special Areas)	Environmental Act National Parks Act Forestry Act The Ministerial Decree for SPA's
Ministry of Agriculture	Fisheries Act
Ministry of Domestic Affairs	Coastal Security Force Act Municipal Act
Ministry of Tourism and Culture	Act for the Conservation of Cultural and Natural Wealth Tourism Incentives Act
Municipalities	Municipal Act

(*): In the reference Table, the Author used the term "Law" to refer to the same kind of legislation.

Source: Adopted from Özhan (2005: 45)

[91] TROG, Date: 13/07/1982, Number: 17753

[92] TROG, Date: 09/05/1985, Number: 18749

[93] TROG, Date: 13/11/1989, Number: 20341

[94] For detailed information about these Acts and By-laws, see the references and Doğan *et. al.* (2006).

This fragmentation prevails in terms of planning and the planning institutions as well. The coasts are subject to several fragmented plans in the country, with a lack of integrity and consistency among them. There are two main sorts of plans related to the usage of coastal zones: higher level plans (including five-year development plans, regional plans, sub-regional plans, and environmental profile plans) and land-use (development) plans[95]. As a component of higher level plans, national five-year development plans started to be prepared for economic development since 1965 and cover several sectors significant in the utilisation of coastal systems, such as fisheries, tourism, transportation, agriculture, forestry and environment. The responsible institution for the national development plans is the State Planning Organisation. In addition to five-year national development plans there are nationwide sectoral development plans. They are established from time to time for sectoral development of particular sectors, such as tourism development plans of the 1970s. The land-use plans are one of the most commonly used instruments for the management of coastal zones in Turkey, like many other countries. The land-use plans involve the Ministry of Public Works and Settlement and the Ministry of Tourism (in areas declared as tourism centres), the municipalities and governorates. If the planning area falls within the borders of a SPA that include human settlement, the planning authority is the Ministry of Environment and Forestry (Özhan, 2005: 50). Current planning system in coastal zones is sectoral, speculative, rigid, and cannot incorporate social, economic, cultural and environmental aspects into the planning system. Both the coastal states and the inland states are planned according to the same standards and principles. There is the lack of local considerations in related legislations. There is one single regulation for every region without any particular attention to physical or socio-economic disparities on regional and local scales. Another deficiency in terms of planning is the hierarchical character of the administrative structure. The strong central government still plays the decisive role in coastal planning and management, which usually creates inefficiency at different stages. Theoretically, the coastal municipalities are empowered to carry out detailed town planning, including infrastructural works, waste management and water quality control, and the responsibility for enforcing the Shore Act in their areas. However in

[95] For detailed information about these plans, see Özhan (2005: 50-52) and Doğan *et. al.* (2005: 88-92).

practice due to political pressures from above, inadequacy in technical expertise, deficiencies in the organisational structures, the municipalities fall short in fulfilling their responsibilities and the planning process generally result in further degradation of coastal environments (Bridge and Salman, 2000: 36; Dede *et. al.*, 2004: 253; Serdaroğlu Sağ and Sağ, 2006: 85-90). This lack of decentralisation therefore is a major obstacle to the sustainable management of coastal zones. Especially when there is the need for tailoring the policies according to the local geographical, economic and social needs, the local government should have the central role in the planning process. Therefore, their role should be strengthened in coastal zone management in conformity with the principle of subsidiarity, and during the planning process all responsible public bodies should take part in a coordinated way.

As it is clear, there is a lack of horizontal and vertical integration in the administrative and legislative structure in coastal zone management in Turkey. Since there is the lack of a legal mechanism to assure *vertical and horizontal integration*, this system usually suffers from inadequate coordination in the decision making process. An inefficient communication exists among the ministries, between the ministries and other authorities responsible for providing public services. The lack of an efficiently functioning coordination mechanism (such as a coordinating agency) culminated in overlapping responsibilities among different institutions or sometimes responsibility gaps. There is an ongoing lack of communication and confusion both at the vertical and horizontal levels of authority (Narlı, 2001: 216).

However, since the late 1980s, several efforts have been carried out in terms of promoting ICZM in Turkey. Two regional initiatives have been the most influential in terms spreading the concept of sustainable coastal management in Turkey and bringing the concept of ICZM into the agenda: the GEF Black Sea Environmental Programme (BSEP)[96] and the UNEP Mediterranean Action Plan (MAP)[97]. As a party to the GEF BSEP and hosting its Coordinating Unit, several developments took place in Turkey in terms of enhancing ICZM. *The National ICZM Policies and Strategies* for Turkey was published with the GEF BSEP support in 1998. The central aim of this National Strategy is to achieve sustainable development in coastal and marine areas of Turkey. To accomplish this goal, the Strategy stresses

[96] See supra p. 36.

[97] See supra p. 34.

the need for establishing precautionary and polluter pays principles and Environmental Impact Assessment, spreading the use of environmental friendly technologies, dissemination of knowledge and enhancing public participation. The principles which should be followed to achieve ICZM are set as the horizontal and vertical integration in administrative structure, inter-sectoral cooperation, the integration of marine issues into coastal zone management, embracing an approach harmonious with nature, protection of sensitive ecosystems, adoption of the principle of societal equality, application of economic instruments in coastal management, and the enhancement of marine transport, eco-tourism and aquaculture (Duru, 2003: 286-287). The UNEP MAP process is another very significant opportunity for Turkey to facilitate ICZM. One major contribution of the MAP in terms of environmental protection in Turkey is the Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA and Biodiversity Protocol)[98]. This Protocol foresees the establishment of SPAs with the fundamental aim of safeguarding representative types of coastal and marine ecosystems of adequate size to ensure their long-term viability and to maintain their *biological diversity* (SPA and Biodiversity Protocol, 1995: Article 4). In addition to the establishment of SPAs, the Parties are also obliged to protect, preserve and manage threatened or endangered species of flora and fauna in marine and terrestrial coastal areas. This Protocol was ratified by the Turkish government on 22 July 2002[99], and became a national legislation. It has a great potential to contribute to the protection of biological diversity in the Mediterranean coastal area in Turkey. The second major contribution within the framework of MAP to the initiation of ICZM in Turkey is the Draft Protocol on ICAM. Turkey contributed to the efforts for drafting the Protocol on ICAM[100] through the Ministry of Environment, which is the country's focal point to the Protocol. The Draft ICAM Protocol is planned to be the legal instrument for

[98] Originally, the Protocol Concerning Mediterranean Specially Protected Areas (SPA Protocol) was adopted in 1982. The revised Protocol (the SPA and Biodiversity Protocol) was adopted in 1995. The former Protocol was ratified by the Turkish government in 1988 (TROG, Date: 23/10/1988, Number: 19968), and SPAs were started to be designated throughout the country. Subsequently, in 1989, by a Ministerial Decree numbered 383 'the Environmental Protection Agency for Special Areas' was established as a response to the SPA Protocol. The Agency is an auxiliary body to the Ministry of Environment and Forestry (See supra p. 89).

[99] TROG, Date: 22/08/2002, Number: 24854

[100] See supra p. 35.

ICZM within the context of MAP for the Mediterranean region. If ratified and enter into force, the Protocol has the potential to serve as an important legal mechanism in Turkey to initiate further efforts towards ICZM, such as the establishment of necessary administrative and institutional structure.

It is useful to mention two more recent piece of legislation in Turkey. Although they are not specifically designed for coastal zones, they are based on a area-based management planning approach and may have a direct contribution to the wise and sustainable management of coastal zones. The first one is the By-law for the Protection of Wetlands[101], issued in May 2005 (repelling the old By-law of January 2002). It was adopted particularly with an aim of implementing the measures established by Convention on Wetlands of International Importance (the Ramsar Convention of 1971). It aims the protection and enhancement of all wetlands whether they are cited in the Ramsar List of Wetlands of International Importance or not, as well as facilitating collaboration and cooperation among the public bodies responsible for their protection. According to this By-law, a National Wetlands Committee will be established. This Committee will be empowered to designate Ramsar sites[102] throughout the country. Article 26 states that for each Ramsar site a management plan is issued, according to the Guidelines for Management Planning for Ramsar Sites and other wetlands[103] (T.C. Çevre ve Orman Bakanlığı, 2005a). According to these Guidelines, it is foreseen that the wetlands management should be integrated within broad-scale environmental management planning, including river basin and coastal zone management. This By-law is particularly important for its potential contribution for the protection of coastal wetlands, for its management planning approach and its possible positive contribution to coastal zone management.

Another legislation, which is also based on management planning, is the By-law for the Establishment of Area-based Management and a Committee for Cultural

[101] The By-law from the Ministry of Environment and Tourism "Sulak Alanların Korunması Yönetmeliği", TROG, Date: 17/05/2005, Number: 25818

[102] The Ramsar sites are wetlands of international importance designated under the Ramsar Convention.

[103] The Guidelines was adopted during the 8th meeting of the Contracting Parties to the Ramsar Convention, held in Spain in November 2002. The Turkish version of the guidelines is published by the Ministry of Environment and Forestry in May 2005, and is available at: http://milliparklar.gov.tr/bolumler/dkoruma/kbab/pylsm/transfer/arsiv/ramsarrehber.pdf.

Monuments[104]. The aim is to protect the historical ruins, the archaeological sites and their interplays through the coordination of public agencies and non-governmental organisations within the framework of sustainable management plans; to prepare, implement and monitor the management plans for those areas, to establish an Advisory Committee and a Coordination and Monitoring Committee for those management areas and to establish a Committee for Cultural Monuments. According to this By-law, management areas will be established in archaeological and natural sites and their management plans are prepared (T.C. Kültür ve Turizm Bakanlığı, 2005). This By-law may also have a strong interplay with coastal management, since most of the archaeological and natural sites are located in coastal zones. If properly established and implemented, the area-based management planning will have substantial contribution to coastal protection.

A number pilot projects[105] have been carried out trough the leadership of several international organisations (the UNEP MAP PAP-RAC, the OECD, the World Bank, the Global Environment Facility, the EU) in cooperation with the national government to improve the vertical and horizontal integration and bring in integrated management mechanism in coastal zones. The management plans developed by this pilot projects established common recommendations, which are the establishment of multi-dimensional administrative structure, protection of natural resources and biodiversity, improvement of waste-water treatment systems, establishment of proper data collection and management systems, and raising public awareness through environmental education. However, the major shortcoming of these plans is the fact that they do not have any legislative basis. The legislative

[104] "Alan Yönetimi ile Anıt Eser Kurulunun Kuruluş ve Görevleri ile Yönetim Alanlarının Belirlenmesine İlişkin Yönetmelik", TROG, Date: 27/11/2005, Number: 26006

[105] In the period between 1988-1989, İzmir Bay was studied by UNEP MAP PAP-RAC as one of the four country projects, which focused on pollution and water quality management of İzmir Bay. Later, the context of the study was broadened and the project entitled "*Integrated Management Study for the Area of İzmir*" was carried out by a team of UNEP MAP and Turkish experts during 1991-1993 (Özhan, 1996: 169). In 1990, a project was granted by the by the World Bank coordinated Mediterranean Environment Technical Assistance Program (METAP) for establishing a Management Plan for the Patara Special Protected Area, which was in 1997. *The Bodrum Peninsula Coastal Zone Management Project* (1993-1995) was carried out through a grant of the GEF NGO Small Grants Programme under the umbrella of the Turkish National Committee on Coastal Zone Management. Another project was carried out in Mersin (*Mersin Coastal Area Integrated Planning Project*) during 1995-1996 within the framework of the UNEP MAP, granted by the METAP and carried out by a private company, trough a contract by the Ministry of Environment. (Özhan, 2005: 44-45; Duru, 2003: 274-284).

system does not refer to coastal management plans within the administrative structure of Turkey. Therefore without any legislative and administrative framework, those plans lack a regulatory character; they can only remain as guiding documents (Görer and Duru, 2001: 87). The most recent and on going pilot project is the SMAP III funded ICZM Project entitled 'Preparation and implementation of the Integrated Management Action Plan in collaboration with stakeholders for the Inner Gökova Bay and the Sedir Island within Gökova Specially Protected Area' (Gökova Project). The Gökova Project has started in January 2006 and is planned to be finished at the end of 2008. The coordinating body of the Project is the Faculty of Engineering of the Muğla University and the partners include national, regional, local authorities (the Environmental Protection Agency for Special Areas, the Governorate of Muğla Province and the Municipality of Akyaka), and two academic bodies. The aim of the project is for the first time in Turkey the development and implementation with the involvement of all stakeholders of an integrated management plan for coastal areas (Inner Gökova Bay and the Sedir Island) located within the boundaries of a Specially Protected Area. The overall objective is the demonstration and testing of the real process of ICZM within the existing institutional and legal system by incorporating all three level governmental bodies and all other stakeholders within the process. The project will implement the overriding EU ICZM principles throughout the decision making and management processes. Within the context of the Project it is envisaged that an Integrated Coastal Management Advisory Committee in Akyaka Town is established and an Integrated Coastal Management Action Plan for the Inner Gökova Bay and the Sedir Island will be prepared by this Committee[106].

Another achievement for Turkey, which is also pointed out in the evaluation report, is the establishment of the Turkish National Committee on Coastal Zone Management (KAY TMK) in 1993. It was established to support the efforts towards the conservation of and benefits from the nation's coastal areas, to provide a medium for information exchange among the stakeholders, and to contribute to the development of scientific research projects aiming towards the rational use and protection of coastal areas (Özhan, 2005: 46). It plays an important role in promoting

[106] 'http://www.smaponline.net/DOC/smap3/Project_Description_EN/Project_Decription_Gokova.pdf' ; 'http://www.gokovaprojesi.mu.edu.tr/index.htm'

the ICZM approach at the national level particularly through the organization of conferences[107], seminars, courses and research projects.

The Five Year Development Plans refer to some extent to the issues of coastal degradation and the need for further protection. However, it is not possible to claim that they outlined neither any detailed action in terms of coastal zone management nor any explicit reference has been made to ICZM. There were some general provisions in terms of coastal protection, administrative and legislative arrangements were envisaged, but only in general terms without any specific measures (Duru, 2003: 230-231). The Seventh Development Plan (1996-2000) emphasised the lack of integration and coordination among administrative bodies responsible for environmental management. It pointed out the need for integration of environmental and economic concerns and making use of economic instruments (Devlet Planlama Teşkilatı (DPT), 1990: 190). The Eight Development Plan (2001-2005) similarly underlined the need for integrating environmental policies into economic and social policies within the context of sustainable development, and called for administrative and structural arrangements to assure sustainable use of natural resources (DPT, 2000: 189). These plans made reference to the subjects of sustainable development and environmental integration. The Ninth Development Plan (2007-2013) explicitly states the uncertainties about the duty and authority distribution among institutions for the sustainable use of natural resources and environmental protection (State Planning Organisation (SPO, 2006: 38). It is also stressed that reaching EU norms in terms of environmental protection among others will raise the quality of life for the people of Turkey. Under the agriculture section, the need for sustainable management of coastal and inland fisheries resources is emphasized (SPO, 2006: 21, 41). The Ninth Development Plan does not include any specific reference to ICZM either.

