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Spatial planning in European coastal zones

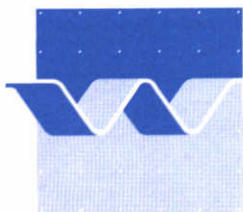
Review of approaches in spatial planning, coastal policy and coastal defence

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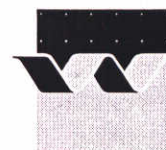
Spatial planning in European coastal zones

Review of approaches in spatial planning, coastal policy and coastal defence

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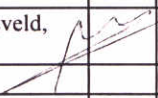


ABSTRACT:

Within the context of the Memorandum of Understanding (MOU) between Poland and the Netherlands, a project was initiated by the Dutch Institute for Coastal and Marine Management (RIKZ) to make a survey of coastal planning practices in the European Union and the Baltic region. The project is divided into two phases. In the first phase, a quick-and-dirty scan of available literature and other information is performed. Main goal of this phase is to make sure that all summarising documents that deal with this problem are located are a coarse image of the coastal zone management situation is obtained. The results of this phase are presented in this report. In the second phase a more in depth analysis will be performed which should provide information that can be utilised to improve the coastal planning and management strategies of Poland as well as the Netherlands.

The report consists of a main report and an Appendix. The main report contains a description of spatial planning, coastal policy and coastal defence regulations in the countries of the European Union and Baltic states. The Appendix holds a hardcopy database with summarising tables and reference lists for each individual country.

As a conclusion it can be stated that most of the countries have indeed adopted a certain coastal planning approach. There are significant differences in sectoral approaches, in integration efforts, in the way coastal conservation and coastal defence is implemented in the legislation, etc. Furthermore, the effectiveness of the approach no doubt varies between the countries, but firm conclusions cannot be drawn as this need to be studied in depth. It is recommended to start the next phase with a screening procedure for selecting a limited number of countries to be studied. Anticipating on this selection, and as a very first rough indication only, the following countries seem to be particularly interesting for comparison with the Dutch and Polish situation: Denmark, Germany, Ireland, the UK and Latvia.

REFERENCES:

REV.	ORIGINATOR	DATE	REMARKS	REVIEW	APPROVED BY
1.0	Van Koningsveld, Marchand	30-11-98		Van der Weide	Schilperoort 
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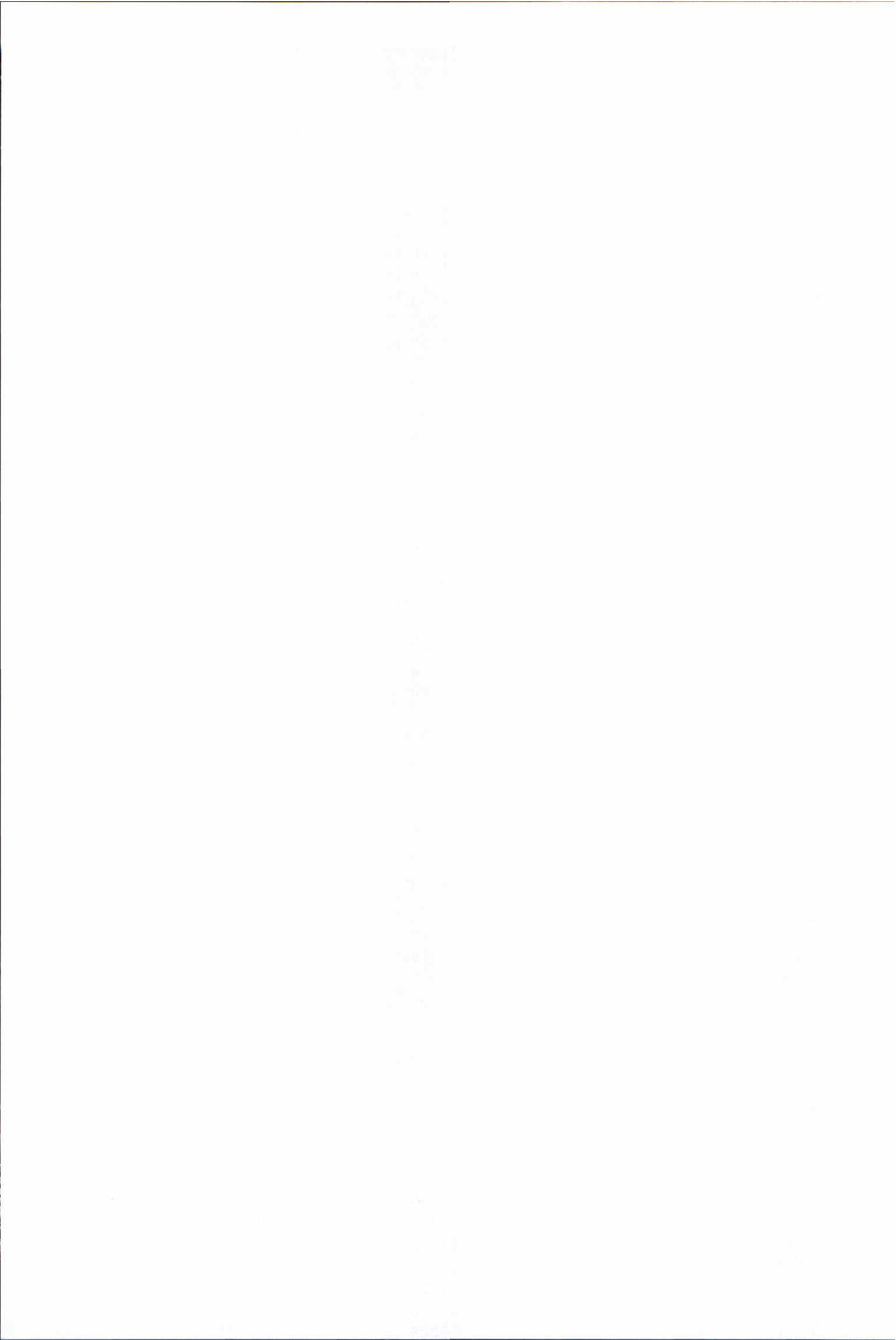
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Preface

Within the context of the Memorandum of Understanding (MoU) between Poland and the Netherlands, a project was initiated by the Dutch Institute for Coastal and Marine Management (RIKZ) of the Ministry of Transport and Public Works to make a survey of coastal planning practices in the European Union and the Baltic region. The project is divided into two phases. In the first phase, a *quick-and-dirty* scan of available literature and other information is performed. Main goal of this phase is to make sure that all summarising documents that deal with this problem are located and a coarse image of the coastal planning situation is obtained. The results of this phase are presented in this report. Due to limitations of this study not all information has been uncovered. For several countries information on important subjects is still lacking, and most of the information sources listed in the Appendix are not reviewed in depth. In the second phase a more detailed analysis will be performed which should provide information that can be utilised to improve the coastal planning and management strategies of Poland as well as the Netherlands.

Main contractor of the project was DELFT HYDRAULICS in co-operation with the European Union of Coastal Conservation (EUCC). Special thanks is offered to the EUCC for using their contact network and extensive archives of European countries.

Comments on the first draft were given by persons from several countries. We gratefully acknowledge the contributions given by *dr. Helle Tegner Anker* of CESAM, Aarhus University, Denmark; *Dr. Antonio Lechuga* of the Centro de Estudios y Experimentación de Obras Públicas, Spain, *Mr. John R. Goudie* from MAFF, UK, *dr. Andrzej Cieslak* of the Institut Morski, Poland and by *mr. Joost de Ruig* of RIKZ, the Netherlands. The report was reviewed by *mr. Jentje van der Weide* and *mr. Frank Hoozemans* of DELFT HYDRAULICS.



I Introduction

At present, one-quarter of the world's population of almost 6 billion, live in coastal zones where most of the largest urban concentrations are situated. This often leads to conflicts in land use, over-exploitation of natural resources and degradation of valuable ecosystems. Integrated coastal zone management offers a means to balance conflicting demands of different users of the same resources and to manage the resources on a sustainable basis that is consistent with a country's goals. It includes the formulation of a coastal management strategy which describes the goals and the means of achieving those goals, and implementation of plans which define targets, policy instruments, necessary human and financial resources and time-frames.

So far there is no country known in the world that has been able to manage its coast completely without conflicts. The current size of the population, global sea level rise and the number of activities in the coastal area cause the need for research and improvement of coastal zone planning and management techniques. One of the first steps in this process is an inventory of coastal zone regulations throughout Europe. In this report the first step towards such an inventory in European Union and the Baltic region is made. It should be kept in mind that this inventory does neither incorporate the *actual implementation* of these policies and regulations, nor evaluates the effectiveness in terms of integrated coastal zone management.

The objective of the study is to present an overview of existing reports and other relevant information sources with respect to spatial planning, coastal policy and coastal defence in the countries of the European Union and Baltic states¹. Comparison between EU countries and countries along the Baltic sea regarding land use planning can offer ideas and possibilities for developments in future Polish and Dutch policy. The inventory will be used for a more detailed analysis of spatial planning practices which is envisaged as a next step in the co-operation within the MoU framework (and which is beyond the scope of this study).

In Chapter 2 the method for the inventory is described. Chapter 3 reports on efforts to fill this framework for analysis for each individual coastal country in the European Union and the Baltic region. Chapter 4 will highlight some of the most important findings. Chapter 5 explores the relations between spatial planning and coastal zone management practices. In Chapter 6 some conclusions and recommendations for further research will be presented.

¹ Including all states along the Baltic sea except Russia.

2 Structure of the inventory

2.1 Introduction

This chapter describes the structure of the inventory that has been followed in the description of spatial planning and coastal policy regulations in each individual country. Main reasons for such a structure are the need to formalise the research process and to create the possibility to compare the individual country results. The following structure was adopted:

1. *Country facts*
population size, type of government, EU/non EU, etc
2. *General features of the coast*
Coastline length
Description of the coastal types (beach, cliffs, lagoons, deltas, intertidal areas, rocky shores, etc)
Major management problems (tourism and development, coastal erosion, sand mining, water quality, etc.)
3. *Spatial planning*
Regulations and legislative framework for spatial planning, nature preservation and environmental policy
4. *Coastal policy*
Regulations and legislative framework for coastal resources planning, zoning, setback-lines etc.
5. *Coastal defence*
Regulations and legislative framework for shoreline management, sea defence and coastal protection.

The next paragraphs describe the individual aspects of the presented structure.

2.2 Country facts

Main source of information for these facts is the world factbook by the CIA. This factbook provides information about the geography, population and government, among other facts. The information about the country geography consists mainly of data about area, length of land boundaries, length of coastline etc. Data on the population reflects the size and composition of the population. These two factors give a rough indication of the context of government. The type of government is interesting for the description of coastal zone management in each individual country. Physical planning, nature preservation and environment policy are issues that in most countries are organised on a national level. Coastal policy is in some cases merely a special section of physical planning legislation. In some countries however there is specific policy with respect to the management of the coast. This can vary from setback lines and no-build zones to government bodies founded especially for this purpose. A more detailed part of government coastal policy is that of coastal defence. Coastal defence focuses on shoreline management and the protection of the coast from

flooding and erosion. There are only very few countries, with the Netherlands as an example, that have a coastal defence policy implemented on a national scale. By searching for information on above mentioned subjects a quick-and dirty overview of the current formal situation in each country can be established.

In a publication of the European Union (EU) called '*The compendium of spatial planning systems and policies*', a description is given of the spatial planning situation in the countries of the EU (European Union, 1997). This description also deals with different forms of government that are of importance in this analysis.

Three different types of government

Three types of government can be distinguished. The unitary government, the federal government and the regionalised government. In unitary states the general rule is that the national government makes the laws in relation to spatial planning to be applied throughout the country. Important difference between countries with a unitary government is the level of decentralisation. The second category, the federal states, shares the power between national government and another tier, the *Länder* in Austria and Germany and the *regions* in Belgium. In the regionalised governed countries the regions have powers of law making but within a framework of legislation set down by the national government (see table 2-1).

Government type	Description	Countries
Unitary	Power resides with the national government, although certain responsibilities may be delegated to government departments for specific territorial units or to local government	Denmark Finland France Greece Ireland Netherlands Portugal Sweden UK
Federal	Power is shared between national and regional government with each having autonomy in some spheres and able to make law	Belgium Germany
Regionalised	Power lies with national government and with tiers below national level, and is apportioned through the constitution or statute	Italy Spain

Table 2-1 : Government systems (source: European Union, 1997)

Property rights

An important aspect of coastal planning is the way in which property rights of land is dealt with. In many countries the beach and area below the high water mark is public property and/or state owned. However, in some countries large parts of the coastal zone are often private property or in the process of privatization (as for instance in the former Sovjet Republics). Very limited information has yet been encountered regarding this important subject. In those cases where there is information, this has been included in the tables in the Appendix.