The National Environment Action Plan[108] (NEAP) includes a comprehensive programme for of action for enhancing the management of marine and coastal resources, with 43 actions in the fields of policy and legislative arrangements,

[107] Until 1997, the Committee has been organising national a conference series 'Turkish Coast', which regularly bring together the stakeholders for coastal management in Turkey. The sixth Conference was held in Mugla University, in November 2006.

[108] It was prepared by the State Planning Organisation during 1995-1998 to address environmental management issues in Turkey, and lay down a comprehensive management plan.

institutional reforms, economic, financial mechanisms and education and training among others. They were proposed for better protection of marine and coastal areas and sustainable use of their resources (SPO, 1998: Annex 6, 15-16). Within the context of the NEAP, a short term project entitled 'Improving Coastal Zone Management in Turkey' was envisaged as a short term action. As a justification of the project, the lack for integrated management in coastal zones to ensure the proper management was emphasized. The scope of the Project included many aspects in coastal zone management such as identification of the environmental problems specific to sea/lake shores and river banks, identification of the responsibility of organizations and agencies that are related to the prevention and elimination of these problems, identification of existing legislative arrangements, development of democratic mechanisms with participation of all the stakeholders, and introduction of relevant legislative framework for the implementation of these democratic models (SPO, 1998: Annex VII). However, no steps have been taken to implement this project during the term following the publication of this Plan (Özhan, 2005: 65). Similarly, In National Agenda 21[109], Chapter 13 is devoted to sustainable management of coastal and marine areas. It calls for establishing integrated management plans and policies for the protection of coastal and marine areas. This integration should be multi-dimensional (including horizontal, territorial and vertical) and enforceable. Therefore there is the need for an administrative body, responsible for 'regional management' in coastal zones, which will have the potential to transform the existing structure into an integrated management framework (Ministry of Environment, 2001: 75-77). However the necessary steps for implementing these measures have not been taken yet at the legislative level. Therefore, neither the National Environment Plan nor the National Agenda 21 has a legal underpinning and they only remain as guiding reports.

In Turkey, ICZM is far from being implemented at the national scale. Furthermore, there is not any envisaged government action to improve the existing administrative and legal structure towards the attainment of ICZM. However, the country committed itself to the harmonisation of national legislation with the EU's, and the goals of sustainable development and environmental integration find their

[109] It is the outcome of a Project 'The Preparation and Implementation of National Agenda 21 in Turkey' (1996-2001) initiated by the Ministry of Environment with UNDP support.

place in national documents. Although recently not central in the policy making mechanism at the governmental level, it can be expected that these broader goals together with more global commitments such as the MAP or the BSEP will have repercussions towards the integrated and sustainable management of Turkish coasts in the longer term.

3.2.5 Efforts at European regional seas level and some other EU funded initiatives to foster ICZM in Europe

Several regional initiatives and conventions for regional seas, which were designed for the protection of the marine and coastal environment for particular regions, do exist within the European territory. Those efforts may also play an important role in the regional development of ICZM throughout Europe and some of them have initiated action plans for the integrated management of coastal areas. The EC is a party to most of these regional conventions, which are: the Oslo Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft in 1972, the Paris Convention for the Prevention of Marine Pollution from Land-Based Sources, the Convention for the Protection of the Marine Environment of the northeast Atlantic (OSPAR) (replacing the Oslo and Paris Conventions) in 1992, the Convention on the Protection of Marine Environment of the Baltic Sea Area (Helsinki Convention) in 1974; and the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona Convention) in 1976.

The first Convention on the Protection of the Marine Environment of the Baltic Sea Area (referred as the Helsinki Convention) was signed in 1974, by the seven Baltic coastal states. In the light of developments in the international community, a new Convention was signed in 1992 by all the States bordering the Baltic Sea and the European Community and entered into force in 2000. The aim of the Helsinki Convention is to prevent and abate pollution in the marine environment of the Baltic Sea. The original Convention did not apply to inland waters of the Contracting Parties (CPs). However, it was not adequate to prevent serious pollution. The 1992 Convention removes this deficiency by including the inland waters as well as the sea bed. It also refers to the preservation of ecological balance of the Baltic Sea. The Baltic Marine Environment Protection Commission (HELCOM) was

established to administer the Helsinki Conventions. One of the most important duties of the HELCOM is to make recommendations on measures to address pollution across the Baltic Sea region, which are to be implemented by the CPs through their national legislation. The Nature Protection and Biodiversity Group of the HELCOM (HELCOM HABITAT) promotes the ecosystem based management approach and extends the principles of ICZM to cover the whole Baltic Sea[110]. The HELCOM Recommendation 24/10 concerning the *Implementation of Integrated Marine and Coastal Management of Human Activities in the Baltic Sea* was adopted on 23 June 2003. It encourages the CPs, in accordance with the EU's ICZM Recommendation and the forthcoming European Marine Strategy, to develop a national strategy or, where appropriate, several strategies, to implement the principles for integrated management of human activities of the coastal areas and extend these principles to include marine offshore areas[111]. Another major initiative in the Baltic Sea region is the Agenda 21 for the Baltic Sea Region (Baltic 21), which was established by a joint effort of the Prime Ministers of the Baltic Sea Region (the members of the Council of the Baltic Sea States (CBSS)[112]), the European Commission and a number of intergovernmental and non-governmental organisations in 1996. Within the context of Baltic 21 one key issue is spatial planning, for which the goals and actions have been developed by the VASAB network (Vision and Strategies around the Baltic Sea 2010)[113]. Development of ICZM is among the objectives of the Spatial Planning Action Programme[114] within the context of the Baltic 21. The Baltic 21 and VASAB 2010 show some premising potential to foster ICZM, and spatial planning in coastal zones.

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[110] 'http://www.helcom.fi/'

[111] 'http://www.helcom.fi/Recommendations/en_GB/rec24_10/'

[112] The CBSS is an overall political forum for regional intergovernmental cooperation in the Baltic region. The members of the Council are the 11 states of the Baltic Sea region as well as the European Commission For more information on the CBSS, see 'http://www.cbss.st'.

[113] The VASAB was founded in 1992 to prepare the report "VASAB 2010: Towards a Framework for Spatial Development in the Baltic Sea Region". This report as well as "VASAB 2010 plus" is an outline of spatial development perspectives for the Baltic Sea Region. Integrated development of coastal zones and islands is one out of six key themes within VASAB 2010. The aim of VASAB is to integrate ICZM into existing spatial planning methods. For more information on the VASAB network, see 'http://www.vasab.org/'.

[114] 'http://www.baltic21.org/?sasp,10#'

As a part of the UNEP Regional Seas Programme, the Mediterranean Action Programme (MAP) adopted the Barcelona Convention in 1976 (amended as 'the Convention for the Protection of the Marine Environment and the Coastal Regions of the Mediterranean' in 1995, according to the needs of sustainable development and to include coastal areas). A Draft Protocol on Integrated Coastal Area Management was prepared within MAP, which represents a good opportunity to implement ICZM regionally within the EU[115].

Since the 1990s, the EU has been supporting several other initiatives to strengthen European cooperation in the field of sustainable coastal development and ICZM. The major examples of such efforts will be briefly mentioned below.

The efforts on coastal management in Europe are spread over thousand often small sized coastal management organisations and research groups, which is a major weakness of coastal zone management in Europe. The ENCORA Coordination Action (European Network for Coastal Research) was established in February 2006 to overcome the existing fragmentation and to strengthen the links within and between those organisations and practitioners (Dronkers, 2006). The EU funding foreseen for the 2006-2009 period for the ENCORA action amounts to 3,5 million EUR. The ENCORA action functions through Coordination Offices established in 13 countries, which are funded by the EU. The Coordination Offices are based upon national networks (e.g. COZONE: UK national network, DANCORE: Danish national network, RIC: Italian coastal network), thematic networks (themes include ICZM participation and implementation, social and economic aspects of ICZM, Marine and coastal spatial planning, Capacity building, training and education in ICZM) and affiliated networks (such as CoastNET, LOICZ, EUROCOAST, ICCOPS, CoPraNet) which make the ENCORA a kind of network of the networks. The Thematic networks, where the communities of coastal and marine science, policy and practice interact to develop and share knowledge, are led by institutions with outstanding expertise and will deliver a European directory of coastal expertise and European Action Plans to fill the gaps in coastal knowledge and practices (Dronkers, 2006). The ENCORA action has several services. These include a contact database (a database with information on persons, institutes and projects related to ICZM in Europe), forum (a platform for discussion within ENCORA), websearch

[115] See supra p. 34.

(for ICZM information), coastal wikipedia (provide a survey of coastal expertise and practices in Europe), and the Young Professionals Exchange Programme, to which young professionals can apply for financial support[116].

Another important EU funded initiative to give as an example here is the ELOISE (European Land-Ocean Interaction and Shelf Exchange Studies) research programme, which is a thematic network instigated by the European Commission where coastal zone research is combined to focus on the operation of the land-ocean interaction in coastal zones, and on the human impact on this operation. The ELOISE programme has been formulated as the contribution of the EU to the challenges described in the coastal zone core project (LOICZ) of the International Geosphere-Biosphere Program (IGBP)[117], and it represents a research contribution to the EU initiative on ICZM. It was established within the fourth framework programme (1994-1998) and continued under the fifth programme (1998-2002) within the context of the Thematic Programme 4 (Energy, Environment and Sustainable Development) (Ledoux *et.al.*, 2005: 2-3). Within the framework of ELOISE, a total of 55 research projects, 26 of which currently active, have been carried out, a majority of which addressed global biogeochemical cycles and fluxes, and ecosystem structure and human impact on coastal zones. By being a coastal zone research network of high scientific value, the ELOISE is expected to directly contribute to activities in the fields of ICZM and spatial planning[118].

[116] For additional information, see 'http://www.encora.eu/'.

[117] IGBP is an international scientific research program. It studies the interactions between biological, chemical and physical processes and how they interact with human systems, to provide scientific knowledge to improve the sustainability of the Earth. Since 1993, the Land–Ocean Interactions in the Coastal Zone (LOICZ) project has studied the key role that the coastal zone plays in the Earth System functioning, to provide coastal communities the scientific knowledge and understanding to respond to coastal change. For more information, see 'http://www.igbp.net/'.

[118] For more, see 'http://www2.nilu.no/eloise/index.cfm?fuseaction=info.abouteloise'.

3.3 Evaluation of ICZM in Europe

The European Commission, which was called by the EU ICZM Recommendation to provide an evaluation report on ICZM, issued a Communication on the Evaluation of ICZM in Europe[119] on 7 June 2007. It constitutes the Commission's report further to the EU ICZM Recommendation[120].

Overall 18[121] of the 24 coastal MSs and candidate countries have officially reported on the implementation of the EU ICZM Recommendation by June 2006. It is reported that no country has implemented an ICZM Strategy as prompted by the ICZM Recommendation. In seven countries (Finland, Germany, Malta, Portugal, Romania, Spain and the United Kingdom) the implementation of an ICZM strategy is pending. Six countries (Belgium, Cyprus, France, Greece, Netherlands, and Slovenia) have prepared documents considered as equivalent to an ICZM National Strategy, or coastal zone management strategies have become an integral part of its spatial planning processes. In eleven countries (Bulgaria, Croatia, Denmark, Estonia, Ireland, Italy, Latvia, Lithuania, Poland, Sweden and Turkey), no ICZM equivalent policies are in advanced stages of preparation, only fragmented tools are in place for the management of coastal issues (CEC, 2006a: 9-10)[122].

The results of the evaluation process demonstrate that in the majority of MSs, the response to the EU ICZM Recommendation is part of a slow and ongoing process towards more integrated coastal management. Most national ICZM strategies

[119] Communication from the Commission, 'Report to the European Parliament and the Council: An Evaluation of ICZM in Europe' of 07.06.2007, COM 2007(308).

[120] This report of the Commission was prepared depending upon the information from the former evaluation report carried out by the Rupprecht Consult and the IOI, a report by the EEA with an integrated spatial assessment of Europe's coasts and a report from the Working Group on Indicators and Data analysing the use of indicators in the national report further to the ICZM Recommendation (CEC, 2007).

[121] The countries which have not reported to the EU ICZM Recommendation are Bulgaria, Croatia, Estonia, Ireland, Italy and Turkey.

[122] The evaluation process was based on a "regional seas" approach, which is believed to be the most effective way for governance of European coastal zones. The regional seas subject to the analysis are the Baltic Sea, the North Sea, the Atlantic Coast, the Mediterranean and the Black Sea. The evaluation report includes a thorough analysis of those regional seas, including the physical characteristics and the major coastal issues at each regional sea level, legislative and policy frameworks, administrative levels, stakeholders and their concerns, inter-regional organisations and cooperation structures, and interconnectedness to regional development planning mechanisms of the countries involved. The results of this analysis are behind the scope of this study. For more information, see CEC (2006).

developed following the ICZM Recommendation were adopted in 2006, and their implementation has just recently started (CEC, 2007: 5). However, the evaluation process has shown that the EU ICZM Recommendation has been particularly beneficial to coastal management in Europe by creating a new awareness and initiating a rethinking of traditional fragmented approaches by promoting a reconciliation of economic, social and environmental interests (CEC, 2006a: 10). Therefore it is wise to state that the EU ICZM Recommendation has initiated a non-reversible process that can lead to an integrated management of coastal zones in most of the MSs, provided that EU support will be strengthened and widened. It at least initiated a rethinking on how to face and solve coastal problems in their territories.

Nevertheless, the evaluation process also proved that the overall implementation of the ICZM Recommendation is not happening at the full scale and therefore the potentials of the Recommendation are not fully exploited. Consequently, at this stage an incentive based approach is considered to be more appropriate instead of formulating an "ICZM Directive". Since most national strategies were launched only in 2006 and further developments are expected through forthcoming Community policies (e.g. the proposed Marine Strategy Directive, the future EU Maritime Policy), at this stage the Commission considers that a new legal instrument specific to ICZM is not foreseen. The ICZM Recommendation remains valid as the basis to continue to support the integration processes in MSs. The MSs will be encouraged to implement their national ICZM strategies or to develop ones where the EU ICZM Recommendation has not yet been implemented (CEC, 2007: 5). Therefore, it can be stated that the existing EU sectoral policies and legislation will continue to be the primary tool for EU ICZM action in the foreseen future. Within this context, one major goal for the EU will be the integration of ICZM goals with existing sectoral policies and legislation. The Commission will be devoted to put much effort to ensure the incorporation of ICZM into current policies, which necessitates a strong co-ordination mechanism between existing legislation and EU institutions.

Within this context, the EU is decided to maintain its guiding role in terms of initiating ICZM in Europe. It may play a central role, in terms of providing guidance and standards in following the general goals of sustainable development in European coasts. The EU support should be continued, strengthened and focused. The

principles of ICZM need to be made more operational and well understood at the local level. Therefore guidance needs to be developed by the EU to help to clarify the principles underlying sustainable coastal management and ways to operationalise them. Within this context, the EU is expected to promote awareness, training and education for ICZM, and stakeholder coordination; as well as to give technical and financial assistance for EU wide ICZM initiatives. Additionally further emphasis should be given on the implementation of ICZM on a regional seas basis to enhance the ICZM activities on a supra-national level in order to provide a common European frame.

The direction of future EU ICZM action is expected to be decided in the longer term according to the outcomes of these efforts and the effectiveness of this flexible approach, which attributes a guiding role to the EU. Although the ICZM issue is a complex and multidimensional one, and it has been acknowledged that formulation of a binding legal instrument for ICZM at the EU level is something really challenging to be designed, the existing approach is already being criticised for being too soft. The choice of a Recommendation to initiate ICZM is criticised for being one of the softest instruments that could have been chosen by the EU, which is raising doubts on its effectiveness at the MSs level. It has been claimed that the issue is sacrificed for political will. However, this should not make one to think that the importance of coastal areas and ICZM is underestimated by the EU institutions. As it is seen from past experience, there is time needed for an environmental issue to be fully recognised and embraced at the political level. Therefore, if there will be enough political will and public pressure, there is a strong possibility for a future Community devotion towards the formulation of a new more efficient legal instrument, such as a sufficiently flexible Framework Directive for ICZM at the European level.

CHAPTER 4

THE IMPACT OF EUROPEAN UNION POLICIES AND LEGISLATION ON THE EUROPEAN COASTAL ENVIRONMENT AND MANAGEMENT

The EU ICZM Strategy base the EU ICZM action on the existing Community policies and legislation, instead of establishing a new legislative ICZM instrument. Several policies and legislation of the EU are of key importance in relation to ICZM. They may have whether direct impact on the physical environment of the coast, both maritime and terrestrial, or indirect influence on the scope of separate policy measures. They may either contribute to or detract from the sustainable management of coastal areas. One major challenge for the EU in terms initiating ICZM at the EU level is to achieve coordination among those separate policies and legal measures. It is therefore great benefit to analyse those existing EU instruments to generate a framework idea of their interplay with coastal matters in general and ICZM in particular.

Law exerts an inevitable influence on the implementation and achievement of ICZM and therefore at the planning, formulation and implementation stages of an ICZM initiative, the international, national or regional legislation play an absolutely essential role (Gibson, 2003: 127; Beckman and Coleman, 1999: 491). From a historical perspective, there exist a large number of administrative laws, usually dealing with particular sectoral issues on terrestrial or maritime regions (i.e. matters like land use planning, local government, flood prevention, nature conservation, shipping, pollution, fisheries, recreation, defence etc.). These laws prescribe the functions of individual regulatory bodies responsible for them. They usually have been designed in isolation from each other. Within a State these laws may be supra-national, national, regional, or local in scope. The uncoordinated structure in

formulating these laws usually results in inconsistencies and conflicts between those different levels (Gibson, 1999: 1).

The MSs of the EU have a diverse range of legislation affecting their coastal zones. Even on the definition of the coastal zones, there is no single practice among the MSs, although there exist some common applications, which are exerted by international treaties (such as the 12 nautical miles limit for territorial seas or 200 mile limit for the Exclusive Economic Zone decided by the 1982 UNCLOS). There exist some other commonalities as well, with respect to the concepts of public ownership of the shore or the territorial sea bed. However, the precise extent and delimitation of the shore inevitably varies among the MSs of the EU.

It is this diversity among national applications, which makes the issue complex at the EU level. It is quite a strong challenge to design a specific legislation at the EU level, such as an ICZM Directive, as it was concluded in the previous Chapter. However, this does not mean that the EU lacks any legal competence in terms of managing its coastal areas. Practically and potentially, the existing EU legislation, as well as the policies, has a major and growing impact on national coastal laws; particularly in the contexts of environment, nature conservation, fisheries, and water quality. It is expected that this enforcement of the EU law on MSs may create a unifying influence on national laws, but at the same time it can also be adversely affected by the legacy of national jurisprudence. The actual extent of the influence of EU policies and legislation depends primarily on the level of their practicability at local levels, which should be taken into consideration in any EU policy formulation.

The purpose of this Chapter is to elaborate on the major examples of such EU policies and legislation, in terms of their impact on environmental and coastal matters and their existing or possible interplay with coastal management and ICZM.

4.1 Policy Frameworks

The policies of key economic sectors may have substantial influence on coastal environments. Therefore they should be designed in a way that environmental concerns are integrated into them and their existing and potential damage on coastal environments are minimised. In addition to these sectorally focused policies of the

EU, in recent years the EU has been facilitating an integrated, cross cutting approach in policy formulation. There are several integrated and horizontal policies which are not directly aimed at coastal zones but are very relevant to the sustainable development of the coasts (EEA, 2006: 78). Examples of such integrated and horizontal policies, which are dealt in this section, include the Cardiff Process, the Sixth Environmental Action Programme, the Sustainable Development Strategy, the European Spatial Development Perspective, the Governance White Paper, the Regional Policy and the Structural and Cohesion Funds, and the Future Maritime Policy; whereas examples of some major economic sectors include the Common Agricultural Policy, the Common Fisheries Policy, the Transport Policy and the Sustainable Tourism Policy.

4.1.1 The Cardiff Process: A Strategy for Integrating Environment into EU Policies

In 1998, the European Commission issued the Communication[123] entitled 'Partnership for Integration: A Strategy for Integrating Environment into EU policies'. This Strategy Paper was prepared for the European Council meeting held in Cardiff, in June 1998. This marked the beginning of a comprehensive implementation process for environmental integration, which is known as the *'Cardiff Process'*. The Commission invited the European Council to declare its firm commitment to ensure that Article 6 of the EC Treaty will be rapidly implemeted in practice, and to recognise that a Partnership should be promoted between the Council, Parliament, and Commission to achieve this objective (CEC, 1998a: 3). The respective 'Council formations'[124] were required to integrate environmental considerations to their specific policy fields. There should be an approach to Community policy making based on the recognition that all policies contribute to sustainable development, and thus procedures were required to ensure integration of environment into other policies. Within this context, the Commission was devoted to

[123] Communication from the Commission to the European Council of 27 May 1998, COM (98) 333

[124] The Council of the EU meets in different policy formations. For example, Environment Ministers meet to discuss matters relating to the Environment, while Finance Ministers meet to discuss Economic and Financial matters. These are the Council formations, and are composed of the ministers of the MSs.

ensure that all key policy initiatives integrate concern for environment, with the incorporation of a detailed environmental assessment into key policy proposals. The Council was required to identify a set of priority actions for the incorporation of environmental requirements, and should periodically review environmental integration into key sectoral policies (CEC, 1998a: 6-7). Within this framework, there was special reference to the Agenda 2000 proposals, which is a policy reform of the Agriculture and Cohesion Policies, and includes a package of pre-accession assistance for the countries in Central and Eastern Europe. Key environmental components which were required to be integrated into Agenda 2000, were laid down through this Strategy Paper. A Stocktaking of the Cardiff Process by the Commission was adopted in 2004[125]. It showed the positive results of the Cardiff process, but also points to several weaknesses in its implementation, including the need to improve the consistency of strategies across Council formations. It also pointed to a set of measures at Community and national levels to support the implementation of the Cardiff process. The Commission also stressed the importance of political support in the achievement of environmental integration[126].

The Cardiff Process can be considered as a direct policy framework in terms of achieving one of the fundamental objectives of ICZM, which is the *integration principle*. ICZM approach requires policy coordination at all sectors having an impact on the coastal zone. The requirement of integrating environment into other areas is therefore a complementary action for the integrated and sustainable management of European coastal resources.

4.1.2 Sixth Environmental Action Programme

The Community's Fifth EAP phased out at the end of December 2000. Subsequently, the Sixth EAP, "Environment 2010: Our Future-Our Choice", was approved in 2002. Compared to the Fifth Programme, it adopts a longer time horizon, (2001-2012). Four priority areas have been established within the scope of the Programme: (1) Climate change; (2) Nature and biodiversity; (3) Environment and health; and (4) Natural resources and waste. The strategic approaches

[125] Commission working document (COM/2004/0394)

[126] For more, see 'http://europa.eu/scadplus/leg/en/lvb/l28075.htm'.

emphasized within the framework of the Sixth EAP are to ensure the effective implementation of existing environmental legislation, the integration of environmental concerns into all relevant policy areas, and greater focus on prevention. The aim is to ensure a high level of protection, taking into account the principle of subsidiarity and the diversity of situations in the various regions of the Community. The actions must be based on the polluter pays principle, the precautionary principle and preventive action, and the principle of ratification of pollution at source (OJ of the EC, 2002b: Article 2). The Sixth EAP is also aimed to ensure that the Community's environmental policy making is undertaken in an integrated way. EIA and SEA are chosen as the two central tools to promote integration of environment into other sectors. Their full and effective implementation is thus required at the Community level.

The Sixth EAP obliges the Commission to prepare thematic strategies in seven areas, which are air pollution, preventing and recycling of waste, protection and conservation of the marine environment, sustainable use of pesticides, sustainable use of resources and urban environment. The thematic strategies are considered to be the next generation of environment policy. They set clear environmental objectives according to the themes with a long term perspective, thereby providing a stable policy framework. The aim is to create positive synergies between them, and integrate them with existing sectoral and horizontal policies (CEC, 2006a: 215).

ICZM approach is among the policies which is directly mentioned and promoted by the Sixth EAP. Article 3 of the Decision on the Sixth EAP foresees the promotion of effective and sustainable use and management of land and sea taking account of environmental concerns. Therefore, promotion of best practice with respect to sustainable land use planning with special emphasis on ICZM is accentuated within the Programme. Additonally, the ecosystem approach is required to be applied to promote sustainable use of the seas and conservation of marine ecosystems, including sea beds, estuarine and coastal areas through the promotion of integrated management of coastal zones (OJ of the EC, 2002b: Article 6). Furthermore, ICZM may serve as an important vehicle to support and back up the Sixth EAP by bringing the implementation of recommendations developed within a

thematic strategy into a wider local, regional and national context (CEC, 2006a: 215).

4.1.3 Sustainable Development Strategy (SDS)

In 2001, at the Göteborg European Council Meeting, the European Council adopted the EU Sustainable Development Strategy (SDS), which was proposed by a Commission Communication[127] entitled 'A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development'. It had been written as a commitment stemming from the Rio Declaration that was to be delivered at the Rio+10 World Summit on Sustainable Development in 2002 (CEC, 2001b: 2). It was the formulation of a long term approach for the EU's contribution to the Rio process and the Sixth EAP constituted the basis of the environment chapter of this document (Schrama and Sedlacek, 2003: 8-9). The SDS is based on the principle that the economic, social, and environmental effects of all policies should be examined in a coordinated way and taken into account in decision making (Göteborg European Council, 2001: 4). MSs are required to draw up their national sustainable development strategies (NSDS), and appropriate national consultative processes. One of the objectives of the NSDSs is to develop environmental policies that facilitate protection of the environment combined with sustainable development of resource utilisation (CEC, 2006a: 211). The horizontal preparation of the Sustainable Development Strategy will be coordinated by the General Affairs Council, and the institutions of the EU are invited to improve internal policy coordination between different sectors.

The SDS was complemented with an external dimension by the 2002 European Council in Barcelona, in view of the World Summit on Sustainable Development in Johannesburg. However, negative unsustainable trends continued to exist and new challenges have been arising. Therefore it was decided that urgent action was needed at the short term to gradually change the unsustainable consumption and production patterns in the longer term. With mainly this aim, the SDS was renewed for an enlarged EU at the European Council of June 2006. In the renewed Strategy, it is underlined that sustainable development is an overarching

[127] Communication from the Commission of 15 May 2001, COM (2001) 264

objective of the EU set out in the Treaty, governing all the Union's policies and activities (Council of the EU, 2006: 2). The aim is to move towards a better integrated approach of policy making, by setting out a more coherent SDS. Key objectives are laid down as environmental protection, social equality and cohesion, economic prosperity, and meeting the international responsibilities of the EU. Policy guiding principles are formulised as promotion and protection of fundamental rights, solidarity within and between generations, open and democratic society, involvement of citizens, involvement of business and social partners, policy coherence and governance, policy integration, use best available knowledge, precautionary principle, and polluters-pay principle (Council of the EU, 2006: 3-5). The renewed SDS stresses the need for collaboration at all levels of governance, business sector, NGOs and citizens. It also points out the need for global solidarity, and the importance of strenghtening partnership with other nations including developing nations, which will have a significant impact on global sustainable development.

The SDS is expected to improve the management and implementation of EU legislation and policies in coastal zones. The strategic approach, which is based on taking a broad overall thematic and geographic perspective by considering local differences, emphasised the need for a flexible and adaptive management for coastal areas. This approach is thus very relevant to and enhances ICZM (CEC, 2006a: 212). Furthermore, among the actions that should be taken for the conservation of biodiversity and natural resources, the SDS directly refers to the promotion of ICZM by the Commission and the MSs. Additionally, *Local Agenda 21*[128] initiatives involve participation of all stakeholders at the local level (including local governments, NGOs, the private and public sector) to formulise local specific solutions to local problems. Within this context, ICZM has the potential to positively reinforce *Local Agenda 21* initiatives (CEC, 2006a: 212).

[128] *Local Agenda 21* was formulised within the framework of Agenda 21 and it is an instrument to promote sustainable development and Agenda 21 at the local level by direct participation of local authorities. According to Agenda 21, local authorities were required to adopt a Local Agenda 21, through a dialogue with its citizens, local organisations and private enterprises (UNCED, 1992b)

4.1.4 European Spatial Development Perspective (ESDP) and the Governance White Paper

The ESDP is the outcome of an extensive discussion process, which resulted in the adoption of the ESDP in 1999, at the Potsdam Informal Council of EU Ministers responsible for Spatial Planning. During that Council, the MSs and the Commission reached an agreement on common objectives and concepts for the future development of European territory[129]. The aim of spatial development policies was determined to ensure balanced and sustainable development within the territory of the Union, by ensuring that the three fundamental goals of European Policy are achieved equally in all regions of the EU: economic and social cohesion; conservation and management of natural resources and the cultural heritage; and more balanced competitiveness of the European territory (IEEP, 1999).