2.3 General features of the coast

General features of the coast are important as an indication for the specific coastal problems and the possible types of coastal zone management. Steep cliffs have different erosion characteristics than for example a row of dunes. These different types of coast also have different types of users. In order to understand why countries adopt a particular coastal policy it is very important to know the types of coasts their coastal policy and planning system is or should be designed for.

2.4 Spatial planning

Under this section the organisation of spatial planning in each country is described. Spatial planning includes public policy and actions intended to influence the distribution of activities in space and the linkages between them (European Union, 1997). In the description an overview of legislative powers with respect to the different physical planning authorities is given.

2.4.1 Planning systems

At the national level all EU member state governments have some responsibility for spatial planning, except in the case of Belgium. National governments can also have sole responsibility for the planning system as in Greece and is also particularly important in the UK and Ireland. At the regional level the Belgian regions play the primary role in spatial planning. The German Länder and the Spanish and Italian regions also have considerable autonomy from central government. The regional or provincial structure is significant in France, Denmark, Finland and the Netherlands. In contrast, the regional tier is much less important in the UK and Ireland. At the local level, local authorities have the primary responsibility for regulating land use control and detailed plan making across most of the EU but within a framework set and supervised by national or regional government. The role of local authorities is strongest in member states with a unitary government with a policy of decentralisation.

2.4.2 Plans and policies

Once the forms of government have been described, instruments that are available for spatial planning can be evaluated. Similar instruments applied in different systems will never be alike. Even within one system their form and content often varies depending on location and time of preparation. Nevertheless, the EU compendium places the different instruments in categories. Given the scale of the analysis it is inevitable that these broad categories will mask many more subtle differences between instruments. More detailed commentary on the characteristics of the plans and the procedures for making and reviewing them will be available in the different member state volumes belonging to the EU compendium.

Roughly four major categories of instruments can be determined:

- a) national instruments (national policy and perspectives)
- b) strategic instruments
- c) framework instruments

d) regulatory instruments

In Table 2-2 a summary is given of the occurrence of each of these instruments within the European Union. In the next paragraphs a description of each of the planning instruments is given.

Member state	National instruments	Strategic instruments		Framework instruments	Regulatory instruments
		One level used	Two levels used		
Belgium		*Brussels/Flanders	*Flanders(1) (Wallonia)	*	*
Denmark	*	*		*	*
Finland	*(p)	(*)		*	*
France	*			*	*
Germany	*		*	*	*
Greece	(*)	(*)		*	*
Ireland	*	*(p)		*	*
Italy	*		*	*	
Netherlands	*	*		*	*
Portugal		(*)		*	*
Spain	(*)	*(p)		*	*
Sweden	*(2)	*	(*)	*	*
UK	*		*	*	

* Indicates that there is an instrument at this level
 (*) Indicates the provision of such an instrument by law but not widely used or in preparation
 *(p) Indicates that the instruments at this level are in preparation
 (1) Pending Flemish legislation which attributes a substantial role to the provincial level
 (2) Nature Resources Act

Table 2-2 : Summary of spatial planning instruments (source: EU compendium of spatial planning systems and policies, 1997)

a) National policy and perspectives

The purpose of national policy and perspectives is to identify the national government's spatial planning policies and strategy. This includes documents that give general guidance of performance criteria for development and those which are spatially specific and are described as national plans. The area covered by these plans is the whole member state. National policy can be divided in sub-categories: National perspectives, sectoral policy guidance and sectoral plans/guidance. Examples of national plans are the *Landsplan Perspektiv* in Denmark and *VINEX: Vierde Nota over de Ruimtelijke Ordening Extra* in the Netherlands.

b) Strategic instruments (regional level)

The purpose of strategic plans is to identify broad spatial development patterns for areas below member state and above the municipality. They do not generally identify specific locations and are intended to be implemented through other lower tier instruments which specify locations. They are likely to be incorporated, or closely integrated with the expression of social and economic policy for the area. Strategic plans may be indicative in terms of broad development patterns or programmatic in identifying specific quantities of growth and change for sub-areas. The boundaries of strategic instruments are often tied to the ad-

ministrative tier of government which prepares them (region or province) but they can be prepared for a functional planning region such as a coastal zone. Sub-categories of the strategic planning instrument are: general strategic instruments, second level strategic instruments for part of an area, sectoral instruments and city region plans. Examples are the *Regionalpläne* in Germany and *Streekplan* in the Netherlands.

c) Framework instruments (local level)

The purpose of framework instruments or master plans is to identify a general spatial framework and criteria for the regulation of land use over area. They are used at the *local* level for general guidance. They may include an element of general zoning of land according to its current or intended land use, but generally they do not determine the precise use of land in advance of more detailed plans or decisions on regulation. Generally, framework instruments cover the whole of one municipality, but where local authorities are small they may cover several, covering possibly a functional planning area, such as a town or city. Examples are the *Structuurplan* for city-regions in the Netherlands and *Plano Director Municipal* in Portugal.

d) Regulatory instruments (local level)

The purpose of regulatory instruments is to regulate the development and protection of individual parcels of land. The typical regulatory plan covers the whole or part of the local authority, indicates detailed site specific zonings for building, land use and infrastructure and has the effect of granting the right to build on or change the use of land, subject to confirmation through permit procedures or the preparation of more detailed implementation plans. The regulatory instruments may cover areas ranging from one site, a neighbourhood of one municipality, the whole of a municipality or more than one. Sub-categories of regulatory instruments are: regulatory zoning instruments, local building control instruments, and implementation instruments. Examples are the *Plan d'occupation des sols* in France and the *Bestemmingsplan* in the Netherlands.

2.4.3 Regulation and permits

For final implementation of certain policies, regulation instruments are available in all countries. Usually building permits are issued. These permits can give permission on several issues such as: construction, building regulation, change of use, sub-division demolition and deforestation. In many cases the main permit is divided into separate permits for instance on: preliminary application, sub-division of plots, demolition of buildings, works on historic buildings and sites, pollution, environmental control, advertisement etc.

2.5 Coastal policy

In many countries coastal policy is a part of the national spatial planning strategy. But some countries have made special arrangements for the regulation of activities in the coast. Examples of this are setback lines, no-build zones, etc. Special arrangements can extend land and seaward.

2.6 Coastal defence

Only few countries have a coastal defence programme. One of those countries is the Netherlands. Coastline management and flood protection are important ingredients of coastal defence management.

3 Country descriptions

3.1 Belgium

3.1.1 Country facts

Belgium is one of the smallest European countries with an area of approx. 30,000 km² and about 10 million inhabitants. On land Belgium has boundaries with Germany (167 km), France (620 km), Luxembourg (148 km) and the Netherlands (450 km). The government type is a constitutional monarchy of a federal nature by constitution since 7 February 1831. The country is basically divided into the Dutch speaking Flemish and the French speaking Walloons. Belgium is a member of the EU.

3.1.2 General features of the coast

Belgium has a coastline of 64 km consisting mainly of flat coastal plains and dune rows. Large parts of the Belgian coast are developed. Reclaimed land is protected by dikes. Flooding of these reclaimed part is a major management problem.

3.1.3 Spatial planning, nature preservation and environmental policy

Spatial planning in Belgium is mainly organised by the regions. The national (federal) government is hardly involved in the spatial planning process. Table 3-1 summarises the spatial planning situation in Belgium.

90 % of the remaining natural coastal area is designated as “green” area within the physical planning legislation. Several areas have the additional legal protection status of reserve or protected landscape.

3.1.4 Coastal policy

The Belgian government has not defined a specific coastal strip but some coastal protection is implemented through physical planning measurements. Often dune areas get a protected status in land-use plans.

3.1.5 Coastal defence

The Flemish government has designated 1,098 acres of dune area for environmental protection. Large parts of the Belgian coastline are defended by concrete walls against flooding and erosion.

	Responsible authority	Instrument
National	Federal Government	<u>Legal framework and main legislation</u> 1962 Spatial Planning Act (All)
	Regional government	1991 Ordonnantie houdende Organisatie van de Planning en Stedebouw (B)
	Regional government	1962 Wet houdende Organisatie van de Ruimtelijke ordening en Stedebouw (F)
	Regional government	1984 Code Wallon de l'Aménagement de Territoire, de l'Urbanisme et du Patrimoine (Last edition 1994) (W)
Regional	Brussels region*	<u>Strategic plans</u> Plan de Developpement Régional
	Flemish region*	Ruimtelijk Structuurplan Vlaanderen
	Walloon region*	Plan Régional d'Aménagement du Territoire
Local	589 Gemeentes/Communes	<u>Framework plans</u> Gemeentelijk ontwikkelingsplan (B)
		Algemeen plan van aanleg (F)
		Schéma de structure communal (W)
		<u>Regulatory plans</u> Bijzonder bestemingsplan (B)
		Bijzonder plan van aanleg (F)
		Plan particulier d'aménagement/schéma directeur (W)

*Note: only the Flemish region is of relevance here, as the other regions do not have a coastal zone.

Table 3-1 : Spatial planning and organisation (based on European Union, 1997)

3.2 Denmark

3.2.1 Country facts

Denmark has an area of approx. 43,000 km² and a little over 5 million inhabitants. On land Denmark has a boundary with Germany of 68 km. The government type is a constitutional monarchy of a unitary nature. Denmark is a member of the EU.

3.2.2 General features of the coast

Denmark has a coastline of over 7,000 km, predominantly of a glacial origin. Coastlines are therefore generally formed in sandy glacial plains or moraine cliffs. Occasionally, tertiary chalk formation protrude the glacial landscape, whereby impressive headlands are formed, between which gently curved sandy beaches are found.

The North sea coast of Denmark (the West Coast) is sandy and particularly vulnerable to erosion. Mean erosion rates reach values up to 2 m/year and littoral drift is in the order of 100,000 - 1,000,000 m³/yr. The Kattegat and Baltic Sea Coast are moderately exposed. Mean erosion rates are 0.3 - 0.5 m/year and the littoral drift is up to 75,000 m³/yr. Belt and fjord coasts are even less exposed. Mean erosion rates are less than 0.25 m/year, the littoral drift is less than 10,000 m³/year.

The main incentives for coastal zone management policy in Denmark have been the control of coastal erosion, the need for a balanced utilisation of resources in the coastal zone and the wish to enhance the environmental quality of the coastal zone.

3.2.3 Spatial planning, nature preservation and environmental policy

Over the years sectoral legislation and planning has grown to a high level of sophistication. Table 3-2 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<u>Legal framework and main legislation</u> 1992 Planning Act
Regional	14 County councils	<u>Strategic plans</u> Regionplaner
Local	275 Municipalities	<u>Framework plans</u> Kommuneplaner <u>Regulatory plans</u> Lokalplaner

Table 5-2 : Spatial planning and organisation (based on European Union, 1997)

The Nature Conservation Act 1917, now the Nature Protection Act 1992, formalised the right of public access to all Danish beaches. The revision of this act of 1937 restricted building activities on the beach and the adjacent 100 m of the hinterland, increased to 300

m in 1994. A directive issued by the Minister of Environment in 1978 provided a stop for the outlay of new vacation housing and hotel areas in a 3 km wide coastal zone, thus functioning as an important setback line. These coastal planning rules were incorporated into the Planning Act in 1994.

3.2.4 Coastal policy

Right of way, general setback lines and governmental sovereignty over the sea territory are pillars in Danish coastal policy. Through the Nature Protection Act, a protection zone of 100 m - presently being extended to a 300 m zone - is implemented along the Danish coast. Here it is prohibited to alter the state of the area. Amendments to the Planning Act have imposed a 3 km coastal zone, in which planning for new activities is restricted. According to the Raw Materials Act of 1992, extraction of materials from the sea bottom is only permitted in designated areas. Besides this other conservation orders were issued for certain areas. The protection of the coast is mainly regulated through environmental legislation.