The ESDP does not provide for any new responsibilities at the Community level, and is planned to serve as a policy framework for MSs, including their regional and local authorities, and the Commission in their own respective spheres of responsibility (in accordance with the principle of subsidiarity), in order to improve cooperation among the sectoral policies of the Community and the MSs that have spatial impacts,. The document lays down a set of guiding principles and a general vision for the sustainable management and development of European territory based on an integrated approach. The central point in spatial development policies is the conservation of the variety of cultural and natural resources and the avoidance of increases in regional disparities, through paying greater attention to spatial factors at an early stage of policy. Economic growth and convergence of certain economic indicators are not enough to achieve the goal of economic and social cohesion. There is the need for common objectives and concerted action for spatial development in MSs. Therefore, national development policies of the MSs and the EU necessitate clear spatially transcendent development guidelines, which are aimed to be provided by the ESDP. These spatial development guidelines include development of a polycentric and balanced urban development and strengthening partnership between urban and rural areas, promotion of integrated transport and communication concepts in order to support the polycentric development of the EU territory, and development

[129] For more, see 'http://europa.eu/scadplus/leg/en/lvb/g24401.htm'.

and conservation of the natural and the cultural heritage through wise management, to contribute to the maintenance of diversity (IEEP, 1999: 19-20).

The philosophy of the ESDP espouses a spatial and integrated approach, which also lie at the hearth of ICZM. ICZM thus contributes directly towards the goals of spatial planning by addressing a strategic part of the European territory; and integrated approach, which could be adapted readily to the needs of different landscapes. The coastal regions, with diverse natural and economic conditions, are expected to form the focus for the concentration of population and for the expansion and diversification of the economy. They consequently constitute a significant area for concern, which should be addressed by the ESDP over the coming decades (CEC, 1999a: 73).

The White Paper on Governance[130] was issued by the Commission in July 2001. The aim was to establish more democratic form of governance at all levels (global, European, national, regional and local). It forwards a set of proposals focusing on better involvement, better regulation, and the contribution the EU can make to world governance. Even though the White Paper does not refer explicitly to ICZM, its content is of high relevance to ICZM. One of the underlying philosophies of ICZM is governance by partnership with civil society, which solely overlaps with the idea of this White Paper. Therefore the White Paper on Governance and ICZM initiatives are expected to reinforce and complement each other in the management of European coasts (CEC, 2006a: 207-208).

4.1.5 Regional Policy and the Structural and Cohesion Funds

Article 2 of the EC Treaty lays down one of the Community objectives as promoting throughout the Community a harmonious, balanced and sustainable development of economic activities. Furthermore, the Title XIV of the Treaty is about "Economic and Social Cohesion", which foresees a reduction in disparities between the development of various regions and the backwardness of the least favoured regions or islands, including rural areas (The Treaty Establishing the

[130] 'European Governance. A White Paper', 25 June 2001, COM (2001) 428

European Community, 1957: Article 2; Article 130a). The Regional Policy[131] was designed to provide Community level assistance to help the most disadvantageous regions, in order to overcome those disparities and achieve economic and social cohesion within the European territory. The Regional Policy makes use of mainly two instruments: the Structural Funds (European Regional Development Fund (ERDF)[132], European Social Fund (ESF), European Agricultural Guidance and Guarantee Fund (EAGGF), and Financial Instrument for Fisheries Guidance (FIFG)), and the Cohesion Fund[133]. The Structural and Cohesion Funds account for more than one-third of the EU's total budget. Thus such high level of expenditures has significant positive and negative impacts on the physical environment of many coastal areas in Europe. For example, the European Regional Development Fund alone has provided EUR 2 billion for only port development during 2000-2006 (IEEP, 1999: 27).

Environmental requirements were included within the 1993 revision of Structural Fund Regulations. MSs were required to analyse the state of environment in the programme area; make a prior appraisal of environmental impact of the proposed regional development plans; involve the environmental authorities in the Structural Funds decision making process; and ensure that the EU policy and law on the environment are complied with. In 1994, the Cohesion Fund was established to help environment and transport projects in the poorest regions (GRPN, 2005: 14). Throughout the 1990s, the Environmental Policy of the EU evolved from a command and control approach towards a broader proactive approach based on sustainable development. Therefore environmental and sustainable development principles should be integrated into other sectors, particularly to the principle economic sectors. In a published Communication of the Commission on Cohesion Policy and the

[131] The Regional Policy is also known as the Cohesion Policy, which is used interchangeably in the text.

[132] As to note, being established within the framework of the ERDF, the *INTERREG Programme* of the EU, which offers a framework and funding opportunities to address cross-border and trans-national issues, has given rise to a substantial number of interregional projects on coastal zone management (including Safecoast, Corepoint, CoPraNet etc) (Dronkers, 2006).

[133] For more, see 'http://europa.eu/scadplus/leg/en/lvb/l60014.htm'.

Environment[134], the complementary character of environment and regional development was emphasised, and the role of the Cohesion Policy in coping with environmental problems was pointed out. It is obvious that the environment is perceived as an internal element of regional development and Cohesion Policy. For the effective implementation of numerous examples of EU Directives (especially those concerned with land use planning, pollution prevention and natural protection), there exist a large volume of co-financed expenditure supplied by the Structural Funds (CEC, 1998b). Therefore the Structural Funds are of high relevance in fulfilling the environmental objectives stemming from the EU legislation, most of which are strongly relevant for the effective implementation of ICZM process as well. Moreover, the requirement for integrated programming and regional partnerships in the Structural Funds Regulations help to reinforce the key elements of ICZM (IEEP, 1999: 27).

However, of all EU policies the implementation of the Structural and the Cohesion Policy is the most decentralised, and therefore it is not possible to generalise their impact on coastal zones. Often, the opportunities to use EU co-finance in an integrated and sustainable way are not adequately benefited, and the screening process was also not affectively implemented. Therefore there are many examples of insensitive use of Structural Funds in coastal areas. For example, in the Ria de Aveiro Demonstration Project area the ERDF finance has contributed to the construction of hard coastal defences to mitigate beach erosion, which has simply displaced the problem further along the coast and deteriorated the existing situation. However, there exist also many examples of Structural Fund supports which contributed for example to water and waste treatment facilities in an appropriate way (IEEP, 1999: 27). As a result of the DP on ICZM, it was concluded that the Structural Funds has the most potential for advancing ICZM. Main reasons are the strengthened requirement that the MSs develop integrated regional development plans that bring together several measures to decline industrial, urban, rural and fisheries dependent areas; the reinforced requirement that the Structural Funds contribute to sustainable development; the statement that plans will be evaluated with

[134] Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee, and the Committee of the Regions of 22 November 1995, COM (95) 509

reference to compatibility with Community policies, and requirements for ex-ante environmental evaluation of the concerned region (CEC, 1999a: 72).

Agenda 2000 Reform Process (2000-2006) covered the Structural Funds as well. The general aim was to increase the effectiveness of the Structural and the Cohesion Funds. Besides others, the strengthening of the integration of the environmental dimension into the Structural Funds process to promote sustainable development was one of the dimensions of the reform process. The MSs are required to make environmental sustainability a horizontal theme in the programmes' preparation, content, monitoring, evaluation and information and comply with Environmental Impact Assessment procedure at project level. As a part of the Community's reform on Structural Policy, the Cohesion Fund remains to be an instrument to cover environment and transport infrastructure. A more strategic approach and an increased coordination with other Community instruments were foreseen for a greater success of the Cohesion Fund. The application of polluter pays principle was also incorporated into the system. For this period, there was an exemption from the application of the Strategic Environmental Assessment (SEA) Directive[135], which came into force in 21 July 2004, for Structural Funds Plans and Programmes. Instead, the former method of ex-ante evaluation of environmental impacts of these plans prevailed for that period (GRPN, 2006: 1).

In 2006 the new round for the Structural and Cohesion Funds Operational Programmes was started. This new period will cover the period 2007-2013. From now on, many of the Operational Programmes under the Structural and Cohesion Funds will be subject to the SEA. That is expected to strengthen the environmental dimension of the Cohesion Policy, with the potential of remedying some of the problems mentioned at the outset. Furthermore, the Community Strategic Guidelines for Cohesion (SGC) (2007-2013) were established with the aim of strengthening the synergies between environmental protection and growth. The SGC focuses on investment in infrastructure to comply with Community environmental legislation in the fields of water, waste, air and nature. Investment in sustainable energy and transport is also promoted. In order to mitigate the potential negative impacts of the Cohesion Policy, the EIA and SEA can be made use of to prevent potentially damaging projects to be funded through these funds (CEC, 2006a: 209). As of 2007,

[135] For more information on the SEA Directive, see infra p. 131.

as regards to direct support towards the implementation of ICZM the Cohesion Policy will be a major contributor by means of the Cooperation objective and the Regions for Economic Change[136] initiative, which includes coastal management among its themes, as well as the European Fisheries Fund (CEC, 2007: 10).

4.1.6 Future Maritime Policy

The European Commission issued a Green Paper for a future EU Maritime Policy[137] in July 2006. This Green Paper was the first step towards the establishment of an all embracing EU maritime policy. The maritime policy is designed to combine the fragmented sectoral uses (maritime transport, industry, coastal regions, offshore energy, fisheries, marine environment, socio-economic cohesion etc.) in marine areas under the framework of a single united policy (CEC, 2006b). Therefore it is based on a holistic approach and will bring all important elements together and forge a vision on how to manage these separate issues jointly. The Green Paper acknowledges that 80% of the ocean pollution results from land-based human activities; it shows a clear link between marine and terrestrial environments, and therefore the coastal zones. The maritime policy is aimed at embracing the whole range of activities which are taking place on the coast. Therefore the need for integrated coastal management and development is recognised (EEA, 2006: 80). The Green Paper points out that the coherence of EU policies affecting the coastal zones and the vertical integration among various levels of governance are a prerequisite for the success of ICZM. Given the interactions across the land/sea interface, it is considered that an overall EU maritime policy has a major stake in the success of ICZM (CEC, 2006b: 29).

4.1.7 Common Agricultural Policy (CAP)

Agriculture creates pressures on the environment, as well as plays an important role in the maintenance of many cultural landscapes and semi-natural habitats (Baldock *et. al.*, 2002: 4). Amongst the EU sectoral policies, the CAP of the

[136] Communication from the Commission 'Regions for Economic Change' of 8 November 2006, COM (2006) 675 and SEC (2006) 1432

[137] Green Paper 'Towards a future Maritime policy fort he Union: A European Vision fort he Oceans and Seas of 07/06/2006, COM (2006) 275

EU has been the one with the largest damaging impact on the physical environment in the DP demonstration project areas (IEEP, 1999: 18). The key factor for this damage is laid down as the high support prices offered under the principal CAP, which has encouraged many farmers towards over-production for years. This led to an over-application of pesticides, excessive use of nitrogenous fertilizers, and over grazing of pastures, all of which culminated in the pollution of surface, coastal and groundwaters by pesticides, and via eutrophication. Besides these pollution problems, the loss of biodiversity, decline in important habitats and species, loss of landscape diversity, excessive abstraction of water, soil erosion are among the most prominent outcomes of intensive agricultural activities (Baldock *et. al.*, 2002: 4). In coastal areas one of the major human activities is agriculture, which has been intensified due to substantial investments in drainage and irrigation schemes within the context of the CAP in certain coastal areas over the last decade (CEC, 1999a: 63). These problems have had serious outcomes in terms of coastal biodiversity, fishing and tourism activities.

At the Berlin European Council on 26 March 1999, the EU Heads of Government concluded a political agreement on Agenda 2000. Agenda 2000 is an action programme designed to strengthen Community policies and to give the EU a new financial framework for the period 2000-2006 in order to prepare for the 2004 enlargement. It mainly composed of reforms to the CAP and the Structural Funds[138]. The CAP reform within Agenda 2000 is intended to mark a shift towards multi-functional agriculture with a greater emphasis on integrated rural development. There is a shift from production support towards more direct income payments (CEC, 1999a: 63). The overall objectives may be underlined as the desire to integrate environmental objectives into the CAP, the need to assure the safety and quality of products particularly through measures of production compatible with ecological needs, and the importance laid on agri-environmental instruments[139] aimed at contributing to sustainable development in rural zones. It established the general obligation on the MSs to introduce appropriate environmental measures for a range

[138] 'http://ec.europa.eu/agenda2000/index_en.htm'

[139] Agri-environmental schemes offer farmers voluntary multi-annual contracts where they are paid for delivering environmental goods and services which go beyond the reference level of good environmental practice in the country or region concerned. With Agenda 2000, they were integrated within the broader context of the rural development regulation (Baldock *et. al.*, 2002: 63).

of commodity regimes while leaving a wide degree of freedom as to how MSs can fulfil their obligation. This new approach, by supporting appropriate agriculture in coastal regions, is a more appropriate approach in terms of sustainable development in coastal zones (CEC, 1999a: 63). It is likely to make an important contribution to the more sustainable development of agricultural coastal areas, for principally the following reasons: (1) Phased cuts in support prices for cereals, oilseed, beef and dairy products are expected to result in reductions in the application of fertilizers and pesticides which in turn will reduce eutrophication and pollution in coastal waters; (2) Environmental conditions are attached to all direct payments to farmers; (3) Under the Rural Development Regulation (RDR), for the first time co-ordinated rural development programmes will apply within the EU territory; (4) Under the RDR the coverage of Less Favoured Areas[140] have been extended to cover areas where environmental restrictions apply, and the farmers will be compensated for obligations imposed by EU environmental measures (IEEP, 1999: 52). The weakest part of the CAP reform is the discretion left to the MSs over whether and how they take advantage of the new opportunities under the RDR. Therefore attention should be given to how these opportunities given by the Agenda 2000 are taken into practice by the MSs (CEC, 1999a: 63; IEEP, 1999: 52).

On June 2003 a further fundamental reform to the CAP was agreed. This reform represents a complete shift in the way the EU supports its farm sector. It introduced single farm payment for EU farmers, independent from production and it will be linked to the respect of environmental, food safety, animal and plant health and animal welfare standards, as well as the requirement to keep all farmland in good agricultural and environmental condition ("cross-compliance"). More funding will be provided to farmers for environmental, quality or animal welfare programmes by reducing direct payments for bigger farms. The reform brought about a strengthened RDR measures with more EU support to agri-environmental measures and new measures to promote the environment. With this reform of the CAP, rural development is playing an increasingly important role in helping rural areas to meet

[140] Less Favoured Areas within the context of CAP refers to the areas where production conditions are difficult and farmers have received support payments under the CAP for more than 25 years. The LFA designations are made in recognition of socio-economic and physical characteristics across the regions and they are aimed to the continuation of farming in certain specified less favoured areas to maintain a minimum population level in the areas concerned and to conserve the country side (The Scottish Parliament - the Information Centre (2001: 1-2).

the economic, social and environmental challenges of the 21st century[141]. This reform made the CAP more in line with the principles of environmental integration and sustainable development, which in turn will have repercussions in coastal zones in terms of their sustainable and wise management.