3.2.5 Coastal defence

The Coast Protection Act empowers regional authorities to protect against flooding and erosion. In the case that the regional authority does not have enough expertise the law makes it possible to involve at an early state the Danish Coastal Administration DCA for assistance in further examination of the project. The DCA also has a management task for the coastal zone. The DCA consists of 4 major sectors:

- Monitoring
- Analysis and Design
- Contracting
- Legal and Regulatory Activities

If appraisal is positive the regional authority may proceed with project preparation. The final regulatory procedures still require final permission from the Minister of Transport & Works to establish coastal protection works and other man made changes in a zone 100m landward including territorial waters. The Analysis and Design department of the DCA can also define projects depending on the outcome of the analysis of monitoring data.

Migrating dunes caused legislative and administrative problems leading to the Dune Preservation Law. This law which is now incorporated into the Nature Protection Act has functioned as a setback line. The Law on Coast Protection of 1988 provided improved coordination of coastal protection and development schemes within a coastal environment perspective. The integrated process has been called Coast Erosion Management CEM. The coast erosion management leads to site specific plans with a few prerequisites:

- Coherence with the planning system
- Set back and no build regulations
- The coast protection act 1988

3.3 Estonia

3.3.1 Country facts

Estonia has an area of approx. 45,100 km² and a little over 1,5 million inhabitants. On land Estonia has boundaries with Latvia (267 km) and Russia (290 km). The government type is republic since 1991, when it gained independence from Russia. Estonia is not part of the EU but does have aspirations to become part of the EU in the near future.

3.3.2 General features of the coast

The length of the Estonian coastline is 1,393 km.

Description of the coastal types (beach, cliffs, lagoons, deltas, intertidal areas, rocky shores, etc.) Major management problems (tourism and development, coastal erosion, sand mining, water quality, etc.)

3.3.3 Spatial planning, nature preservation and environmental policy

Information about the regulation of spatial planning is lacking.

3.3.4 Coastal policy

Land use plans have been prepared in 1992-1994 for all coastal areas. Protection of the coastal zone is regulated by the Act on Protection of Marine and Freshwater Coasts, Shores and Banks from 13-3-1995 Nr. 517. The coastal zones are protected by a construction prohibition zone of 100 m on the mainland and 200 m on the islands, counted from the mean water line. In densely populated areas (towns and villages) the width is 50 m. The exact borders of the zones are determined by general plans taking into account recognisable natural borders. The zones may thus be extended up to 100 m. They can also be diminished but only with the permission of the ministry of the Environment. The protected strip does not extend sea ward. Activities in this area of the coastal zone are regulated by the 1994 Water Act.

3.3.5 Coastal defence

Information about regulated coastal defence is lacking.

3.4 Finland

3.4.1 Country facts

Finland has an area of approx. 337,000 km² and a little over 5 million inhabitants. On land Finland has boundaries with Norway (729 km), Sweden (586 km) and Russia (1,313 km). The government type is a republic since 1917, when it gained independence from Russia, and unitary in nature. Finland is a member of the EU.

3.4.2 General features of the coast

Finland has a coastline of 1,126 km, islands and coastal indentations excluded.

3.4.3 Spatial planning, nature preservation and environmental policy

In the past, the landowner in Finland, had the right to build 4-5 buildings per kilometre of shoreline without any plan. He could also prepare a shore plan and thus built up to 10 buildings per kilometre. But with the new Nature Conservation and Building Act this has changed. Provisions were included in the Building Act which require planning as prerequisite for any development in a coastal or inland shore zone. Table 3-4 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<u>Legal framework and main legislation</u> 1958 Rakennuslaki (building Act) Latest revisions 1989, 1990, 1992, 1994 and 1996
Regional	19 Regional counties and Åland	<u>Strategic plans</u> Seutukaava Seutusunnitelma
Local	454 Kunnat/kommuner	<u>Framework plans</u> Yleiskaava/General plan <u>Regulatory plans</u> Asemakaave (Cities) Rakennuskaave (Rural) Rantakaava (Shore)

Table 3-4 : Spatial planning and organisation (based on European Union, 1997)

Without a land use plan drawn up by the local authority and ratified by a state authority it is now prohibited to erect new constructions and extract sand and stone materials in a shore zone. There are, however, several exceptions from this planning requirement.

The width of the coastal zone is determined case by case. According to the guidelines of the Ministry of the Environment, it should be in general around 100 metres landward from the mean water line, but the width can vary between 50 and 200 metres.

The new provisions establish a narrow planning zone along the coast. It is not a protected zone like in many other European States. Compared with the previous situation in Finland it is, however, a huge progress.

3.4.4 Coastal policy

Besides the provisions in the building act, Finland has almost no legislative measures that protect the coastal strip. A shore protection programme including 2.6 % of the coastline has been approved by the government in 1990. It indicates the governments intention but has no legal effect. Besides that, about 3 % of the coastline has been protected as National Park or Nature Reserve. A few coastal stretches have been protected through municipal land use plans. A narrow strip, usually of 20-30 m, is general partly protected through municipal building bylaw.

3.4.5 Coastal defence

Because of the absence of any significant tide, a relative sea level decline and moderate wave climate coastal defence is not an issue in Finland.

3.5 France

3.5.1 Country facts

France has an area of approx. 547,000 km² and a little over 58 million inhabitants. On land France has boundaries with Andorra (60 km), Belgium (620 km), Germany (451 km), Italy (488 km), Luxembourg (73 km), Monaco (4.4 km), Spain (623 km) and Switzerland (573 km). The government type is republic, and unitary in nature. France is a member of the EU.

3.5.2 General features of the coast

France has a coastline with a length of 3,427 km divided into 2,738 km on the mainland and 644 km on Corsica. The coastal area exhibits a wide range of geographical features, including sea grass beds, coastal wetlands, beaches and dunes. On the Mediterranean coast problems associated with water quality and tourism impacts have prompted attention. On the North Sea coast concerns for oil spills dominate coastal management policy.

3.5.3 Spatial planning, nature preservation and environmental policy

Table 3-5 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<u>Legal framework and main legislation</u> 1995 Loi d'Orientation sur le Développement et l'Aménagement du Territoire (planning and development act) Code de l'Urbanisme (code of urban planning law)
Regional	25 Regions and Corsica Ile de France Corsica	<u>Strategic plans</u> Plan de région Contrat de plan Etat-région Schéma directeur de la région Schéma d'aménagement
Local	36,558 Communes	<u>Framework plans</u> Schéma directeur Directive territoriale d'aménagement <u>Regulatory plans</u> Plan d'occupation des sols

Table 3-5 : Spatial planning and organisation (based on European Union, 1997)

The physical planning structure is built up typically according to unitary government. The regions make strategic plans based on the national guideline. Local authorities are responsible for the detailed implementation. The coastal law of 1986 creates the possibility to specify 'espaces remarquables' to be protected because of their ecological value. These sites should be delimited in the 'Plan d'occupation des sols' of the communes and should be under strict legal protection.

3.5.4 Coastal policy

Inspired by British initiatives, France founded in 1975 the Conservatoire de l'Espace Littoral et des Rivages Lacustres (CELRL). In 1986 the Loi Littoral (Coastal Law) was accepted. It constitutes the basic text formalising the doctrine of coastal management. It aims not only at nature conservation but also at reconciliation of the various coastal interests. It is the first legal text concerning the protection of natural coastal sites in France. Coastal conservation takes place mostly by identifying 'des espaces remarquable' (special areas). These areas are identified and protected by local physical planning. The Loi Littoral functions exclusively as a law for land use planning. Another relevant law is the 'Schemas de Mise en Valeur de la Mer' of 1983. This law is mainly concerned with zoning the adjacent marine environment and introduces a system of plans for enhancing and exploiting the sea.

3.5.5 Coastal defence

Information about coastal defence policy in France is lacking.

3.6 Germany

3.6.1 Country facts

Germany has an area of approx. 357,000 km² and a little over 81 million inhabitants. On land Germany has boundaries with Austria (784 km), Belgium (167 km), Czech Republic (646 km), Denmark (68 km), France (451 km), Luxembourg (138 km), Netherlands (577 km), Poland (456 km) and Switzerland (334 km). The government type is federal republic, and federal in nature. Germany is a member of the EU.

3.6.2 General features of the coast

Germany has a coastline of 3,379 km. The coastal zone is divided roughly into 1300 km along the North Sea, including 4 estuaries and about 20 smaller islands, and 2000 km along the Baltic, including 3 larger islands, where there are a number of semi-enclosed embayments called "Bodden". Three German states have borders with the sea:

- Niedersachsen (major part of North Sea coast)
- Schleswig-Holstein (minor part of North Sea coast and minor part of Baltic Sea coast)
- Mecklenburg-Vorpommern (major portion of Baltic Sea coast)

The North Sea coast is made up of low lying marshland with a large tidal flat area (Wadden Sea) a few large estuaries and some islands. It is a meso-tidal environment with tidal ranges varying from 2.5 m to 4.0 m or even 5.0 m in storm surges.

The Baltic Sea coast has cliffed sections alternating with low areas covered by beach ridges, dunes or marshes. It is a micro-tidal environment with tidal ranges decreasing eastward to 10 cm. Wind induced water level changes vary between +3.5 m M.O.D. and -1.7 M.O.D..

Main problem in the North Sea coastal area is the protection against high water levels of the sea as well as in the estuaries. A system of dikes was put into place to safeguard the hinterland from this threat. Main problems in the Baltic Sea coastal zone is protection from high water levels due to wind set-up. The protection works that are presently in place are too low and are not able to cope with wind induced water levels. Furthermore erosion is a major problem on the Baltic coast as well as on the North Sea coast.

3.6.3 Spatial planning, nature preservation and environmental policy

Spatial planning in Germany is organised on three levels. The federal government mainly provides mainly building regulations. The responsibility of the actual physical planning process is mainly in the hands of the regional (Länder) and local authorities. Table 3-6 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	Federal Government	<u>Legal framework and main legislation</u> 1986 Baugesetzbuch (BauGB) (Federal building code) amended in 1990 by Reunification treaty and in 1993 by BauGB Massnahmen Gesetz (supplement to code)
Regional	13 Länder 32 Regierungs Bezirke	<u>Strategic plans</u> Landesentwicklungspläne/Landesentwicklungsprogramme Regionalpläne/Gebietsentwicklungspläne/ Raumordnungspläne
Local	16,040 Gemeinden	<u>Framework plans</u> Flachennutzungsplan (F-plan) <u>Regulatory plans</u> Bebauungsplan (B-plan)

Table 3-6 : *Spatial planning and organisation (based on European Union, 1997)*

The federal government can assign a protected status to certain environmentally important areas through the Federal Nature Conservation Act.

3.6.4 Coastal policy

The fact that Germany is a federation, with each of the different coastal states having its own administrative structure for coastal and water management affairs, prohibits the use of the term Integrated Coastal Zone Management on a national level. There is no structural coordination of coastal management activities between states. In Mecklenburg-Vorpommern the First Nature Protection act from 1992 declares that building constructions may not be erected or essentially enlarged within a 200 m wide strip from the coastline. In Schleswig-Holstein the Nature Conservation Act, amended in 1993 stipulates on protection strips for water protection and recreation. The protected strip is 100 meters from the shoreline on all coastal waters. In both states the nature protection agency is entitled to grant exceptions in certain cases and under certain conditions.

Other measures to ensure the protection of the coast are the designations of nature reserves. Mecklenburg-Vorpommern assigned some protective designation to more than 90 % of the coast varying from National Park and Nature Reserve to Landscape Reserve. In Niedersachsen most of the natural coast belongs to a strictly protected nature reserve, the Wadden Sea Area. The Federal Nature Conservation Act contains provisions for the general protection of most coastal habitats like sand banks, reeds, salt marshes, coastal dunes, coastal grassland, heaths and wetland, moraine cliffs, pools and wet forests. The coastal states also restrict certain forms of fishery in the coastal zone.

3.6.5 Coastal defence

The two states of Mecklenburg-Vorpommern and Schleswig-Holstein have long term master plans for coastal protection. Coastal protection and management is primarily under responsibility of the governments of these states while Federal and municipal governments have a smaller degree of influence on certain issues. Activities at the national level are limited to the setting of a normative and legal framework. In addition the Federal government is also

involved in planning and finance within the framework of the Joint Task of improving Agricultural structures and Coastal Protection.

3.7 Greece

3.7.1 Country facts

Greece has an area of approx. 132,000 km² and a little over 10,5 million inhabitants. On land Greece has boundaries with Albania (282 km), Bulgaria (494 km), Turkey (206 km) and Macedonia (228 km). The government type is a presidential parliamentary government. Greece is a member of the EU.

3.7.2 General features of the coast

The coastline of Greece has a length of about 16,500 km, corresponding to one third of the total Mediterranean coastline. 9,000 km of this belongs to the insular complex of the country. Only 30 % of the Greek coast is flat and of sedimentary origin, while the remaining 70 % is abrupt and vulnerable to erosion due to their lime stone origin. The Greek coastal zones are of high cultural, ecological, recreational and economic value, and play an important role in the development of the country. The coastal zone in Greece extends to about 10-15 km landward, depending on the start of mountainous terrain, while the official territorial waters is considered as the seaward limit. Besides erosion and the pressures of tourism, the risk of oilspills by tankers travelling through the Mediterranean are a great threat to the Greek coast.

3.7.3 Spatial planning, nature preservation and environmental policy

Table 3-7 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<u>Legal framework and main legislation</u> 1983 L1337 Act on extension of town plans and Urban development law L1577/1985 General building regulation. Extremely complex planning legislation with many separate laws and regulations.
Regional	13 regions Athens and Thessaloniki	<u>Strategic plans</u> Chorotaxiko Schedio Rhytmistiko Schedio
Local	54 Prefectures	<u>Framework plans</u> Geniko poleodomiko schedio (GPS) <u>Regulatory plans</u> Schedio poleos - Poleodomiki meleti

Table 3-7 : Spatial planning and organisation (based on European Union, 1997)

On the national level several efforts have been made to improve co-ordination of physical planning and environmental policy. One of the main efforts is the foundation of the National Council of Physical Planning and Environment. This council operates by law under the auspices of the Minister of Co-ordination and the Prime Minister himself assisted by the

National Councils Secretariat, also foreseen by law. Another effort, supported by law, is the creation of the Ministry of the Environment, Physical Planning and Public Works. This ministry is responsible for both expressing and developing policies regarding physical planning and environment. The development of specific policies, and the responsibility for their implementation lies within the different competent Ministries. Most plans elaborated and launched so far by the Ministry of National Economy and the Sectoral Ministries had as a major objective to increase the economic development and standards of the country. As for the plans implemented by the Ministry of Environment, Physical Planning and Public works they were mostly aimed at ensuring housing facilities and relevant infrastructure to areas facing high pressure, with a parallel effort to maintain and protect the most important ecosystems.

3.7.4 Coastal policy

Overlap and gaps in responsibility among many different authorities have constituted a major problem in formulating and executing environmental policy in spite of efforts in the past. Efforts are being made to improve co-ordination between ministries. Also integration of the environmental considerations into other policy areas are gradually being strengthened. So far management of the coastal zone is mainly being regulated by physical planning strategies and environmental policy. However, in spite of government efforts, CZM is still dealt with case by case. Coastal resources planning and CZM are still rather fragmentary. Important aspects so far are the efforts on reducing the effects of water pollution. There is a Contingency Plan for oil spills and chemical pollution in the sea and extensive efforts towards sewage treatment.

3.7.5 Coastal defence

Law 1337/83, provides for some protection of beaches and natural coastal areas. This protection is mainly directed towards regulations on building in the coastal area. The absence of great tidal movements in the Mediterranean area reduces the threat of erosion and flooding. The threat of pollution is of greater concern in this area where more than 25 % of the global oil tanker traffic crosses the Mediterranean Sea which covers only 0.7 % of the ocean surface of the globe. Efforts toward reducing the consequences of pollution receive great attention in the National Coastal Zone Management Program that is being developed.

3.8 Ireland

3.8.1 Country facts

Ireland has an area of approx. 70,300 km² and a little over 3,5 million inhabitants. On land Ireland has boundaries with the UK (360 km). The government type is republic, unitary in nature. Ireland is a member of the EU.

3.8.2 General features of the coast

Ireland has a coastline of 1,448 km. There is a great variety of coastal landscapes, such as sand dunes, lagoons, estuaries, cliffs, islands, shingle bars and shallow marine inlets and reefs.

3.8.3 Spatial planning, nature preservation and environmental policy

Table 3-8 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<i>Legal framework and main legislation</i> 1963 Local Government Act (Planning and Development) as amended by subsequent Planning Acts together with 1994 Local Government Regulations
Regional	8 Regions	<i>Strategic plans</i> Regional reports
Local	88 Districts	<i>Framework plans</i> Development plan <i>Regulatory plans</i> Action area plans

Table 3-8 : *Spatial planning and organisation (based on European Union, 1997)*

Most land-use activities and developments are controlled by the local authorities through the Local Government Acts, which require each authority to prepare a development plan for its area. The planning system is administered at local level, is widely accepted and understood, and allows for significant public involvement. However, planning authorities have limited in-house expertise to deal with specialist nature conservation and marine-related matters. Much of the land resource of the coastal zone is already committed in terms of existing or planned development, or is designated for nature conservation.

3.8.4 Coastal policy

The coastal zone in Ireland is currently administered by a range of authorities, agencies and bodies. The legislative framework in the coastal zone is very complex and intricate, involving both international and national measures. The legislative measures serve one of two principal purposes- the administration of activities or the protection of the environment.

Much legislation is structured on a sectoral basis and so does not promote integrated policy. In Ireland there is a clear division of responsibility for the administration of the marine and terrestrial sub-zones of the coastal zone. The principal division of responsibility and jurisdiction is along the shoreline, at the boundary between land and sea. The key administrators of the coastal zone are the Department of Marine and Natural Resources, the Department of the Environment and Local Government, the Department of Arts, Heritage, Gealtacht and the Islands, and the local authorities. In addition many other government departments and state agencies have responsibility for some aspect of administration of the coastal zone.

Efforts toward new policy in Ireland concerning the Management of the Coastal Zone devote much attention to resource development and conservation and environmental protection. To achieve these goals little progress is expected from fundamental restructuring of legislation, or administrative responsibility and procedures. Ireland considers building on existing systems to be a more realistic and desirable approach although some restructuring of the administrative system, to separate policy and operational matters for example, is required. According to Irish government existing and future issues in the coastal zone can best be addressed by streamlining and enhancing the arrangements for consultation and co-operation, in planning and operation, between, and within, the various department, authorities and agencies responsible for the management of the coastal zone.

Although this process will take time to achieve, the Irish government does not want resolution of issues and conflict to have to wait on the full establishment of the system. Integrated Coastal Zone Management (ICZM) policies must, therefore, focus on a process that includes a flexible development path. To achieve the ICZM goals a proposition is made to adapt a program that progressively moves from an interdepartmental committee, in a number of steps or phases to an Independent Unit in charge of ICZM.

3.8.5 Coastal defence

The coastal area is very dynamic and erosion is a natural and widespread process around the coastline of Ireland. For most of the coast, the present policy of accepting natural shoreline changes, and accommodating the problems they cause, is likely to be the most appropriate response. Some areas however will require continued or improved protection to avoid substantial financial and social losses.

3.9 Italy

3.9.1 Country facts

Italy has an area of approx. 301,000 km² and a little over 58 million inhabitants. On land Italy has boundaries with the Austria (430 km), France (488 km), Vatican (3.2 km), San Marino (39 km), Slovenia (199 km), Switzerland (740 km). The government type is republic, regional in nature. Italy is a member of the EU.

3.9.2 General features of the coast

Italy has a coastline of approximately 5,000 km. About 50 % of the shore consists of low levelled sandy beaches of considerable economic value for seasonal tourism. Major coastal management issues are problems caused by pollution of the coastal waters.

3.9.3 Spatial planning, nature preservation and environmental policy

Table 3-9 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<u>Legal framework and main legislation</u> 1942 Law No. 1150 1967 Law No. 765 1977 Law No. 10 Regional Laws
Regional	20 Regions 5 Regioni autonomi	<u>Strategic plans</u> Piano territoriale di coordinamento Piano territoriale paesistico
Local	8,102 Comuni	<u>Framework plans</u> Piano regolatore generale <u>Regulatory plans</u> Piano particolareggiato (PP) Piano di lottizzazione (Pdl) Piano di reupro (Pdre) Piano di edilizia economica e popolare (PEEP) Piano degli Insediamenti produttivi (PIP)

Table 3-9 : *Spatial planning and organisation (based on European Union, 1997)*

The Italian government system is regional in nature. This means that regions also have certain powers of legislation. Regional plans provide guidance on land use for lower tiers of government. Local authorities, by the production of Piani Regolatori Generali, define land use through a zoning process for each commune as well as principal communication routes and identify the location of new infrastructure.

3.9.4 Coastal policy

In the past decades, the major barrier to co-ordination and integrated management in Italy, was the pulverisation of responsibility in a number of governmental authorities from city quarters to cities to provinces, regions and state, each defending their own strategy influenced by a variety of political currents and the interests in power rather than in public services. In recent years this severe problem, the cause of lack of action, has been recognised and new solutions for co-ordination and integration are under consideration. Two State Departments have been created or given a role by law to improve integrated management of the coastal zones. A law dealing with "Measures to safeguard the ocean from pollution" gives authority to the State Department of Merchant Marine to provide means and techniques to protect the coastal waters from accidental oil spills and to protect special ecological areas. The Law creating the Ministry of Environment, outlines the responsibilities of the Department and the relationship of the Department with other governmental institutions and the regional and local authorities. Other laws deal with the present development of authorities or agencies to co-ordinate numerous independent initiatives from local to national scale.

3.9.5 Coastal defence

Technical services such as the tide, GPS and wave rider networks, and dikes, seismic, geological and hydrograph services are being co-ordinated by a single authority under the Council of Ministers, by-passing previous competencies of the State Departments of Merchant and Military Marines, Environment, Research, Industry, Civil Defence, Public Works, Transports and Tourism. Coastal defence programs start from scientific and technical approaches, more advanced techniques of monitoring, real time analysis and communication providing forecasts and warnings. Drainage basins and threatened sea areas are now under a co-ordinated management with the establishment of the River and Sea Authorities with the objective to integrate the environmental and human factors. Difficulties are the costs of preventive actions and the reluctance of the population, politicians and industries to change in short time, their habits, routines, customs or economical administrations. While the Italian scientific milieu is getting interested in global, regional and local research, for better understanding and prediction, the Italian government prefers a "wait and see" policy. The major obstacle is the present economical crisis. An exception is the case of Venice for which a safeguard program is underway.

3.10 Latvia

3.10.1 Country facts

Latvia has an area of approx. 64,000 km² and a little over 2,5 million inhabitants. On land Latvia has boundaries with the Belarus (141 km), Estonia (267 km), Lithuania (453 km) and Russia (217 km). The government type is parliamentary republic. Latvia is not a member of the EU.

3.10.2 General features of the coast

The length of the Latvian coastline along the sea and the gulf is approximately 470 km. The Seaside lowland stretches along the seashore and the gulf. It's width ranges from 5 to 40 km. The coastal zone is located within the boundaries of the Seaside lowland and its continental boundary crosses a 3 m wide isohypse (CZM-Centre, 1993). Total area of the coastal zone makes 1030 km² of the Latvian territory. There are three different sub-zones in the coastal zone:

- a 40 - 400 m wide beach zone
- sand banks and artificially afforested pine trees
- zone of wetland

3.10.3 Spatial planning, nature preservation and environmental policy

Territorial development plans approved by the ministry of environmental protection and regional development.

3.10.4 Coastal policy

The law on Environmental Protection adopted in 1991 contains provisions for a protected belt along the shore of the Baltic Sea and the Riga Gulf. The aim of the protected belt is to preserve all the protective functions of the forest, to conserve the littoral landscape and to provide sustainable utilisation of natural and recreational facilities in the littoral zone. The act declares strict protection on a 300 meter wide belt starting from the water-edge including the beach and coastal formations. Where the dune or other coastal formations exceed 300 metres the protected zone is extended to its natural boundaries, for instance the point where the dune ends. The protected belt also extends 300 m seaward of the waterline. The protected belts are taken into consideration in planning and any activity within the littoral zone, including the drawing of master plans and development projects for towns and villages. The protected belt borders are marked on the land use maps. The Environment Protection Committee working under the Latvian parliament is administering the act in the dry-land part of the protected belt. It can give permission to use the belt for certain purposes. Approval must also be obtained from an expert body and the local authority. Besides the 300 meter belt for strict protection there is a larger belt stretching from 3 to 5 kilometre, in some places 8 kilometre where building is restricted and requires a special permission. The exact width of that zone will be determined in land use planning.

3.10.5 Coastal defence

Government regulations concerning the protection of the coastline were adopted in 1987 and 1990. Several local regulations considering the protection of the coastline have been adopted. They regulate building, recreational activities, public access, the use of cars and jet-skis and the establishment of local nature reserves.