4.1.8 Common Fisheries Policy (CFP)

There are two main issues in terms of the relationship between the CFP and ICZM. The first one is the open access to fisheries which has led to overcapitalisation, overfishing, depletion of resources, and ultimately socioeconomic difficulties for fishing communities; and the second one is the loss of fish habitats and deterioration of water quality caused by environmental pressures from other sectors (CEC, 1999a: 68). Originally, one of the central aims of the CFP is the conservation of fish stocks; and the issue of sustainability has been one of the core principles of the CFP. Conservation policies were based on regulating the quantities of fish caught through a system of Total Allowable Catches (TAC). The amount of TAC is set annually by the EU, for each different fish stock. MSs have been allocated a share of the maximum quota on a fixed percentage basis. This share is based on several factors including countries' past track. This system is called "relative stability", which means that each MSs tries to retain its position in fishing industry relative to others. One central issue within the CFP is undermined via this policy, open access to all community waters. The system is also criticized that the decisions on countries' share are determined largely by political bargaining between MSs, and the CFP is said to be "a politico-economic mechanism that subdivided a resource between MSs" (Wright (2000) quoted in Northern Ireland Assembly, 2001: 5). Furthermore the system of quotas is expected to only be a proper tool for conservation, if the fish stocks are not mixed. However, the fisheries within the EU are mixed. That means if the quota for one fish stock is reached, fishing will continue unless the quota for any other fish stock is reached as well. Therefore, this measure cannot avoid the illegal fishing (Northern Ireland Assembly, 2001: 4). Obviously, the conservation measures of the CFP were not adequately designed to ensure the sustainability of fish stocks, which was the central aim of the Policy. This argument

[141] For more, see 'http://ec.europa.eu/agriculture/capreform/index_en.htm'

was fully supported by the demonstration projects on ICZM, which showed that the current applications under the CFP do not fully support sustainable fishing (CEC, 1999a: 69).

Because of these deficiencies and several others, it was a common view that the CFP need to be reformed. The first package of reform measures, which has been the outcome of a consultation process led by the Commission since 1998, was approved by the Council of Fisheries Ministers in 2002[142]. The objective of the new policy is to "ensure exploitation of living aquatic resources that provides sustainable economic, environmental and social conditions" (OJ of the EC, 2002c: Article 2). It is also mentioned that the Community should apply the precautionary principle to provide for the sustainable exploitation of fisheries resources and minimise the impact of fishing activities on marine ecosystem. One major policy area within the CFP reform is strengthening and improving conservation policy. A multi-annual, multi-species, and ecosystem oriented management regime is foreseen, by taking stronger technical measures and monitoring of the agreed policies to achieve sustainable development (Northern Ireland Assembly, 2001: 9). The Community measures include adopting recovery plans for fisheries stocks which are outside safe biological limits; adopting management plans to maintain stocks within biological limits; establishing targets for sustainable exploitation of stocks; limiting catches and fishing efforts; and adopting technical measures. The former application of the 6 to 12 mile zone, which reserves access for small scale fisheries, is maintained in this reform. The aim is laid down as to protect fisheries resources within this zone and to protect the fishing activities of coastal communities which are dependent on fisheries. This regime entered into force on 1 January 2003 and will be applicable until the end of 2012.

Since the EU subscribes to the FAO Code of Conduct for Responsible Fisheries, there is the obligation emerging from the Code of Conduct's Article 10 to integrate fisheries into coastal zone management. Within this framework the EU has the responsibility to establish procedures and mechanisms to settle conflicts between fisheries resource users and other stakeholders at the coastal zone (CEC, 1999a: 69). Although there is no such reference for a particular collaboration mechanism

[142] Council Regulation (EC) No 2371/2002 of 20 December 2002 on the Conservation and Sustainabe Exploitation of Fisheries Resources under the Common Fisheries Policy.

between those parties, the CFP Reform mentions among the principles of good governance, consistency with other Community policies, in particular with environmental, social, regional, development, health and consumer protection policies (OJ of the EC, 2002c: Article 2). It can be stated that the reform process has brought the CFP to a state much more consistent with the idea of ICZM, both in terms of its objectives, principles and technical measures.

4.1.9 Transport Policy

One of the central policy objectives of the EU's Transport Policy is to promote environmental friendly modes of transport and their effective integration in multi-modal transport chains and networks. Short sea shipping, or namely intra-European shipping, is one of the methods to be used achieving this objective. It has several advantages over other modes of transport, such as more efficient energy use and less impact on environment (IEEP, 1999: 34). Therefore it has the capacity to keep pace with the growth of road transport throughout Europe. The *Trans-European Transport Networks*[143] (TEN-T) constitute one fundamental issue within the Transport Policy. However, the TEN-T Programme has been criticised in terms of its insufficient emphasis to support for the development of transport modes that are compatible with the idea of ICZM, like short sea shipping. It is further criticized that the EU could be more sensitive in identifying road networks within TEN-T, through considering development pressures generated by these networks on coastal regions. Some opportunities to make EU transport policy more compatible with ICZM may be summarised as follows (CEC, 1999a: 64):

- Supporting creation of new mechanisms for managing non-infrastructure aspects of transport planning and non-commercial aspects;
- Promotion of less pollution modes of transport;
- Limitation to development of ports in important wetlands

[143] The TEN-T policy is designed to allow the mobility of goods and persons within the whole territory of the Community with high quality infrastructure. It combines all modes of transport infrastructures (roads, railways, waterways, ports, airports, navigation aids etc.), together with the services necessary for the operation of these infrastructures For more information, see 'http://europa.eu/scadplus/leg/en/lvb/l24094.htm'.

4.1.10 Sustainable Tourism Policy

Currently, there exists no common EU policy in the field of tourism. However, since the 1980s, the strategic importance of tourism sector in terms of job creation and economic development was recognised within the EU. By the turn of the 20th century, matters of sustainability with their relevance to tourism sector became to be recognised widely within the EU. In its Resolution of 21 May 2002, the Council has outlined a vision for European tourism including aspects of sustainability. Similarly, several Commission Communications were produced within this context. The Commission Communication of 2003 'Basic Orientations for the sustainability of European Tourism'[144] outlines the challenges and objectives of sustainable tourism, and specifically refers to the EU Recommendation on ICZM, underlining the particular relevance of ICZM for tourism activities in Europe (CEC, 2006a: 212). Tourism is considered as a sector with a potential to contribute to sustainable coastal development. It may offer opportunities to diversify the economy in regions where the traditional management activities are declining, and contribute to the good management practices in areas where neglect could have negative environmental consequences (CEC, 1999a: 73-74). In 2004, a Tourism Sustainability Group was established to advice on actions promoted by the EU. However, tourism still remains mainly a MSs competence. Therefore, the EU will rely on a broad range of other Community instruments to promote sustainable tourism at the local and regional level. ICZM is considered to be one of the strongest instruments to achieve sustainable tourism. Within this context, tourism policy and ICZM is expected to go perfectly hand in hand with each other (CEC, 2006a: 213).

4.2 Legal Frameworks

Although there is no specific EU legislation for ICZM, numerous Community laws are already affecting the management of coastal zones, because they are designed to regulate activities that arise or have an impact on coastal zones. This section is devoted to analyse those legislation.

[144] Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee, and the Committee of the Regions of 21 November 2003, COM (2003) 716

Since all environmental media are represented in the coastal zone, most sectoral legislation on environmental quality may have some relevance to ICZM. However, the most directly influential legal instruments on the physical environment of coastal zones can be marked as those focused on water quality. Examples of EU Directives which are related to water quality management are demonstrated in Figure 3 below. The early approach in issuing legislation was generally on a sectorally oriented basis. Environmental damage and pollution was treated as isolated issues from other sectors and the early legislation on water quality inhered such a sectoral character. However, especially from the 1990s onwards, the interdependency among sectoral activities and their mutual interaction has become to be recognised. Particularly with the embracement of environmental policy integration as a EU wide objective, the legislations issued throughout the 1990s and 2000s exhibit an integrated and cross-cutting character. The aim of such integrated legislation is to transfer issues horizontally from a narrow sector to an inter-sectoral perspective. Similarly, most of the earlier legislation has also been revised later, based on a more holistic management planning approach. These integrated policies and legislation are expected to have crucial impact on the management of coastal zones, since coastal issues are of an inter-sectoral character. Furthermore, they do reflect some fundamental principles that are crucial to the concept of ICZM, such as the ecosystem based management approach, spatial planning and public participation. Major examples of such legislation are also demonstrated in Figure 3 below. Such integration objectives are to make their mark on coastal zone management, especially in the context of the territorial cohesion objective of the EU (EEA, 2006: 78).

The examples of water quality legislation analysed in this section include the Bathing Water Directive, Dangerous Substances Directive, Shellfish Waters Directive, Urban Waste Water Treatment Directive and Nitrates Directive. Whereas the examples of integrated legislation included in this section are the Birds and Habitats Directives, EIA Directive, Directive on Freedom of Access to Information on the Environment, Integrated Pollution Prevention and Control Directive, Water Framework Directive, Strategic Environmental Assessment Directive, Directive on Public Access to Environmental Information, Directive Providing for Public Participation in Respect of the Drawing up of Certain Plans and Programmes Relating to the Environment and Proposed Marine Strategy Directive.

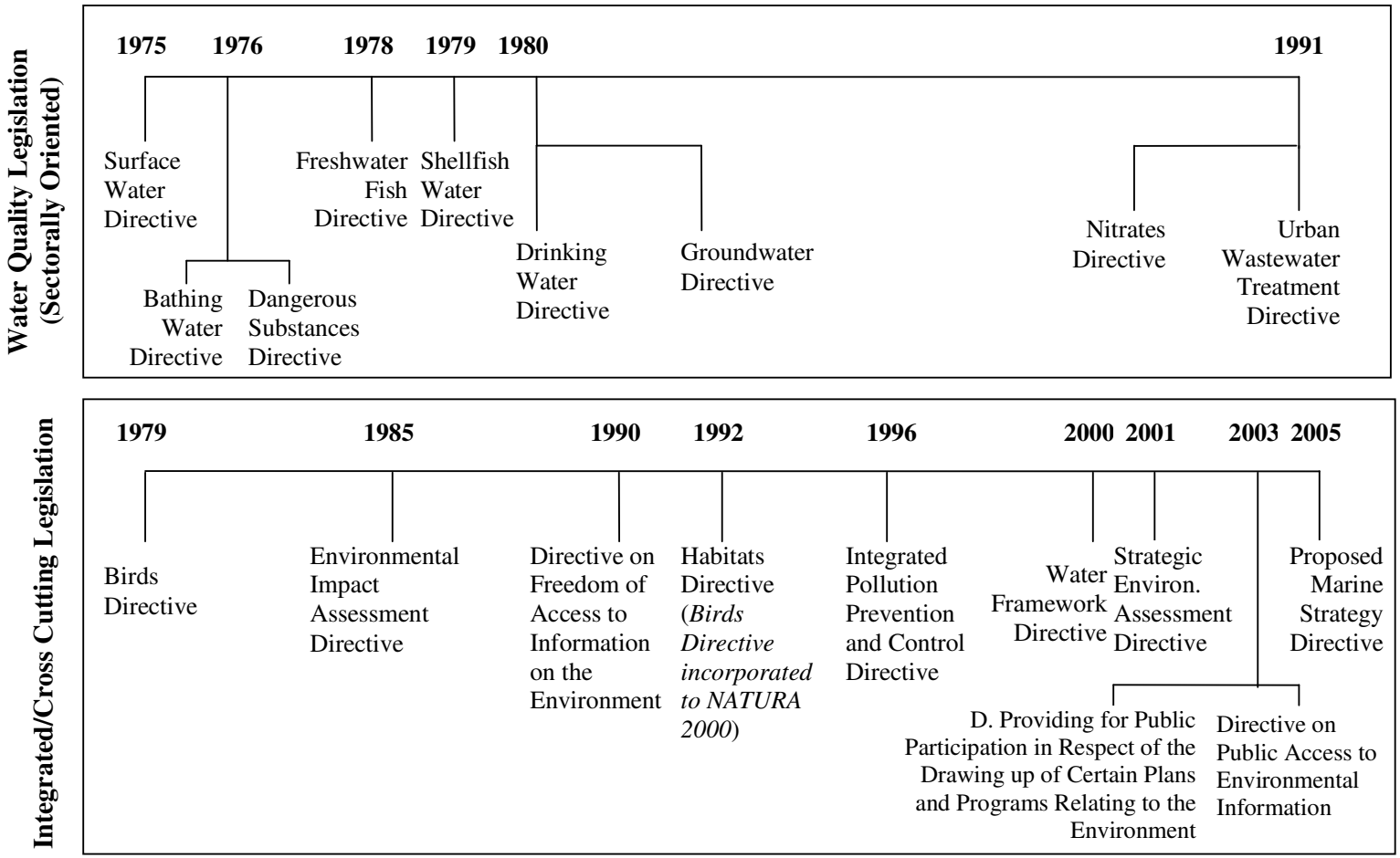

Figure 3: Examples of EU Sectoral and Integrated Legislation Having an Effect on Water and Coastal Zones

4.2.1 Bathing Water Directive

Being one of the earliest pieces of environmental legislation of the EU, the Council Directive Concerning the Quality of Bathing Water[145] was originally designed for the benefit of public health rather than to protect the environment (Gibson, 1999: 53). It was concerned with water quality and set quality requirements for bathing water, composed of 19 parameters (microbiological, physico-chemical and others), and mandatory and guide values were determined for them. MSs should be in compliance with those mandatory values in terms of their bathing water quality, and also should make an effort to reach the guide values. Within two years of notification of this Directive, MSs should have accomplished the laws and regulations to achieve the required standards, and report it to the Commission. However, this Directive has lacked effective implementation due to enforcement problems mainly (Gibson, 1999: 53). It was also limited by the technical and social knowledge of the time it was issued. To make it up to date and more efficient, in October 2002, the Commission issued the proposal for a revised version of it. The new Directive[146], adopted in February 2006, brings much severe health standards and applies for any elements of surface water, where the authority has not imposed a permanent bathing prohibition. It requires the MSs that they draw up a management plan for each site, based on an assessment of sources of contamination. The MSs are required to monitor their bathing waters according to the terms outlined in the Directive, and carry out bathing water quality assessment. In the light of these assessments, they should subdivide their bathing waters as being "poor", "sufficient", "good", or "excellent". At the end of the year 2015, the classification should be completed, and all bathing waters should have reached at least the "sufficient" standard. Public involvement is a major part of this new Directive (in compliance with the Aarhus Convention)[147]. Information on a bathing site's quality classification, the results of water quality monitoring, the site's management plan, a notice whenever bathing is prohibited or advised against and other relevant information should be made readily available to the public, both through displays at

[145] Council Directive 76/160/EEC of 8 December 1975

[146] Directive 2006/7/EC of the European Parliament and the Council of 15 February 2006

[147] For additional information on the Aarhus Convention, see infra p. 130.

the site and through the media and internet. To comply with this Directive, the MSs should take the necessary steps (laws, regulations and administrative provisions), by 24 March 2008. The Directive 76/160/EEC will be repealed and replaced by the end of 2014 by the new Directive.

4.2.2 Dangerous Substances Directive

The Directive[148] on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community, issued in 1976, is also amongst the earlier environmental legislation. The aim of the Directive is to create a general framework for the control of discharges of dangerous substances into Community waters, including inland surface waters, territorial, internal coastal waters, and ground waters (Gibson, 1999: 53). MSs are required to take the necessary steps to eliminate pollution of waters by the dangerous substances categorised under List 1, and to reduce pollution for the substances grouped in List 2. Prior authorisation is required for the discharge of the substances in List 1 and List 2, emission standards should be laid down and authorisation may only be granted for a limited period (OJ of the EC, 1976b: Article 2-6). Through time, five Daughter Directives[149], which set specific values and quality objectives for 18 List I substances, have been issued. Later, this Directive has been integrated into the Water Framework Directive and repealed once the relevant provisions of the latter have been fully implemented.

4.2.3 Shellfish Waters Directive

The Directive[150] on the quality required of shellfish waters, issued in 1979, was concerned to the quality of shellfish waters and applied to the coastal and brackish waters designated by the MSs which need protection or improvement with an aim of supporting the shellfish life (OJ of the EC, 1979b: Article 1). MSs were

[148] Council Directive of 76/464/EEC of 4May 1976

[149] For detailed information about the Daughter Directives, see 'http://ec.europa.eu/environment/water/water-dangersub/spec_directives.htm'.

[150] Council Directive 79/923/EEC of 30 October 1979

obliged to establish pollution reduction programmes to comply with the water quality parameters set in the Directive. The Directive was mainly concerned with increasing the quality of shellfish products, but at the same time it had public health and environmental goals (Gibson, 1999: 54). The Directive will be repealed by the Water Framework Directive (WFD) in 2013.

4.2.4 Urban Waste Water Treatment Directive

The Urban Waste Water Treatment Directive[151] concerns "the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors" and the objective is "to protect the environment from the adverse effects of the abovementioned waste water discharges" (OJ of the EC, 1991a: Article 1). MSs shall ensure that all agglomerations with a population over 2000 are provided with sewerage systems no later than 31 December 2005. It requires MSs to draw up lists of sensitive and less sensitive areas which receive the treated waters, and update them regularly. The treatment of urban water is to be varied according to sensitivity of receiving waters. More stringent tertiary treatment is required for discharges into sensitive areas, and a lower level treatment is permitted for less sensitive waters (Gibson, 1999: 54). MSs should set up national programmes for the implementation of this Directive and will present these to the Commission. Later, there was an amendment to this Directive (Commission Directive 98/15/EC of 27 February 1998 amending Council Directive 91/271/EEC with respect to certain requirements established in Annex I thereof), which clarifies the rules regarding discharges from urban waste water treatment plants to put an end to differences in interpretation by the MSs.

4.2.5 Nitrates Directive

The Nitrates Directive[152] concerns the protection of waters against pollution caused by nitrates from agricultural sources. The MSs are obliged to identify waters affected by pollution and waters which could be affected by pollution; and designate

[151] Council Directive 91/271/EEC of 21 May 1991

[152] Council Directive 91/676/EEC of 12 December 1991

the land which drain into them as vulnerable zones (OJ of the EC, 1991b). MSs must establish codes of good agricultural practice to be implemented voluntarily by farmers. Furthermore, the MSs are also required to establish and implement action programmes, either covering all designated areas as vulnerable zones within their territory or for a particular vulnerable zone. The action programmes should consider available scientific and technical data, and the specific environmental conditions of the area in question. They should include measures to regulate the application and storage of fertilisers containing nitrogen, which are outlined in Annex III of the Directive. The MSs may take additional measures, and they should monitor water quality to measure the nitrogen compound content.

4.2.6 Integrated Pollution Prevention and Control Directive

As it is claimed by Gibson (1999: 54), the Integrated Pollution Prevention and Control Directive[153] was adopted to introduce an integrated regulatory approach for the protection of the environment as a whole. It lays down measures designed to prevent or reduce emissions in the air, water and land from the industrial activities listed in Annex I, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole (OJ of the EC, 1996: Article 1). It sets common rules for permitting and installing industrial installations. The activities listed in Annex I are required to get a permit from relevant authorities in MSs. The authorities must also ensure that all the necessary measures are taken to combat pollution, particularly trough the use of the best available techniques (BAT)[154]; no significant pollution is caused; waste production is avoided and the produced waste is recovered or disposed of with minimum impact on the environment; energy is used in an efficient way; measures are taken to minimise the possibility of accidents and limit their consequences; and finally necessary measures are taken when the activities come to an end to avoid any pollution and to return the site of activity to a satisfactory environmental state. Based on the BAT, the permits must include emission limit values for pollutants having regard to their nature and

[153] Council Directive 96/61/EC of 24 September 1996

[154] BAT (Best Available Technique) is defined in the Directive as the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values.

potential for transboundary affects. If necessary, appropriate requirements should be included for the protection of soil and groundwater, and measures for waste management. An integrated approach should be employed to issuing permits to ensure that the conditions of, and procedure for the grant of, the permit are fully coordinated where more than one competent authority is involved. New installations, and existing installations which are subject to "substantial changes", have been required to meet the requirements of the Directive since 30 October 1999, and other existing installations must be brought into compliance by 30 October 2007.

The Directive also ensures that the permit procedure is to satisfy specific requirements for the public to get informed and involved in the decision making process, through having access to applications for permits, permits, results of monitoring releases, and an inventory of the principal emissions and sources responsible. Within this framework, the European Pollutant Emission Register is established and emission data for major industrial activities are made accessible in a public register[155].

4.2.7 Water Framework Directive

The Directive[156] Establishing a Framework for Community Action in the Field of Water Policy is among the EU legislation which is expected to have very significant impacts on the coast (Ledoux *et.al.*, 2005: 8). The Water Framework Directive (WFD) emerged from the necessity to develop an integrated Community policy on water. It lays down an overall framework for action and coordinates and integrates the overall principles for protection and sustainable use of water, in accordance with the principle of subsidiarity, preventive action and the precautionary principle. The purpose of the Directive is to "establish a framework for the protection of inland surface water, transitional waters, coastal waters, and groundwater" (OJ of the EC, 2000: Article 1). The Framework, which is established by this Directive, is expected to prevent further deterioration and protects and enhances the status of aquatic ecosystems; promotes sustainable water use based on a long term perspective; will make use of specific measures for the progressive reduction of

[155] 'http://ec.europa.eu/environment/ippc/eper/index.htm'

[156] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000

discharges, emissions and losses of substances; and ensures the progressive reduction of pollution of groundwater and prevents further pollution. The WFD integrates previously existing water legislation (seven Directives[157] will be repealed by this Directive), update existing water directives, and strengthens existing legal obligations (Ledoux *et.al.*, 2005: 8).

The WFD recognizes the interdependence of ecological systems. According to the Directive, water management will be based on the natural unit of '*river basin'*, which has become the main natural and geographical unit for management of all water bodies across Europe. The MSs have to identify all the river basins within their territories, and assign them to particular river basin districts, into which nearest groundwater and nearest coastal waters will be assigned as well. MSs should assign competent authorities for each river basin district, by 22 December 2003 at the latest. Within nine years following the date of entry into force of the WFD, River Basin Management Plans (RBMP) should be established for each river basin district. The Directive specifies the measures that should be included within the RBMP for surface waters, groundwater and for protected areas. The overall aim of the RBMP is to achieve a "good status", which is defined in terms of ecological and physical standards, at the latest 15 years after the date of entry into force of the Directive (OJ of the EC, 2000). These requirements will also apply to estuaries and coastal waters up to one nautical mile from the baseline of the territorial sea. As it is noted by Gibson (1999: 55), that is the point of the Directive which makes it significant for ICZM. Although it does not target coastal zones specifically, besides covering coastal water quality in its objective for good quality status, it also provides a good example of integrated catchment management, addressing the issue of diffuse pollution of coastal waters (Ledoux *et al.*, 2005: 10). The WFD together with the EU ICZM Recommendation may provide opportunities for coupling coastal zone management with catchment basin management. Such freshwater-marine system coupling may in turn be affective in lowering pollutant loads and improve conditions in estuaries (CEC, 2006a: 199). Public participation is another core point in the WFD. The draft RBMPs are required to be published and open for comment in order to allow active involvement and consultation.

[157] The Directives 75/440/EEC; 77/795/EEC; 79/869/EEC will be repealed seven years after, and the Directives 78/659/EC; 79/923/EEC; 80/68/EEC; and 76/464/EEC will be repealed thirteen years after the entry into force of the Directive.

The WFD is viewed as one of the most significant EU policies or legislation in facilitating ICZM. The Directive is viewed by the Commission as part of the mechanism within which to adopt ICZM (Canney, 2007). It is expected to provide for continued dialogue and for the development of strategies towards a further integration of other policy areas. In order to establish an effective integrated management scheme of marine and coastal systems over the long term, even larger scale integrated management initiatives should be established. Within this context continuing coordination of the WFD with the future Marine Strategy and creation of the legal grounds for catchment-coastal continuum are required. This represents a further step towards the sustainable management of the coastal zone (CEC, 2006a: 1999).

4.2.8 Proposed Marine Strategy Directive

The Commission Communication on the European Marine Strategy[158] and the related Proposal for the Marine Strategy Directive[159] were issued to achieve the overall objective of protecting and restoring Europe's oceans and seas and to ensure that the human activities are carried out in a sustainable manner. The fundamental principles of the Directive are as follows (EEA, 2006a: 79):

- a dual/EU regional planning approach
- an ecosystem based approach for the integrated planning of marine resources and coastal systems
- knowledge-based policy making
- a cooperative approach

Within the framework of the Directive, the area of concern is the European marine waters. European Marine Regions and sub-regions will be established as management units for implementation, by promoting an ecosystem approach and facilitating spatial monitoring and assessment programmes. In respect of each Marine

[158] Communication from the Commission to the Council and the European Parliament 'Thematic Strategy on the Protection and Conservation of the Marine Environment' of 24 October 2005, COM (2005) 504

[159] 'Proposal for a Directive of the European Parliament and of the Council establishing a Framework for the Community Action in the field of Marine Environmental Policy (Marine Strategy Directive)' of 24 October 2005, COM (2005) 505

Region, MSs will be required to establish of a framework for the development of Marine Strategies designed to achieve "good environmental status" in the marine environment, by the year 2021 at the latest (CEC, 2005: 14). Those Marine Strategies will contain a detailed assessment of the state of the environment and a definition of "good environmental status" at regional level. MSs will also be required to establish environmental targets and monitoring programmes with the Marine Strategies. Where it will be impossible for a MS to achieve the environmental targets, special areas and situations should be identified to make use of specific measures tailored for their particular context (CEC, 2006a: 197).

Via this Marine Strategy, it is planned to establish a framework for enhanced co-operation. It is consistent with the WFD, which requires the establishment of RBMPs, for which the first review will take place in 2021 as well. For the development of ICZM strategies, the Marine Strategy Directive can be supportive by giving guidance and setting standards at national and regional levels, as well as for regional planning as a whole. The area of concern in the Marine Strategy Directive is partially covering the target area of ICZM, with overlapping objectives. At the coast/land interface, ICZM may serve as the link to transfer the key issues into a wider coastal-terrestrial management process (CEC, 2006a: 198).

4.2.9 Birds and Habitats Directives and NATURA 2000

The Directive[160] on the Conservation of Wild Birds (Birds Directive), which was adopted in 1979, relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the MSs and covers the protection, management, and control of these species by laying down rules for their exploitation (OJ of the EC, 1979a). MSs are required to take the requisite measures to preserve, maintain, or reestablish a sufficient diversity and area of habitats for all the species of birds listed in Annex 1 of the Directive. The measures should include creation of protected areas, upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, reestablishment of destroyed biotopes, and creation of biotopes. The species mentioned in Annex I must be protected under special conservation measures concerning their habitat. MSs are

[160] Council Directive 79/409/EEC of 2 April 1979

required to classify the most suitable territories in number and size as *Special Protected Areas* (SPAs) for the conservation of these species, by taking into account their protection requirements in the geographical land and sea area. It must be ensured that the SPAs are not degraded, polluted or otherwise disturbed. The establishment of SPAs is the central issue in the philosophy of this Directive, and since 1979 the Directive identifies a priority list over 170 birds (Ledoux *et. al.*, 2005: 11). The Directive also assigns measures for regularly occurring migratory species not listed in Annex I. To this end, MSs should pay particular attention to wetlands, and particularly to wetlands of international importance. MSs must report the Commission every three years on the implementation of national provisions.

The Birds Directive provides the legal basis for the protection of coastal ecosystems, and ICZM supports the up-take of specific measures in line with the Birds Directive within local coastal management plans (EEA, 2006: 78; CEC, 2006a: 201).

The European Union signed the *UN Convention on Biological Diversity* in 1992, and obliged under Article 6 to draw up a strategy to predict, prevent and tackle at source biodiversity loss. Together with the Birds Directive, the Directive[161] on the Conservation of Habitats and of Wild Fauna and Flora (Habitats Directive) are the two most important planks of EU biodiversity policy (Ledoux *et al.*, 2005: 11). The overall aim of this Directive is to promote the maintenance of biodiversity, which is a contribution to the general objective of sustainable development. It contributes towards ensuring biodiversity through the conservation of natural habitats and of wild flora and fauna in the territories of MSs. It also aims at maintaining or restoring at favourable conservation status, natural habitats and species of wild fauna and flora, by taking into account economic, social and cultural requirements and regional and local characteristics (OJ of the EC, 1992b: Article 2). The Directive remedies some of the deficiencies of the Birds Directive and extends many of the protection mechanisms under the Birds Directive to other species and habitat types (Ledux *et. al.*, 2005: 11; Gibson, 1999: 57). MSs are required to designate sites as *Specific Areas of Conservation* (SACs), composed of sites hosting the natural habitat types in Annex I and of species in Annex II of the Directive. A coherent European ecological network of SACs should be established under the title '*Natura 2000'*. The aim is to

[161] Council Directive 92/42/EEC of 21 May 1992

ensure a favourable conservation status within *Natura 2000 network*. The Directive was amended in 1997, by Council Directive 97/62/EC, which made a revision to the list of habitat types and species (Gibson, 1999: 57). By 2004, the MSs must have designated their SACs, which are already agreed with the Commission from the candidate list of the MSs. Although the Birds Directive is not replaced by the Habitats Directive, all SPAs designated under the former become automatically SACs under the latter. According to Article 6, MSs are required to establish the necessary conservation measures involving appropriate management plans specifically designed for the site or integrated to other development plans. A plan or project which is likely to have a significant effect on a Natura 2000 site must undergo assessment to determine whether it would damage the conservation objectives. It should be ensured that the plan in question would not have any adverse affect on the integrity of the site concerned. If the site concerned hosts a priority natural habitat or species listed in the Annexes, development may only be permitted if it is related to human health or public safety.