3.11 Lithuania

3.11.1 Country facts

Lithuania has an area of approx. 65,000 km² and a little over 3,8 million inhabitants. On land Lithuania has boundaries with Belarus (502 km), Latvia (453 km), Poland (91 km) and Russia (227 km). The government type is republic. Lithuania is not a member of the EU.

3.11.2 General features of the coast

The length of the Lithuanian coastline is 94 km.

3.11.3 Spatial planning, nature preservation and environmental policy

In order to ensure environmentally sound development, the Supreme Council established the Environmental Protection Department (EPD), passing the Law on Environmental Protection in 1990. The department was to serve as the states primary institution regulating the environmental administration. The EPD was made subordinate to the Supreme Council (legislative branch) and not, as in most other European countries, to the Government (executive branch). In keeping the main regulatory agency for environmental matters independent of government policies, legislators hoped to avoid conflicts of interest. Once privatisation of the majorities of industries is complete, the EPD will be elevated to ministerial rank. The EPD is empowered to present recommendations to the legislature and the executive branch on measures to enhance environmental policies. Besides that the Department is the principal agency governing the issuance of permits for the exploration and usage of natural resources, storage or burial of domestic and industrial wastes, and the discharge of pollutants.

3.11.4 Coastal policy

There is no general legal protection of the coastal strip. The short Lithuanian coast (94 km) mainly comprises urban areas, already protected areas or former military areas. Development is allowed only according to land-use plans (master plans, development projects for towns and management plans for protected areas). The use of forests in a 3-7 km wide zone is specially regulated, including, for instance, prohibition against privatisation. There are plans for compilation of the draft for a Marine Environment Protection Law with more detailed provisions concerning the protection of the coastal strip.

3.11.5 Coastal defence

Clear cutting of forestry is not allowed in a 1 kilometre zone. Besides that 66 % of the coastline has been protected as national park or regional park.

3.12 The Netherlands

3.12.1 Country facts

The Netherlands has an area of approx. 35,000 km² and about 15,5 million inhabitants. On land The Netherlands has boundaries with Belgium (450 km) and Germany (577 m). The government type is constitutional monarchy and is unitary in nature. The Netherlands is a member of the EU.

3.12.2 General features of the coast

The entire Dutch coastline measures 432 km. Of these 432 km, 79 km is occupied by sea arms or dams to close sea arms. The remaining 353 km can be divided into four types of coast:

- Dunes (254 km),
- Dykes (34 km),
- Beach plains (38 km),
- Others (27 km) (harbours, industrial areas and municipal areas).

Dunes and dikes can function as a primary dam. Beach plains do not have this safety function. From the list above it is obvious that the dunes play an important role in the protection of the hinterland from flooding. There are three types of coast along the Dutch shoreline. Each type has special development characteristics. The three types are:

- The Delta coast; located in the South West part of Holland, consisting of (former) tidal inlets and islands
- The Holland coast; located in the provinces North and South Holland, uninterrupted coastline with a densely populated hinterland including the cities of Rotterdam, Amsterdam and The Hague.
- The Wadden coast; located in the Northern part of Holland, fringing the Wadden sea.

Major management problems in the Netherlands are safety of the hinterland against flooding and conflicts in area use, especially along the Holland coast.

3.12.3 Spatial planning, nature preservation and environmental policy

Table 3-12 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<i>Legal framework and main legislation</i> 1965 Wet op de Ruimtelijke Ordening (Spatial Planning Act) Major amendments in 1985 and 1994
Regional	12 Provinces 7 City regions	<i>Strategic plans</i> Streekplan Structuurplan
Local	647 Municipalities	<i>Framework plans</i> Structuurplan <i>Regulatory plans</i> Bestemmingsplan

Table 3-12 : Spatial planning and organisation (based on European Union, 1997)

Development in the Dutch coastal zone is not regulated by a setback line or coastal strip in which development is restricted by law, like in a number of other European countries. Development in the Dutch coastal zone is regulated by master plans for spatial planning. The plans for spatial planning are drawn up from rough to detailed by the national, provincial and local authorities, respectively. Each making the decisions from their own scope of view, within the restrictions of the plans presented by higher levels of authority. The 'bestemmingsplan' on the local level is the regulatory instrument for activities in the coastal zone.

3.12.4 Coastal policy

As was mentioned earlier, safety of the hinterland and conflicts in area use are the major coastal management problems in the Netherlands. To ensure the safety of the hinterland the monitoring and control of coastal erosion are of prime concern. The Provincial Consultative Bodies for the coast (POK's) co-ordinate activities and advise the government in coastal policy. The bodies try to weigh the interests of the different stakeholders in the coastal area but still progress can be made towards more integrated coastal zone management. Public participation is an important instrument in Dutch coastal management.

3.12.5 Coastal defence

Coastal defence is carried out decentralised, with the bulk of activities carried out by regional bodies called *waterboards* on the larger part of the Dutch coast. The National Government is handling the areas that require a national approach such as for example the Delta works. The provincial governments supervise the activities of the waterboards. The earlier mentioned POK's are platforms where all important stakeholders in the coastal management process are represented. The entire coastal system is overseen at the national level by the Ministry of Transport, Public Works, and Water Management, which acts as leading coastal agency

Since 1990 the coastal defence policy in the Netherlands is formulated according to the Dynamic Preservation Strategy, which sets basic coastline positions to be maintained by law. The position of the coastline is determined each year through a monitoring system. By comparing the actual position of the coastline with the basic coastline of 1990, decisions can be made whether to intervene by sand nourishment or not. Where the safety of the hinterland is not threatened and long-term erosion is absent a choice for dynamic interaction between the sea and the land can be made in order to improve natural values.

3.13 Poland

3.13.1 Country facts

Poland has an area of approx. 312,500 km² and a little over 38,5 million inhabitants. On land Poland has boundaries with the Belarus (605 km), the Czech Republic (658 km), Germany (456 km) Lithuania (91 km), Russia (432 km), Slovakia (444 km) and Ukraine (428 km). The government type is democratic state. Poland is not a member of the EU.

3.13.2 General features of the coast

The Polish coastline has a length of 491 km. The coast mainly consists of beaches, dunes, cliffs and lagoons. Problems that need to be addressed in coastal zone management are protection from flooding and erosion. Besides that, the co-ordination of the use of land and territorial sea areas, sustainable development of tourism and protection of environmental values are considered of key importance.

3.13.3 Spatial planning, nature preservation and environmental policy

Spatial planning is regulated through the Act on Spatial Planning (1994). This act constitutes the basis for enacting local law within communities. Protection areas of particular natural value constitute one of the largest programmes. A programme called the Environmental System of Protected Areas has been implemented since the mid-1970s. Its principal idea was the creation of a coherent, interconnected system of protected areas.

3.13.4 Coastal policy

On the open sea coast 68 % of the shoreline is protected for its natural values. Of this area 10 % lies within national parks or nature reserves where all natural features are protected. The remaining area consists of landscape parks and protected landscape areas where new building and other development is severely restricted. The administration of the Polish coast is handled by the Maritime Offices under the Ministry of Transport and Maritime Economy. The shoreline consists of a *technical belt* and a *protective belt*.

On dune shores the *technical belt* embraces the beach, the dune ridge and a zone up to 200 meters behind the dune ridge. On cliff shores it consists of the cliff foot, the cliff and a belt of land up to 100 meters from the upper edge of the cliff. On lagoon shores it includes the land between the shore and the flood embankment or in areas without a flood embankment a belt up to 200 meters in width.

The *protective belt*, which is considered to be the buffer of the technical belt, extends 2 kilometre inward from the shoreline. The boundaries of both belts are geodetically determined and connected to the national geodetic grid. The protective belt does not extend seaward.

The main aim of the legislation on the technical and protective belts is to protect the coast against erosion and floods, but in practice it can also serve nature protection purposes. The administrative powers of the Maritime Offices are quite extensive and allow control of all economic activities in both zones, as well as the sea area (including internal marine waters). For instance, new building and other utilisation of the area must be approved by the Maritime Office. The areas under the administration of the Maritime Offices are mainly state owned.

A recent amendment (1998) of the Act on Spatial Planning provides that the so-called 'decisions on conditions of construction and development' in the coastal belt (i.e. technical belt + protective belt) must be approved by the respective Maritime Office, and that in the areas of the internal marine waters and territorial sea these decisions are issued by the Maritime Offices.

3.13.5 Coastal defence

The major concerns in Poland with respect to coastal defence are coastal erosion and flooding of the hinterland. Together with the Maritime offices, the Government is currently developing a Strategy for Coastal Protection. Coastal protection oriented research and monitoring has been financed. Work on regulations concerning safety and protection of the coastal zone have been started.

3.14 Portugal

3.14.1 Country facts

Portugal has an area of approx. 92,000 km² and a little over 10,5 million inhabitants. On land Portugal has boundaries with Spain (1214 km). The government type is republic, unitary in nature. Portugal is a member of the EU.

3.14.2 General features of the coast

The Portuguese coastline has a length of 1,793 km. The coast is public domain. The type of the coast is mainly cliffs, rocky shores, dunes, gravel beaches, wetlands and dry grassland.

3.14.3 Spatial planning, nature preservation and environmental policy

Table 3-14 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<u>Legal framework and main legislation</u> Many different laws for sector activity defining individual parts of the system frequently amended by further decrees. Main law for Spatial Planning is the Lei dos Solas Decree Law No. 794/76. New framework law is being discussed
Regional	5 whole or part regions, Azores and Madeira	<u>Strategic plans</u> Plano Regional de Ordenamento do Território (PROT)
Local	305 Câmaras	<u>Framework plans</u> Plano Director Municipal (PDM) <u>Regulatory plans</u> Planos de urbanização (PU) Planos de pormenor (PP) Loteamentos (land subdivision schemes)

Table 3-14 : Spatial planning and organisation (based on European Union, 1997)

Portugal has a unitary form of government. Portuguese physical planning was focused mainly on urban areas. The last years a wider approach has been adopted.

3.14.4 Coastal policy

In Portugal the width of the protected coastal strip depends on the type of the coast. The coast is public domain. Outside urban areas, the protected belt is located 200 metres from the shoreline on cliff or rocky shores and on the dunes 200 metres from the landward limit of the dune. On other coasts, like gravel beaches, wetlands and dry grassland, the protected zone can be extended up to 500 metres from the shoreline.

About 25% of the coast in mainland Portugal is protected with a national protection status. One can exempt from the protected coastal strip by a land use plan and therefor it looks

more like a planning zone than a protected zone. All planning instruments are submitted to the public for comment, but participation is not part of the “culture”.

3.14.5 Coastal defence

Information about regulated coastal defence is lacking.

3.15 Spain

3.15.1 Country facts

Spain has an area of approx. 505,000 km² and a little over 39,4 million inhabitants. On land Spain has boundaries with Andorra (65 km), France (623 km), Gibraltar (1.2 km) and Portugal (1214 km). The government type is parliamentary monarchy, regionalised in nature. Spain is a member of the EU.

3.15.2 General features of the coast

The Spanish coastline has a length of 7,880 km. The coast mainly consists of sandy beaches and cliffs. Main management problems on the Spanish coast are: coastal erosion, tourism development, general urbanisation, sedimentation, degraded water quality, loss of productive ecosystems, intergovernmental duplication, marine pollution and competition for fishery resources (Cicin-Sain & Knecht, 1998).

3.15.3 Spatial planning, nature preservation and environmental policy

Table 3-15 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<u>Legal framework and main legislation</u> 1992 Texto refundido de la Ley sobre el Régimen de suelo y la Ordenación Urbana and several laws by Regional Government or Autonomous Communities.
Regional	17 Regions (of which 10 adjacent to the coast)	<u>Strategic plans</u> Planes directores territoriales de coordinación (or it's equivalent in regional laws)
Local	8,077 Municipalities	<u>Framework plans</u> Plan general. Normas complementarias y subsidiarias Proyectos de delimitación de suelo urbano <u>Regulatory plans</u> Programa de actuación urbanística (PAU) Plan parcial (PP) Plan especial (PE) and others

Table 3-15 : *Spatial planning and organisation (based on European Union, 1997)*

Spain has a regionalised government. This means that the national government shares its powers with a lower tier of government. The power is apportioned through constitution or statute.