The Habitats Directive is of high relevance to coastal issues, since there are a significant number of habitat types listed in Annex II of the Directive located in the coastal fringe (dunes, mud flats, coastal lagoons, coastal freshwater wetlands, estuaries, reefs, sea cliffs, coastal meadows etc.). Furthermore, the Directive specifically establishes Marine Special Areas of Conservation. It is therefore being expected to have a major impact on the coast (Ledoux *et. al.*, 2005: 12).

4.2.10 Environmental Impact Assessment Directive

The Council Directive on the Assessment of the Effects of Certain Public and Private Projects on the Environment (Environmental Impact Assessment (EIA) Directive) was first introduced in 1985[162] and amended in 1997[163]. It requires the assessment of the environmental effects of certain public and private projects which are likely to have significant effects on the environment. Two types of projects are specified within this context; projects which must always have an EIA (Annex I), and projects which need an EIA if they are likely to have significant environmental

[162] Council Directive 85/337/EC of 27 June 1985

[163] Council Directive 97/11 EC of 3 March 1997

effects (Annex II). Some examples of coastal projects in Annex I are, trading ports and piers for loading and unloading connected to land and outside ports; waste water treatment plants; extraction of petroleum and natural gas for commercial purposes if the amount; pipelines for the transport of gas, oil or chemicals (certain upper limits for the capacity of these kind of projects are specified by the Directive). Examples from Annex II type of coastal projects include intensive fish farming; reclamation of land from the sea; extraction of minerals by marine or fluvial dredging; installations for hydroelectric energy production; coastal works to combat erosion and maritime works capable of altering the coast; marinas; holiday villages and hotel complexes; permanent camp sites and caravan sites (Gibson, 1999: 51). It is foreseen that the environmental impact statements should be carried out by the developer. The assessment should include a wide range of information, where the scope of information for particular projects should be determined by MSs. The MSs should ensure that any request for development consent and any information gathered should be made available to the public, and the public should be given the opportunity to express an opinion before the decision is made. The EIA Directive was amended in 1991, to bring it into line with the Convention on Environmental Impact Assessment (EIA) in a Transboundary Context (ESPOO Convention)[164], which was signed at Espoo, in 1991. With the amendment, the transboundary environmental effects have been incorporated into the existing EIA mechanism. The MSs are obliged to report each other in cases when a MS is aware that a project within its borders is likely to have significant impacts on the environment in another MSs. They should be in consultation with each other regarding the measures envisaged to reduce or eliminate these effects (OJ of the EC, 1997: Articles 7-8).

[164] Environmental treats do not respect any national boundaries. Governments have realized that it is their duty to notify and consult each other on all major projects under consideration that might have adverse environmental impact across borders, to mitigate the negative outcomes of such impacts. The ESPOO Convention is a key step to bringing together all stakeholders to prevent environmental damage before it occurs. The EC is a Party to the ESPOO Convention, which entered into force in 1997 (‘http://www.unece.org/env/eia/’). The ESPOO Convention was negotiated by the United Nations Economic Commission for Europe (UNECE), which is one of the five regional commissions of the UN, and was established to foster sustainable economic growth among its 56 member countries. Environment is one of the areas of concern, and the practical aim is to reduce pollution so as to minimise environmental damage. The UNECE have been effective in negotiating environmental Conventions. Apart from the ESPOO Convention, it also negotiated the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (AARHUS Convention) (‘http://www.unece.org/env/welcome.html’).

This Directive may be considered as a crucial tool for the application of ICZM, since its provisions regarding integration of environmental concerns into development activities, public information and consultation coincide completely with the principles of ICZM. It can be stated that EIA is a precondition within ICZM. ICZM may also place projects considered under the EIA Directive into a wider coastal management context (CEC, 2006a: 200). However, one major weakness existed in terms of the timing of the assessment. Mercadie (1999: 4) points out that one of the findings of the DP on ICZM was that EIA required for certain development projects is in general carried out after the projects have been worked out, and is usually intended to lessen the negative impacts. It was therefore necessary to carry out strategic environmental assessment to evaluate the effects of projects starting form the preparatory stage of projects.

4.2.11 Strategic Environmental Assessment Directive

The Directive[165] on the Assessment of the Effects of Certain Plans and Programmes on the Environment (the SEA Directive) was first proposed by the Commission in 1996, later amended in 1999, and issued two years later, in 2001 by the Parliament and the Council. The objective was laid down as to provide for a high level of protection of the environment, to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment (OJ of the EC, 2001: Article 1). Via this directive, the EIA process was brought one step further. The scope of environmental assessment procedure was broadened so as to include that environmental assessment is carried out of plans and programmes of public authorities at all levels of government. An environmental assessment should be carried out for all plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent of projects listed in Annexes I and II

[165] Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001

of the EIA Directive. The environmental assessment of a plan or programme must be carried out during the preparation of it and before the adoption phase. Environmental reports should be prepared in consultation with environmental authorities, which should be designated by the MSs, and should be made available to the public. The detailed arrangements for the information and consultation process with the public and the authorities are left to the MSs. If the plan or programme in question would have a possible transboundary effects, other MSs must also be incorporated into the consultation process.

The SEA Directive is an important contribution for transparent and integrated planning, as well as a measure for achieving sustainable development in a broader context. The areas provided for assessment are within the area of concern of ICZM, which takes into account of interaction among these various sectors. The underlying idea of the Directive is to take all possible effects into account. Thus, the Directive meets the objective of integrating environmental problems and all the parameters in the evaluation. Furhermore, there are synergies between this Directive and ICZM in terms of the decision making process, the information available and the assessment tools (Mercadie *et. al.*, 1999: 11). SEA and ICZM are also very similar in terms of their attempts to act before problems arise, rather than anticipating them, and adjusting plans to counteract negative impacts (CEC, 2006a: 200). However, efforts should be put to ensure that the SEA procedure does not just seperately focus on different sectors, incorporate maritime aspects as well, and variations in application by MSs should be minimised (Mercadie *et. al.*, 1999: 11).

4.2.12 Directive on Freedom of Access to Information on the Environment

The Directive[166] on Freedom of Access to Information on the Environment was adopted in 1990. Its objective is to "ensure freedom of access to, and dissemination of, information on the environment held by public authorities and to set out the basic terms and conditions on which such information should be made available" (OJ of the EC, 1990: Article 1). The information should be supplied to any person on request within two months. There are some exceptions reserved, such as

[166] Council Directive 90/313/EEC of 7 June 1990

information affecting public security, commercial, industrial or personal confidentiality, unfinished documents etc. The Directive gives the right to make judicial or administrative appeals, when a person thinks that the information request is refused unreasonably by public authorities. Gibson (1999: 52) notes that there have been several difficulties of interpretation about the identity of public authorities, the scope of environmental information, and the grounds for exemption. Furthermore, the effectiveness of appeals and the enforcement mechanisms have also been questionable in practice. However, this Directive has facilitated access to other sources of information except statutory registers.

The collaborative approach of ICZM requires the incorporation of public into decision making mechanism. The freedom of access to information on the environment may be an initial and crucial step in terms of getting the public involved in coastal matters and in the decision making process.

4.2.13 Directive on Public Access to Environmental Information

The Commission issued a report (COM/2000/400) to evaluate the applicability of the Directive 90/313/EEC. Several problems and weaknesses, which impede the effective implementation of this Directive, were laid down. Depending on the findings of that evaluation, the new Directive[167] on Public Access to Environmental Information and Repealing Council Directive 90/313 EEC was adopted in 2003. This Directive was designed to eliminate most of the weaknesses of the former Directive and extends the level of access to information set in previous one, repealing it with effect from 14 February 2005. Moreover, it was also designed as a response to and fulfil the Community obligations arising from to the UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the Aarhus Convention), which is signed by the EC in 1998. The objective of the Directive is to ensure that environmental information is progressively made available and distributed to the public. The MSs must also ensure that the lists of public authorities are publicly accessible and the right to environmental information can be effectively exercised. Information must be made available in one month at the latest after the appeal is

[167] Directive 2003/4/EC of the European Parliament and the Council of 28 January 2003

made. In order to strengthen the enforcement mechanisms, the MSs must ensure a procedure of administrative reconsideration or review, which must be carried out by an independent body established by law, when there is an applicant who thinks that his request for information is ignored or wrongly refused. The MSs must report on the experience gained on the application of this Directive (OJ of the EC, 2003a).

4.2.14 Directive Providing for Public Participation in Respect of the Drawing up of Certain Plans and Programmes Relating to the Environment

This Directive[168] providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC was also issued mainly in response to the Aarhus Convention. Adopted in 2003, this Directive is intended to contribute to the implementation of the obligations arising by the Aarhus Convention in particular by "providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and improving the public participation" and "providing for provisions on access to justice within Council Directives 85/337/EEC and 96/61/EC" (OJ of the EC, 2003b: Article 1). It should be ensured by the MSs that the public is given early and effective opportunities to participate in the preparation and modification or review of the plans or programmes required to be drawn up under the provisions listed in Annex I of the Directive. In Article 3, certain amendments are made to the EIA Directive, through which further steps are taken in terms of public information and participation measures. The aim is to broaden the information that is made available to the public, including details of the arrangements for public participation, through which their participation in the decision making process is taken for guaranteed.

The Directive improved and is expected to further improve the issue of public participation in environmental decision making process, and therefore has a high potential to contribute to the process of ICZM.

[168] Directive 2003/35/EC of the European Parliament and the Council of 26 May 2003

4.3 Evaluation

As it is made clear, the current European approach on ICZM is founded on these existing instruments and policies, which may not necessarily designed for coastal zones, but have had far ranging consequences on European coasts and their management. These policies have influenced the European coastal zones and their management in several ways, such as actual damage to the physical environment of the coast, positive contributions to environmental enhancement, deficiencies due to inadequate policy co-ordination at the EU level, insufficient scope for regional differentiation in the implementation of policies, as well as the MSs failures to fully implement those EU policies and legislation (CEC, 1999b: 79).

Policies affecting the EU coasts have not been designed and implemented in a fully integrated manner so far. This is the major challenge for the EU towards the attainment of ICZM at the EU level. If it is ensured that the EU's sectoral and other spatially-significant policies fully respect the environmental and economic needs of coastal areas and contribute to their sustainable spatial development, a significant contribution to advancing ICZM can be achieved at the EU level. This is solely a broad task to be accomplished. Therefore, one major conclusion can be drawn that horizontal and vertical integration of EU level policies is the major aspect of EU ICZM action. The existing EU policies and legislation mentioned throughout this chapter has the potential to provide a great opportunity for further enhancement of ICZM within Europe, if it is assured that the overall objectives of these policies take full account of the principles of sustainable development and environmental integration. Economic development, protection of the environment and social equity goals should be integrated into these policies and legislation in a holistic and coordinated manner. In addition to their design, the implementation of these policies in MSs is another key aspect. The administrations at the regional and local level should be decentralised to enable horizontal integration of policies and further opportunities should be sought in the design of EU policies to ensure greater consultation and participation at local level. Differential spatial impact of EU policies should be taken into consideration in the formulation and implementation of policies, including the impact of land based policies on the sea side and visa versa (CEC, 1999b: 70-71).

There is an ongoing effort to transfer issues horizontally in order to develop an inter-sectoral perspective in the design and implementation of numerous EU policies and legislation. Furthermore, most of the earlier policies and legislation have been revised to make them harmonious with the principles of sustainable development, especially from the second half of the 1990s onwards. This reform process towards an integrated policy design has naturally been of direct benefit for integrated management of the European coastal zone. There is the need for further integration of environmental aspects into sectoral policies and coordination among them, and full implementation of existing integrated policies and legislation. The European Commission stresses its devotion to ensure coherence and synergies among these EU policies and legislation that affect the coastal zone.

If looked from the other side, ICZM is contributing to several existing policy frameworks as well, towards the attainment of a more sustainable and balanced development. ICZM offers opportunities to promote the integration of river basins, coastal zones and marine regions, through the ecosystem-based management approach, and enhances cooperation with the WFD, European Marine Strategy and preparation of the European Maritime Policy. It is essential to develop ICZM strategies in close co-operation with these instruments. Another crucial aspect of ICZM is that it provides a policy tool which is directly oriented towards the management of the interface between the terrestrial and marine environment. It therefore provides a framework for linking the WFD and the proposed Marine Strategy Directive in the management of the space between the terrestrial and marine sides (CEC, 2006a: 218).

As to summarise, ICZM relates very positively to EU policy and legislation. It may help to transform many EU level policies according to the specific regional and local needs, and it can moderate changes between land, the coast and the open sea. Within a sustainable development framework and the EU's ICZM Recommendation with the national ICZM strategies, this interaction and cooperation of EU policies and legislation with the concept of ICZM has the great potential to contribute to sustainable coastal management, and create a legislative framework for the sustainable development of European coasts (EEA, 2006a: 9).

CHAPTER 5

CONCLUSION

The coastal zone is the resulting environment from the coexistence of two margins, namely the terrestrial edge of the continent and coastal waters as the littoral section of shelf seas, which together constitute a whole (EEA, 2006: 7). These two systems, together with their complex natural dynamics and reciprocal influences, generate a highly fragile functional integrity in coastal zone. This integrity constitutes the unique characteristic of the coastal zone, which has been ignored in management efforts carried out by human populations throughout decades. Considered that the coastal systems are subjected to multiple and conflicting uses and interests, the functional integrity of many coastal zones has been deteriorated through these inappropriate management efforts that lack a comprehensive understanding of coastal systems.

The heavy degradation of coastal zones around the world brought about the need for a fundamental shift in the way of policy formulation. This shift came with the idea of *sustainable development*, which found its place in international environmental policy making from the 1980s onwards. Sustainable development was formulised as an outcome of a necessity, which was originated by rapid growth and accelerated economic development of national economies since the industrial revolution. When it was recognised that the resources of the world ecosystem are not infinite, and the existing development patterns cannot be continued without adverse even catastrophic outcomes, the policy makers of the world come together to find out new solutions. The term '*sustainable*' was added in front of the term development, and the two conflicting notions of '*development*' and '*environmental protection*' have become incorporated within a single concept. Although the efficiency and

effectiveness of the idea sustainable development have been the subjects of heavy discussions among scientists, policy makers and intellectuals, there is no doubt that the new concepts and practices brought about with sustainable development, have countless positive outcomes towards a more rational use of world resources.