3.15.4 Coastal policy²

Main legislation for Spanish coastal policy are the following laws: The Shores Act of 1988 and Regional Guidelines for the Coastal Zone of 1992. The Shores act defines the use and government policy power on coastal public property and in particular the shores. There is little implementation of Integrated Coastal Management. Also there is hardly any movement toward policy integration. With respect to management of the coastal zone, there exists an overlap of jurisdiction among national, regional and local authorities. Although the bulk of resource management jurisdiction is vested in the regional government the national government also has a role through the National Shores Act. Local governments participate in CZM through the development of land use plans in beach and foreshore areas. The result is a complicated framework of coastal management arrangements and jurisdictions that appears duplicative and inefficient.

3.15.5 Coastal defence

Information about regulated coastal defence is lacking.

² *Comment of dr. A. Lechuga: 'Though a considerable effort is being made to improve the Spanish coastal zone, in some cases through the corresponding ICZM plans, I realise that not much information is included in the sources. That does not mean that this information is not available. For instance, we are in the process of ICZM plans at Castellon Coast, Ebro Delta and Huelva Coast'.*

3.16 Sweden

3.16.1 Country facts

Sweden has an area of approx. 450,000 km² and a little over 8,8 million inhabitants. On land Sweden has boundaries with Finland (586 km) and Norway (1,619 km). The government type is a constitutional monarchy, unitary in nature. Sweden is a member of the EU.

3.16.2 General features of the coast

The Swedish coastline has a length of 3,218 km.

3.16.3 Spatial planning, nature preservation and environmental policy

Table 3-16 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<i>Legal framework and main legislation</i> 1987 Plan-och Buggnadslagen (The Planning and Building Act)
Regional	24 County administrative boards	<i>Strategic plans</i> Läns strategy
Local	288 Kommuner	<i>Framework plans</i> Överstrikstplan (OP) <i>Regulatory plans</i> Detaljplan (DP)

Table 3-16 : *Spatial planning and organisation (based on European Union, 1997)*

Spatial planning in Sweden is organised in a decentralised way by the Planning and Building act of 1987. Most of the planning responsibilities are transferred to regional and local levels of government. The Act stipulates that all municipalities must have a structure plan covering the whole of their area. Current town and building plans are replaced by one type of plan called a local plan. The local municipal council fixes the plan after an exhibition and an invitation to the inhabitants to react.

3.16.4 Coastal policy

The Nature Conservation Act (§15) was amended in 1994 whereby the aim of shore protection is enlarged to cover also protection of flora and fauna, not only to ensure the possibilities for outdoor recreation. The coastal strip generally extends 100 m from the mean water line. It can be extended up to 300 m by the county Administrative board. Land use in this strip is under regulation. This possibility has been widely used. The coastal strip is also extended seaward, generally 100 m with a possible extension up to 300 m. The use of jetskis is forbidden outside specially marked areas.

3.16.5 Coastal defence

Information about coastal defence measures is lacking.

3.17 United Kingdom

3.17.1 Country facts

The UK has an area of approx. 245,000 km² and a little over 58,2 million inhabitants. On land the UK has boundaries with the Ireland (360 km). The government type is a constitutional monarchy, unitary in nature. The UK is a member of the EU.

3.17.2 General features of the coast

The coastline of England and Wales is some 4,200 km long. The coast has an extremely varied morphology and includes examples of virtually all temperate coastal formations from rock cliffs and headlands to sandy beaches, shingle ridges, dunes, salt marshes and mud flats. Some 25-30 % of the coastline is developed and almost 45 % is subject to some environmental designation as Heritage Coast, Area of Outstanding Natural Beauty or National Park.

3.17.3 Spatial planning, nature preservation and environmental policy

Table 3-17 summarises the responsible authorities and available instruments for physical planning.

	Responsible authority	Instrument
National	National government	<i>Legal framework and main legislation</i> 1990 Town and Country Planning Act (1972 Act in Scotland) amended in 1991 by the Planning and Compensation Act
Regional	11 Regions 56 Counties in England, Scotland and Wales	<i>Strategic plans</i> Regional and strategic guidance Structure plans and unitary development plans part one
Local	483 Districts	<i>Framework plans</i> Local plan and unitary development plan (UDP) part two <i>Regulatory plans</i> Simplified planning zones

Table 3-17 : Spatial planning and organisation (based on European Union, 1997)

The unitary nature of the government system of the UK causes the local planning authorities to take national and regional planning guidance into account when drawing up development plans. Structure plans set out general policies and proposals. Local plans define in detail the areas in which specific policies apply.

3.17.4 Coastal policy

In the United Kingdom the first reactions against the potential threats to the coast were voiced by private organisations as early as the 1930's. Management of the coastal zone is

achieved through statutory planning procedures, local and regional operating authorities and voluntary liaison arrangements. Revised national planning policy guidance on the coast issued in 1992 sets out the principles to be applied in development plans. It advises that development plan policies for the coastal zone should:

- not normally provide for development which does not require a coastal location,
- Guide new development to coastal areas which have already been developed,
- minimise development in areas at risk from flooding, erosion and land instability.

3.17.5 Coastal defence

There are some 300 km of sea defences in England and Wales providing flood protection to urban land and a further 960 km of defences protecting mainly rural and agricultural areas from flooding from the sea. Coast protection and flood defence is the policy responsibility of the Ministry of Agriculture Fisheries and Food (MAFF). At the national level, the MAFF has published a National Coastal Defence Strategy which outlines Government policy towards coastal and flood defences. The national strategy is translated at the regional level by Shoreline Management Plans (SMP's). These are not based on political boundaries, but deal with defence issues within coastal process areas called sediment cells. Shoreline Management Plans outline the strategic objectives for coastal and flood defence within a sediment cell.

In coastal defence matters there is a recognised need for cross boundary co-ordination where administrative boundaries intersect coastal process units and this is being addressed by regional planning groups and regional coastal groups. It is current policy for coastal defences that there is a presumption in favour of the continuation of natural processes, except of course in areas where lives or important natural or man-made assets are at risk.

4 Summary of important findings

Table 4-1 gives a summary of some of the most important findings. The first four columns are included to give a quick indication of each national situation. The last three columns indicate if the country has a coastal planning zone. The concept of such a *coastal planning zone* is defined as an exclusionary terrestrial zone in which certain jurisdiction and control is exerted by the national government. In most countries the national government has primary, if not exclusive legal jurisdiction over the marine areas adjacent to the coast. The shoreland itself is usually under the jurisdiction and control of the local level of government, but in an increasing number of countries, it may also be subject to an exclusionary zone immediately adjacent to the water's edge, created by the national government. Typically, these exclusionary zones, or coastal planning zones, prohibit the building of structures within some fixed distance of the water's edge or tide mark (Cicin-Sain & Knecht, 1998). In the table the total width of the coastal planning zone is indicated and the dimensions land ward and seaward are given.

	Surface area (km ²)	Length Coastline (km)*	Number inhabitants (mln)	Form of Government	Coastal planning zone? (yes/no)		
					Total width (m)	Terrestrial strip? (m)	Protection seaward? (m)
Belgium	30.000	64	10	Federal	n	-	-
Denmark	43.000	7.000	5	Unitary	y	3 km	300 (100) Partly
Estonia	45.100	1.393	1.5	Unitary	y	-	100 (200) No
Finland	337.000	1.126	5	Unitary	y	100 (300)	100 (50-200) No
France	547.000	3.427	58	Unitary	n	-	-
Germany	357.000	3.379	81	Federal	y	-	100 - 200 No
Greece	132.000	16.500	10.5	Unitary	n	-	-
Ireland	70.300	1.448	3.5	Unitary	n	-	-
Italy	301.000	5.000	58	Regionalised	n	-	-
Latvia	64.000	470	2.5	Unitary	y	3-5(6) km	300 300
Lithuania	65.000	108	3.8	Unitary	n	-	-
Netherlands	35.000	432	15.5	Unitary	n	-	-
Poland	312.500	491	38.5	Unitary	y	-	200 (100) Partly
Portugal	92.000	1,793	10.5	Unitary	y	200-500	200-500 -
Spain	505.000	4.964	39.4	Regionalised	n	-	-
Sweden	450.000	3.218	8.8	Unitary	y	-	200-300 (100) 100-300
UK	245.000	4.200	58.2	Unitary	n	-	-

*: Note that there may be substantial differences in coastal length between sources as the method of measuring the length is often different.

Table 4-1 : Summary of some important findings

The information presented in this report has been derived from a number of reports containing reviews and inventories of the current situation in (parts) of Europe. In the following summary the most important sources are listed.

- 1) European Commission (1994). Europe 2000+, Co-operation for European territorial development
- 2) DocTer (1991). European Environmental Yearbook.
- 3) European Union (1997). The EU Compendium of Spatial Planning Systems and Policies.

- 4) European Commission (1997). European Spatial Development Perspective, First Official Draft.
- 5) Healy, M.G. and Doody, J.P. (1995). Directions in European Coastal Management. Samara Publ. Ltd./EUCC.
- 6) Jones, P.S., Healy, M.G. and A.T. Williams (1996). Studies in European Coastal Management. Samara Publ. Ltd./EUCC
- 7) Bakker, Th. W., Jungerius, P.D. and Klijn, J.A. (1990). Dunes of the European Coasts; Geomorphology-Hydrology- Soils, Catena Verlag, Germany
- 8) Meulen, van der F., P.D. Jungerius and J. Visser (1989). Perspectives in Coastal Dune Management, SPB Academic Publishing, The Hague, the Netherlands.
- 9) Bennett, Graham (1994). Conserving Europe's Natural Heritage; Toward a European Ecological Network. Proceedings of the international conference held in Maastricht, 9-12 November 1993, Graham & Trotman/Martinus Nijhoff, London/Dordrecht/Boston.
- 10) Universitaire Beroepsopleiding Milieukunde (1991). European Coastal Management UBM Report No. 1991/2, Leiden University, EUCC archive 17.6.2.
- 11) Hewett, J. (1995). European Environmental Almanac. Institute for European Environmental Policy, London, Earthscan Publications Ltd, London. EUCC archive 17.2.
- 12) Organisation for Economic Co-operation and Development (OECD) (1993). Coastal Zone Management, Integrated Policies, OECD Documents 1993. EUCC archive 17.6.3.2.
- 13) ENVIREG (1994). Commission of the European Communities, Economic Development & Environmental Protection in Coastal Areas: A guide to good practice, published by AMBER 1994, EUCC archive 17.5.2. Economic, Social and Environmental Issues for the European Coastal Zone, Elements of Good Practice in Coastal Planning and Management.
- 14) Information document European Commission Services, DG Environment, Nuclear Safety and Civil Protection, DG Fisheries, DG Regional Policy and Cohesion, Demonstration Programme on integrated management of coastal zones, February 1996.
- 15) Silva, da M.C., de Vries, L.M. and J.M.M. Villaverde (1995). Scoping Study on Integrated Environmental Assessment of Coastal Zones, October 1995, European Environment Agency, European Topic Centre on Marine and Coastal Environment. EUCC archive 17.6.
- 16) Eurosite, Management Plans for protected and managed natural and semi-natural areas, Eurosite European Guide for the preparation of Management Plans, 1996. EUCC archive 17.5.3.
- 17) Brady Shipman Martin (1997). Coastal Zone Management: A draft policy for Ireland, Discussion document, Dublin.
- 18) CIA (Central Intelligence Agency) (1995). The World Factbook, Government printing office, Washington, D.C.
- 19) European Union (1997). *The EU compendium of spatial planning systems and policies*, Office for official publications of the European Communities, Luxembourg
- 20) Cicin-Sain, B. & Knecht, R.W.(1998). *Integrated Coastal and Ocean Management, Concepts and Practices*, Island press, USA, Washington D.C.

5 Relations between spatial planning and coastal management

Spatial planning covers only a part of the large array of coastal management issues. Although spatial planning has been reported to be the most significant coastal management activity, there are at least five other major functions of coastal management to be discerned, i.e. promotion of economic development, stewardship of resources, conflict resolution, protection of public safety and proprietorship of public submerged lands and waters (Cicin-Sain & Knecht, 1998). In order to avoid confusion, it should be clearly defined what we mean by *spatial planning* and *coastal management*. In the context of this report spatial planning has been regarded as the entire legal and regulatory framework intended to influence the distribution of activities in space and the linkages between them (EU Compendium, 1997). In most countries this framework resides with a specific Ministry or Department. Coastal management can be defined as a continuous and dynamic process by which decisions are made for sustainable use, development and protection of coastal and marine areas and resources (Cicin-Sain & Knecht, 1998). In a way spatial planning is broader than coastal management, i.e. with respect to the area it covers: the legal framework is intended to be valid for the entire country, while coastal zone management is restricted to only a part of a country. On the other hand, coastal zone management is broader than spatial planning as it covers more activities (see above) and it uses spatial planning as a tool to reach its goals. In this chapter we are interested in the overlap between the two different governmental policy terrains.