The idea of sustainable development culminated among others in the development of a new approach in coastal zone management, formulised as 'ICZM'. ICZM is a process which aims to protect the functional integrity of coastal zones and ensure sustainable use of coastal resources. ICZM aims to balance the needs of development with the protection of coastal environments to achieve sustainable development in coastal zones. It is considered to be a continuous and dynamic decision making process, based on the ecosystem approach and the principles of sustainable development. It tries to establish a kind of consensus among different stakeholders in the coastal zone and a coordinated policy mechanism. Chapter 17 of Agenda 21, which is the major outcome of the 1992 Rio Conference, is solely dedicated to coastal and ocean areas and explicitly called for integrated management of coastal and marine areas. From this date onwards, ICZM has been widely accepted as the most appropriate model for sustainable management of coastal zones. A large number of international initiatives have been carried out for establishing guidelines, and fostering the policy practice of ICZM.

European coastal zone is a great asset for the European nations, as well as the EU. The great majority of this valuable asset has been exposed to severe threats emanating from human activities such as industrial and urban development and mass tourism. In spite of these pressures, neither governance policies nor public concerns are yet adequate to meet holly the challenges of sustainable development across Europe. Throughout Europe there is a rapid rate of change in human activities in the terrestrial and marine components of the coast. The accelerating pace and increasing scale of change in coastal development is not matched by change within institutions, administrative and legal mechanisms, policies and plans. There has been traditional tendency towards a narrow land-based vision, which is unable to perceive coastal and sea areas as an essential part of the national and European spaces, rather than a borderline. There has been the need for radical improvement in institutional arrangements and mechanisms to enhance sustainable use of coastal resources in European nations, as well as the EU. From the 1990s onwards, ICZM has been

advocated by the EU institutions as the best practice to attain sustainable development of European coastal zones. Consequently, the institutions of the EU have been dedicated to take the leading and guiding role towards the attainment of ICZM at the Community level and among the MSs. This study elaborated on these initiatives taken by the EU, and a number of conclusions have been drowned throughout this study.

First of all, this study underlined that the Environmental Policy of the EU plays a central role in terms of EU policy making, especially from the 1990s onwards with the incorporation of sustainable development as a Community objective into Article 2 of the EC Treaty with the amendments made by the Amsterdam Treaty in 1992. Environmental policy integration, which is explicitly stated in Article 6 of the EC Treaty, has been considered as the central tool to incorporate the issues of environmental protection into other sectoral Community policies and legislation to promote sustainable development throughout the EU. The promotion of sustainable coastal development through ICZM should be considered as a tool to achieve these broader Community objectives in a particular EU territory, namely the coastal zone. Therefore despite the fact that there is not any explicit reference made to the 'coast' in the EC Treaty, the issue of integrated management and planning of the EU's coastal zones is legitimised by the fundamental EC Treaty objectives of environmental protection and sustainable development and inheres high relevance to EU policy making.

Secondly, it should be emphasized that it is great interest for the EU to take concerted action for sustainable management of European coastal zones. The need for EU action at European coasts is justified by a set of reasons: (1) A number of issues in coastal management are of a transnational concern among European nations. (2) A great majority of EU policies and actions (especially in the fields of agriculture, fisheries, environment, regional development, tourism, transport, energy, and industry) have already been affecting the functioning and development of European coastal zone and need to be coordinated and rearranged to be in consistence with the goal of sustainable costal development. (3) The EU has been an important actor in terms of environmental policy making and can play an important role in influencing activities in MSs. The European populace has great reliance on the EU in terms of protecting the Europe's environment. There is a growing public

concerns for coastal zones, accompanied by a demand for EU intervention in this field. As a result of these factors, among others, is has been widely recognised by the EU institutions that there is a need for incorporating coastal zones in future environmental policies as well as in any sustainable development policy or strategy formulated by the EU and the MSs. It is underlined that there is the need for both fully implementing the existing policy instruments and to develop new tools and policies to enhance sustainable development in coastal zones.

Thirdly, it has been highlighted that the recent EU ICZM action is based on the principles of *subsidiarity* and *proportionality*, by providing leadership and guidance to support implementation of ICZM at other levels. Therefore the EU ICZM action is not built on a strict regulatory instrument that explicitly focuses on the application of ICZM. The major underlying factor is the fact that the EU's coastal space is made up of very diverse landscapes and cultural contexts. Therefore, a high variety exists in terms of the planning and management policies and procedures, as well as institutional set up among the MSs. It is important to maintain this diversity to avoid cultural and landscape homogenisation. The priority of EU action should thus be the attainment of regional sustainable development (EEA, 2006: 9). Therefore the mechanism for ICZM which may ultimately be chosen by the EU must be sensitive to these legal variations between the MSs. It must be designed to allow for the most suitable approach to be adopted by each MSs. This hypothesis has been tested by the DP on ICZM. It has been the general view that the drafting of a Council Resolution in the form of a Code of Guidance would be the most appropriate tool because of some advantages of the voluntary approach. Considering this necessity, during the period after the DP the Commission has been promoting a flexible approach, instead of a more descriptive and rigid one, within the limits of the legal competence of the EU and the principle of subsidiarity (CEC, 1999b: 23). This is culminated in the formulation of the European ICZM Strategy, which lays down the principles for ICZM in Europe to guide MSs in their ICZM efforts. The ICZM Strategy is thus based on a more flexible approach, by giving the EU a guiding role. The ICZM Strategy is followed by a European Council and Parliament Recommendation on ICZM (EU ICZM Recommendation), which is the demonstration of the political will from the top and has been highly supportive for the process. However, there is an ongoing debate and a strong demand exists also for

a regulatory approach in some of the MS, Community bodies and intellectuals. A Framework "ICZM Directive" is thus promoted for its effectiveness, and is thought to be a better option for bringing about ICZM in Europe, but should crucially provide scope for flexibility in the approaches used in different regions (Humprey *et. al.*, 2000: 285). However, a legally binding Directive would be much harder to agree upon due to considerable, practical and political difficulties. For the time being there is not any explicitly made Community intention towards the establishment of a Framework Directive on ICZM in the foreseen future.

Fourth, it should be emphasised that the European ICZM Strategy based the EU ICZM action on existing EU policies and legislation which have direct or indirect influence on coastal zones. Within this context, the major EU contribution to advancing ICZM in Europe is envisaged to take explicit steps to ensure that the EU's sectoral policies and other spatially significant policies fully respects the environmental and economic needs of coastal zones to ensure the integrated management approach (the condition for *horizontal integration*). The design of the EU policies should incorporate the principles of sustainable development, and reflect a greater sensitivity to territorial differences. The EU policies affecting the land- and sea-ward issues should take greater account of their mutual interaction. Decentralisation to regional and local levels in the administration of EU policies should be fostered to ensure *vertical integration*.

The existing policies and legislation reflect a great potential and unique opportunity to create an integrated legislative framework to further ICZM in Europe. The EU efforts should be concentrated on realising this great potential to enhance sustainable management of coastal zones. There has been an ongoing effort to incorporate environmental concerns into sectoral policies of the EU, such as the Fifth and Sixth EAPs, the Cardiff Strategy and the EU Sustainable Development Strategy. Several reforms were made especially in the sectors of agriculture, fisheries and regional development, to make these policies more consistent with environmental protection and sustainable development goals. This process is of great benefit and a direct stimulus for the ICZM process. These efforts should be continued and strengthened at the EU level.

The WFD is considered to be one of the most important legislative instruments to stimulate integrated planning both in coastal and inland areas. The

river basin district defined in the framework of the WFD incorporates waters up to one nautical mile beyond the national baseline within the river basin management plans. This approach goes some way to minimising the current sectoral approach, which will be a great benefit for ICZM (Canney, 2007). Similarly, the proposed Marine Strategy Directive and future Maritime Policy are underlined by the Commission to give further impetus to the ICZM policy and further improve its implementation in the years to come. The Thematic Strategy on the Protection and Conservation of the Marine Environment accompanied with the proposed Marine Strategy Directive sets forth a legislative framework to achieve a good environmental status of the EU's marine environment and enhance the existing body of EU policies and legislation in the sea-side of coastal zones, which supports the implementation of ICZM. These two instruments, as well as the related work of regional seas conventions, are considered to be the key for the development of a holistic approach to the sustainable development of the EU oceans and seas, it is thus essential that ICZM strategies are developed in close cooperation and coordination with these instruments (CEC, 2007: 2-10).

In recognition of the threat to coastal zones posed by climate change and of the dangers entailed by the rise in sea level and the increasing frequency and violence of storms, the ICZM is considered by the Commission also as an important opportunity for adopting to the these issues, since it is based on a long term cross sectoral approach and take account of natural dynamics (Snoeren, 2006). Therefore, strategies to adapt the risks of climate change should be developed and implemented in full coherence with ICZM strategies and technologies dealing with specific natural hazards (CEC, 2007: 9).

In addition to policy integration to foster ICZM, the EU has a number of other functions and tools to strengthen ICZM in Europe. It may give direct financial support through Community funding instruments (mainly the Cohesion Fund) to foster ICZM action among its MSs. The Cohesion Fund will try to revitalise economies in peripheral coastal regions and it may be used as an important instrument to ensure that coastal practices move in the direction of ICZM. With the Cohesion Policy Reform, the Structural and Cohesion Funds put more emphasis on environmental standards. Structural assistance can be directed to projects that reduce coastal risks, to integrate the two aims of addressing natural hazards and promoting

spatial planning (EEA, 2006: 82). The EU is also expected to provide guidance to make the EU ICZM principles well understood and internalised by the regional and local level initiatives. The EU institutions should promote awareness, guidance, training and education to increase technical and personnel capacities in those ICZM initiatives. The EU may enhance the European dimension of ICZM on a supra-national level, based on a regional seas approach in order to provide a common European frame. This will also contribute to enhance European wide coordination and participation among stakeholders.

Finally, it must be underlined that the effort for stimulating ICZM is an ongoing and slow process in the EU. The EU ICZM Strategy invited coastal MSs and candidate countries to take national stocktaking to analyse the laws that influence the planning and management of their coastal zones, and based on the EU ICZM principles to formulise national ICZM strategies by February 2006. The results of the evaluation process showed that the implementation of ICZM highly varies among MSs (including newly developed strategies, a new phase in a longer on-going phase of ICZM implementation, or initial proposals for a coastal strategy). Most of the MSs have only adopted national ICZM Strategies in 2006, and their implementations have just recently started. The Commission accentuates that the EU ICZM Recommendation has had a positive impact in stimulating towards a more integrated management of coastal zones of Europe. At this stage, the Commission considers formulation of a new specific legal instrument as to be inefficient, as the benefits of the EU ICZM Recommendation are not fully fruited yet. Therefore the EU ICZM Recommendation will remain as the valid tool for the foreseen future.

This study accentuates the importance of the EU role in terms of initiating ICZM action within the European territory. It seems that the EU will continue on its leading role. Since the beginning of 1992 the EU has been working on this but no European legislation seems to be in sight in the near future. It can be concluded that the potentials and effectiveness of the existing flexible ICZM approach will be investigated in the coming years. It seems that one of the most disputable issues will be about this flexible non regulatory character of EU ICZM action. Voices have already been raised to point out that subsidiarity should not be a bar to action on ICZM, as it has been at the outset of EU Environmental Policy. This existing approach is mainly criticised in terms of its full dependence on MSs political will.

The EU ICZM Recomendation is one of the softest instruments that could have been chosen, raising doubts on its effectiveness at the MSs level. As it is not binding, it remains to be seen to what extent the Recommendation is implemented by MSs. The future state of the European coastal zone will be a reflection of the effectiveness of this flexible Community approach and be decisive in setting the direction of future action. Therefore, this study acknowledges the high probability of a future Community devotion towards the formulation of a new more efficient legal instrument, such as a sufficiently flexible Framework Directive for ICZM at the European level.

Turkey, as a candidate country to the EU, was also invited by the EU ICZM Recommendation to carry out national stocktaking, develop a national ICZM Strategy and report officially on the implementation of this Recommendation. There was no official reporting of Turkey to the Commission. As it was underlined by the evaluation report, there is no national ICZM strategy or anything equivalent for the time being. A legal framework for ICZM or the administrative and institutional mechanisms are not yet established in Turkey. The existing administrative and legislative system adhere a sectoral and fragmented character, lacking the appropriate coordination mechanism to achieve horizontal and vertical integration that will facilitate ICZM at the national level.

By being in the process of accession negotiations with the EU, Turkey is under the obligation of aligning its national policies in every sector that the EU has competence. In July 2003, the Government has adopted the National Programme for the Adoption of the Acquis Communautaire (NPAA) of the EU. Among others, one of the medium-term priorities of the NPAA is the integration of sustainable development principles into the definition and implementation of all other sectoral policies. Within the framework of NPAA (2007-2013), the endeavours on harmonization of environment legislation of Turkey with the EU's relevant legislation are being continued. Since there is no specific binding EU ICZM legislation, for the time being there is not an emerging obligatory act for Turkey to establish ICZM framework into the administrative and legislative system. Furthermore, in Turkey it may be considered as something of a luxury in such an environment where a large range of issues are still waiting as a challenge in the harmonisation process. However, a numerous EU legislation, which are of great

relevance to coastal issues, have already been transformed, and a number of new ones are planned to be transformed as short-term (e.g. amendments to the EIA regulation, a regulation on SEA, a regulation on integrated pollution prevention and control, a new Law on the Protection of Nature and Biological Diversity) and medium-term priorities (e.g. the Water Framework Law, ratifications of the Aarhus and the Espoo Conventions). If fully fruited, these laws and regulations will have very positive impacts towards the attainment of sustainable development and environmental protection, including the coastal zones of Turkey.

In addition to the EU, Turkey has also made global commitments via several international conferences and conventions initiated by the UN (particularly the Rio Declaration and Agenda 21) towards sustainable development in general, and towards the protection and sustainable management of its coastal zones in particular. The role of two Regional Seas Programmes of the UNEP, the MAP and the BSEP, should not be underestimated. The role of these two important international initiatives in initiating ICZM in their area of concern is expected to be growing in the near future, and as a contracting party to both, this will have important implications in Turkey. Particularly, if signed and ratified by the Turkish government, the ICAM Protocol of the MAP may become the first national legislation that make a global commitment towards ICZM.

In summary, there is the need for a fundamental change in the Turkish administrative and legislative system to enhance integrated approach at the government level. It is not expected that ICZM will become one of the central issues in government agenda for the foreseen future. However, the EU guidance and the ICZM Recommendation may be important stimulus for Turkey towards establishing a national agenda and a strategy for ICZM. Furthermore, if the deteriorating character of existing management regimes prevails along the European coasts in the coming term, there is the expectation that the EU ICZM action should follow a more regulatory approach, which generates an obligation for the Turkish government to put ICZM into its agenda. One additional thing to be noted finally is the fact that because of the diversified geographical and socio-economic conditions in coastal and marine regions, such a national ICZM strategy or alike should be flexible enough to consider and respect for these regional and local diversities, to be effective and applicable.

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