In order to put the differences of spatial planning for the European coastal zones in the right perspective, it is necessary to take into account the differences in coastal management between countries as well. A complete review of these differences is beyond the scope of this report. However, some general remarks regarding the relation between spatial planning and coastal management have been made below.

5.1 Types of spatial planning

A first rough classification of planning approaches might improve the understanding of the variety of planning regulations in Europe. Two basal axes are identified:

- top down planning versus bottom-up
- restrictive ('no, unless...') versus a liberal ('yes, on condition that...') planning policy

Denmark is perhaps the clearest example of a top-down approach with a restrictive policy. The Nature Conservation Act of 1992 protects a coastal strip 100-300m from the position where continuous vegetation begins land ward of the shoreline, and the Physical Planning Act (1993) declares that undeveloped coasts shall remain essentially natural landscape resources of the country. At the opposite, a bottom-up approach with a liberal policy can be found. For instance Finland can be mentioned, where the landowner has the right to build unplanned, dispersed structures on the shoreline. Here planners can try to structure these developments in order to maintain some stretches of undeveloped coast, but since most coastal areas in Finland are divided into small ownership units, this is often impossible. If

the state or the municipality wants to save some part of the natural coast from exploitation, it has to buy it at market value (Nordberg, 1995).

An example of a bottom-up approach using a restrictive planning policy is the UK sectoral planning system for building development. In the UK local authorities must prepare a structural plan for their area and take account of national policy guidelines set up for land use planning. Through these sectoral Planning Policy Guidance (PPG) notes it is stipulated that 'undeveloped coasts should not be expected to accommodate new development that could be located inland or in existing developed areas' (Nordberg, 1995; Huggett, 1995).

Of course, a very straightforward way of preserving the coastline is by acquiring some form of protection status. In France, a major instrument for enforcing conservation and guaranteeing public access to the coast is through the acquisition of land. Here, two nation wide mechanisms exist:

- Conservatoire de l'Espace Littoral (CEL)
- Taxe Départementale des Espaces Naturels Sensibles (TDENS)

The CEL's main function is to acquire sites in order to ensure their durable conservation, while the TDENS is an instrument through which the costs of land acquisition and management can be financed. The actual decisions on land acquisition are made on the level of the different departments. The total area of acquired land within the framework of this policy varies from a few hectares in Somme or Landes, to almost 1000 ha in Bouches-du-Rhone (Meur-Ferec, 1995).

Germany is another example where the designation of nature reserves is regarded as an important tool for preserving the coastline. Mecklenburg-Vorpommern assigned some protective designation to more than 90% of the coast. At the same time, Mecklenburg-Vorpommern is also an example of a restrictive policy: the first Nature Protection Act declares that building constructions may not be erected or essentially enlarged within a 200m wide strip from the coastline.

5.2 The need for spatial planning in the coastal zone

There is an interesting example of how spatial planning and coastal zone management influence each other. In the Dutch coastal policy note of 1990, the government introduced the policy of 'dynamic preservation'. The location of the coastline of 1990 became the main benchmark for shoreline management. Coastal erosion was no longer accepted. If the actual coastline is located landward of the position of 1990, corrective action needs to be taken (De Ruig, 1995). This new policy has been positively received by Dutch nature conservation groups as it was seen as a sustainable way of shoreline management, preserving nature values close to the sea. But at the same time this policy increased the development opportunities, as the potential for tourism and recreation of the coastal dunes increased. The interests in the coastal zone are substantial. Nature, sea defence, industry and tourism are struggling for space 'at the front row' of the coast. Besides, the policy of dynamic preservation since 1990 is seen by project developers as an argument that new developments on the shore have become possible (Hillen & Teunissen, 1998).

The Dutch government is currently worried about this situation, as the new developments can negatively affect both the actual nature values of the coast and its long term resilience.

As the government realises that current spatial planning regulations are incapable of regulating this development, it is searching for new instruments. The spatial planning in the Netherlands is primarily based on the local bye-laws and municipal plans. For the Dutch coast there are as much as 300 local plans involved. And it has been proven that these plans do not always guarantee that the coastal zone is protected against developments which are unfavourable from a nature conservation and coastal defence point of view (Hillen & Teunissen, 1998).

The question is if a new approach for spatial planning along the Dutch coast can be found, that solves the above described situation and at the same time is politically and legally feasible in the Dutch context. Besides, which lessons can the Dutch learn from other European countries?

5.3 Effectiveness of spatial planning

The descriptions of different approaches do not take into account the effectiveness of their implementation. In this respect it should be noted that spatial planning is only a tool (e.g. for coastal zone management) and not an end in itself. The ultimate aim is often formulated in more or less general terms of *sustainable development* or *environmental quality, welfare, preservation of landscape amenity* etc. In many European coastal environments the development pressure is high and increasing. There is a general awareness in many countries that, in order to comply with the above mentioned aims, some form of spatial planning is necessary. In this report it is demonstrated that most of the countries have indeed adopted a certain coastal planning approach. The effectiveness of this approach has, however, not been assessed yet. In anticipation of an analysis of the different approaches, some general observations can already be made. Problems associated with the implementation of coastal spatial planning can be grouped in four classes:

- lack of well defined objectives for planning
- insufficient public involvement and acceptance of planning procedures
- differences in spatial and temporal scales between planning units and coastal processes
- lack of planning instruments, insufficient legislative framework, lack of funds, insufficient enforcement etc.

Planning objectives

The first problem is fundamental to all planning efforts. If there is no well defined and concrete aim, planning is bound to fail. It is not sufficient to refer to the general aims such as *sustainable development*, as these objectives leave too much room for different interpretation. An example of an effort to describe more precisely why the coastal zone should be preserved can be found in the development of Dutch coastal policy. Recently the decision makers have introduced the concept of *resilience*. With this argument the government tries to convince the various interest groups to abstain from certain building developments in the dune area of Holland. Building activities that are likely to reduce the coastal resilience are not accepted any more and should be prevented through planning regulations. The question remains, of course, how to define the concept of resilience and make it an accepted criterion within existing planning regulations. Currently, Rijkswaterstaat, in co-operation with DELFT HYDRAULICS, is exploring the possibilities of quantifying and measuring the resil-

ience of the Dutch coast through a number of studies (Baan et al, 1997, Marchand & Baan, 1998).

Another pitfall of coastal planning is often the lack of an overall vision on coastal development. Many planning regulations are set up in order to avoid or handle conflicts over space and do not necessarily result in an optimal situation. The end result is the outcome of public negotiations at a local level, and could easily imply a piecemeal division of the entire coastal area among the different interest groups. Some general planning rules may avoid this phenomenon, e.g. by declaring a general set-back line or coastal strip where major developments are restricted. The main aim of this kind of legislation is often to ensure free public access to the coastline, but also to conserve the nature and landscape values connected to the coast (Nordberg, 1995). Thus, two or more interests may be served by one specific regulation. There is, however, a danger in using this instrument if not all aims are clearly formulated from a general policy perspective. For instance, the use of a set back line (which in essence is a measure to cope with coastal erosion) for nature conservation purposes prevents accounting for important spatial ecological relations which exist perpendicular to the coast. In other words: nature conservation measures should primarily be based on a nature conservation policy.

As long as the arguments and criteria are not yet well defined and described, the public acceptance of certain planning limitations remains problematic. This brings us to the next issue: how to increase public involvement and acceptance?

Public involvement

Without a proper involvement of the public, the acceptance of planning regulations will be small. Of course this issue is generic to all spatial planning and not typical for the coast. What we do see, however, is that coastal planning (and especially the planning of land/water interfaces and coastal waters) is lagging behind. Contrary to land use planning, the coastal zone and waters are often still regarded as free space where boundaries do not exist and resources are unlimited. The idea that spatial planning is nonetheless necessary is still not 'common sense' within the public. A change of attitude is necessary here, and can only be achieved if the urgency of the problems and the objectives of planning are well defined and communicated.

Spatial and temporal scales

It is a well known fact that administrative (planning) units do mostly not coincide with physical units of the coast. Coastal processes often work on larger time and spatial scales than the process of planning. For some interactions, the entire catchments of rivers entering the coastal waters are relevant. An example of this approach is the management of the Po Delta, Italy, where the complete watershed including the coastal zone is considered as the basic management area. But within this approach still an answer has to be found to the question how to relate the basin-wide management to the many different administrative units.

Another example is the sediment transport along the coast, for which the concept of sediment cells, could be adopted, which may encompass large stretches of the coastline. In the

Netherlands and the UK this concept of coastal sediment cells is incorporated in the shore-line management plans (Huggett, 1995).

Planning instruments

The effectiveness of spatial coastal planning finally depends on the existence and well-functioning of planning instruments. Here the country-specific conditions with respect to the type of government, administration and legal context predominate. It is extremely difficult to present general ideas or concepts and to exchange experiences between countries with respect to the planning instruments without making a detailed analysis of the planning conditions of each of the countries. An interesting method for this analysis is the bottom-up approach: which regulations, permits, financial arrangements etc. apply in a specific country if an actor wants to build a construction in the coastal zone? This approach could provide a completely different view on the effectiveness (or ineffectiveness) of spatial planning procedures as described in this report through a top-down approach. A similar analysis can be made for another actor who wants to preserve a certain area for nature conservation purposes.

6 Conclusions and recommendations

The country descriptions show three different approaches to protect the coast or regulate the use of it (see also Nordberg, 1995):

- defining a coastal strip with specific legal protection
- general habitat protection through nature conservation legislation
- land use planning legislation

In some countries we find a mixture of the above approaches, as for instance in Portugal and Poland. In others, an implicit or explicit choice has been made between one of them. For instance, in Ireland building on existing administrative (land use planning) systems is considered to be a more realistic and desirable approach than introducing a new instrument.

It can be concluded that there is much variety between different countries in the EU and the Baltic area when it comes to spatial planning in the coastal zone. In this report it is demonstrated that most of the countries have indeed adopted a certain coastal planning approach. The effectiveness of this approach has, however, not been assessed yet. There are differences in sectoral approaches, in integration efforts, in the way coastal conservation is implemented in legislation etc. Most of the differences are closely related to the government practices in different countries. The coarse overview of coastal planning learns that lots of different approaches have been implemented and much can be learned from those efforts to prevent the same mistakes being made in the future. The information uncovered in the *quick-and-dirty* scan is a starting point for the analysis of the various approaches to coastal zone management activities. More detailed information is required especially on an implementation level.

The ultimate aim of the comparison between countries is: what can we learn from experiences elsewhere? Can a country adopt an approach which has been proven successful in another country? Or in other words: *under what circumstances and to what extent can a program that is effective in one place be transferred to another?* (Rose, cited in Cisin-Sain & Knecht, 1998). The first reaction is: yes, we can learn from other countries. But in order to answer this question more precisely, the information which has been gathered in this report, and what is still to be uncovered in the huge amount of information sources listed in the report, needs to be analysed. In this analysis many aspects need to be taken into account, which influence the effectiveness of a specific approach, e.g.:

- the general level of development
- the type of political system and government type (e.g. federal, unitary or regional)
- the socio-cultural setting
- the physical setting (coastal type and related specific coastal problems)

Take for instance the physical setting of the coast. The well-founded procedures for coastal defence in the Netherlands can largely be explained by the fact that large parts of the coast are prone to flooding. This basic fact has been of enormous influence in historical times as well as in the present regarding the way the society is organised. The local Water Boards have been in existence for many centuries and their organisation has proven to be highly effective in 'keeping man's feet dry'. It has been only in the recent decades that this system becomes less effective with regard to new problems coastal management is facing (e.g. with respect to nature conservation needs and economic development of the coastal zone).

Therefore, in the next phase of the analysis answers need to be given to the following questions:

- can the specific approach in a country be explained from the historical, political, socio-cultural, geographical and physical setting?
- what is the effectiveness of the approach? Is it enforced and does it comply with the anticipated objectives?
- In what way can international arrangements and legislation (e.g. from the European Union) be used as a means to improve coastal management?

Many factors involved in the analysis deal with general spatial planning problems, which are not specific to the coastal environment. There are, however, special elements unique to the coastal environment which makes planning even more complex than inland planning. The natural dynamics of the coast and the continuing pressure on its resources, both from a natural perspective (e.g. sea level rise) and socio-economic perspective (e.g. increasing urban and tourist developments) are the main reasons that coastal management is more than merely planning of the coastal zone. As a consequence of this, it might be fruitful to define the geographical boundaries for coastal management according to the physical environment rather than the administrative system. An example of this approach is the management of the Po delta, Italy, where the complete watershed including the coastal zone is considered as the basic management area. Equally interesting is the evaluation of the CZM Act of the U.S.A., of which elements might be of practical use in the European context, especially for countries with a similar federal policy administration.

Recommendations

In order to efficiently use the large amount of existing information for the analysis phase, it is recommended to start the next phase with a screening procedure for selecting a limited number of countries to be considered. For this screening procedure a clear description of the problem to be addressed should be available. Criteria for the selection could include:

- similarity with respect to the coastal management problems
- similarity with respect to the geographical setting and coastal types
- similarity with respect to the constitutional and administrative setting

Anticipating on this selection, and as a very first rough indication only, the following countries seem interesting for comparison with the Dutch and Polish situation:

- Denmark
- Germany
- Ireland
- UK
- Latvia

Denmark and *Germany* have very similar geographical settings as compared to the Netherlands and Poland, including both the Baltic and North Sea coasts with large stretches of dunes and sandy shores. Besides, Denmark has a very advanced coastal zone management policy, including a general set-back line. Germany, on its turn represents an approach to extensively use a Nature Conservation Act to protect the coastal zone. The *United Kingdom* and *Ireland* have large stretches of North Sea and Atlantic coasts, with a number of coastal types similar to that of the Netherlands and Poland, including estuaries. The UK has a long standing history with respect to both nature protection and coastal defence. Ireland is especially interesting because of its endeavour to implement CZM with a minimum of administrative and legislative adaptation. To this list also the country of *Latvia* is added, as it shares a comparable political history with Poland, it has typical Baltic coastal features and it made provisions for a protected belt along the shore.



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Appendix

January, 1999

Contents

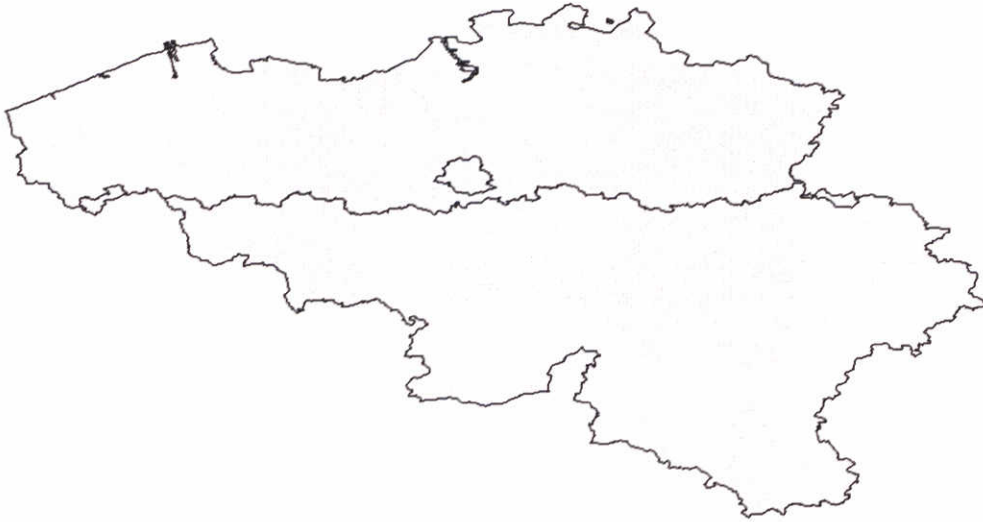
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I Belgium



1.1 Table format Spatial Planning in the European coastal zone

Country: Belgium
 Coastal type:

Property rights:
 Definition coastal zones:

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national		Urban and Regional Planning Act 1962 Royal Ordinance on the organisation and application of project plans and regional plans 1972 the Decree of 22 October 1996 concerning the Town and Country Planning ¹ Dune Decree 1993	specifies the provisions of the sector plans and types of land-use		
	regional	<u>Brussels Region</u> Ministry of Housing, Environment, Nature Conservation, Water Policy, Monuments and Cultural Sights <u>Flemish Community</u> Ministry of Housing and the Environment <u>Walloon Region</u> Direction Générale de l'Aménagement du Territoire, du Logement et du Patrimoine		two-tier system (regional and municipal). three-tier system (regional, provincial and local level) two-tier system		

¹ is the replacement of the Law of 29 March 1962 on the organisation of Town and Country Planning

	local	<u>Brussels Region</u> <u>Flemish Community</u>			two-tier system			
	national	<u>Walloon Region</u> Ministry of Traffic and Infrastructure	Law of 26 March 1971 for the protection of surface waters against pollution Nature Conservation Act 1973 Royal Ordinances of 17 December 1984 Royal Ordinance of 4 November 1987 Decrees of 14 July 1993, 21 December 1994 and 29 November 1995 on the Protection of the Coastal Dunes. Decree on the protection of landscapes of 16 April 1996 ² Ontwerpdecreet Natuurbehoud en het natuurlijk milieu 1997		three-tier system two-tier system		Flemish Higher Council for Nature Conservation	
Coastal policy	regional	<u>Brussels Region</u> Environment and Natural Resources Management Office of the Regional Executive						

² is the replacement of the Law of 7 August 1931 on the protection of monuments and landscapes

1.2 Additional information

- * There is no protected coastal strip defined in metres, but there exists physical planning measurements: for example dune areas get a protection status in and-use plans.
- * 90% of the remaining natural coastal areas is designated as Green area within the physical planning legislation. Several areas have the additional legal protection status of reserve or protected landscape.

Ontwerpdecreet Natuurbehoud en het natuurlijk milieu 1997: Natuurbeleid is gericht op 'de bescherming, de ontwikkeling, het beheer en het herstel van de natuur en het natuurlijk milieu, op de handhaving en het herstel van de daartoe vereiste milieukwaliteit en op het scheppen van een zo breed mogelijk maatschappelijk draagvlak waarbij educatie en voorlichting van de bevolking wordt gestimuleerd'. De Vlaamse regering krijgt de opdracht alle nodige maatregelen te nemen om, de natuur kwantitatief en kwalitatief niet verder achteruit te laten gaan. Het Natuurbeleid bevat zowel een algemeen als een gebiedsgericht aspect. In het kader van het algemene beleid kan de Vlaamse regering alle nodige maatregelen nemen voor het natuurbehoud, ongeacht de bestemming van het betrokken gebied. Zij kan elk stukje natuur in Vlaanderen in stand houden, o.m. door bepaalde activiteiten te verbieden of aan een vergunning te onderwerpen. Belangrijk is de invoering van het zgn, voorkomingsbeginsel. Dat houdt in, dat iedereen die iets onderneemt of daartoe de opdracht geeft en die weet of kan vermoeden dat die activiteiten de natuur kunnen schaden, verplicht is alle maatregelen te nemen om die schade te voorkomen, beperken of herstellen. Ook bevat het decreet een reeks bepalingen over gebiedsgericht natuurbeleid. Binnen 5 jaar moet de Vlaamse regering 125.000 ha Vlaams Ecologisch Netwerk (VEN) afbakenen, waarin een specifiek beleid van natuurbehoud wordt gevoerd en dat bestaat uit Grote Eenheden Natuur (GEN) en Grote Eenheden Natuur in Ontwikkeling (GENO). Onder meer groengebieden, parkgebieden, buffergebieden en bosgebieden kunnen als GEN of GENO worden aangewezen. In die gebieden is het verboden o.m. bestrijdingsmiddelen te gebruiken en de vegetatie, het bodemrelief en de structuur van de waterlopen te wijzigen. Daarnaast komt er een Integraal Verwevings- en Ondersteunend Netwerk (IVON), bestaande uit 150.000 ha natuurverwevingsgebieden en natuurverbindingsgebieden. In die gebieden worden de bestaande natuurwaarden behouden. Ten slotte kan de Vlaamse regering natuurreservaten aanwijzen of erkennen, ook in agrarische gebieden. De regering krijgt eerste recht van aankoop bij de verkoop van gronden in het VEN en in de natuurreservaten, Ook kunnen vrijwillige beheersovereenkomsten met grondgebruikers afgesloten worden.

Dune Decree/ Duinendekreet: de Vlaamse regering heeft 1.098 ha duingebieden definitief voor bescherming vastgelegd. Hiermee werd het oorspronkelijke beschermd duinenareaal van 995 ha. met 103 ha. uitgebreid. Het definitief beschermingsbesluit moet nog ter bekrachtiging worden vastgelegd aan de Vlaamse raad. De definitieve afbakening van de beschermde duinen (waar een bouwverbod geldt) komt na een uitgebreid openbaar onderzoek omtrent de lijst die de Vlaamse regering in 1993 voorlopig vastlegde.

The Decree of 11 September 1985 specifies the terms for environmental impact assessments, and an **Ordinance of the Walloon Regional Executive dated 10 December 1987** establishes the means of their enforcement.

Walloon Decree of 7 October 1985 creates the foundation for all policies in the Walloon region concerning the protection of surface water against pollution.

Royal Ordinances of 17 December 1984 relating to fresh water in need of protection or improvement in order to be suitable for the survival of fish, to bathing water, and to water for breeding shellfish.

Royal Ordinance of 4 November 1987 establishes the minimum quality required for conserving or restoring the normal development of biological life in watercourses (immission standards).

Urban and Regional Planning Act 1962 which covers the whole national territory. Since 1962, this Act has been changes and updated serveral times. The basic principles, however, remain applicable even though spatial planning has become a regionalised matter since the constitutional reforms of 1980 and 1988.

1.3 Information sources

1.3.1 Literature:

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European Coastal Management UBM Report No. 1991/2, Universitaire Beroepsopleiding Milieukunde, Leiden University
EUCC archive 17.6.2

Characteristics of the European coast, human activities in the coastal zone, European nature conservation policy, inventory by country.

Coastal Policy

België: *Vlaams Parlement keurt ontwerpdecreet over het natuurbehoud goed, LBAktualiteiten nr. 31, 17 oktober 1997*
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Integrated Coastal Zone Management van de kustzone "Kust- en Vlaamse banken - IJzermonding - Westhoek": een projekt voor duurzame ontwikkeling, discussienota, Instituut voor Natuurbehoud, Hasselt, 1993.
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1.3.2 Internet:

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Nature conservation in Belgium, governmental authorities, ngo'

<http://www.un.org/esa/agenda21/natinfo/countr/belgium/index.htm>

Information on Belgium and sustainable development, legislation and more

2 Denmark



2.1 Table format Spatial Planning in the European coastal zone

Country: Denmark

Property rights: Public access to the beaches

Coastal type: Sand and pebbled beaches

Definition coastal zones:

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	National government	Nature protection act (1917;1937;1992) 1994	No new hotels and vacation housing in a 3 km wide coastal zone	Protection lines Coastal belt	
		Ministry of the environment	Directive in 1978 since 1994 planning provision incorporated in the Planning Act Physical planning act 1991 (In force from 1992)	No alterations within 100 m of the coast line. Extended to 300 m in 1994. National planning report	Binding directives for pl.CZ National planning directives (to aid implementation)	
	regional	Nature protection board of appeal For the sea territory conservation orders are issued nationally by a statutory order		Regional plans	Issuing permits Granting exceptions; dealing with nature conservation orders on land	
Coastal policy	local	Local government		Municipal plans / local plans		
	national	National government Ministry of the environment	Nature Protection Act 1992.		Protection lines Coastal belt	A Commission is to examine all the Danish coasts in order to define the stretches where the protected belt, because of existing buildings, can

			Hunting and Game Management Act 1993 Sand Drifting Act 1961 now incorporated in the Nature Protection Act Environment Protection Act			Binding directives for pl.CZ	be less than 300 metres.
	Regional						
	local						
Coastal defence	national	Ministry of Transportation and Works National government Danish Coastal Authority	Dune Preservation Law now incorporated in the Nature Protection Act Dike Protection Law Coast Protection Act 1988	Setback lines; building permission required within 100 m of the coastal zone Assists regional and national authorities with technical know how	Protection lines Coastal belt Binding directives for pl.CZ	Responsibility over land/sea interface under one authority Monitoring for storm surge warning system,	
	regional	Ministry on Coastal Protection Regional authority		Execution of measures or constructions for protection against flooding or erosive effect of the sea	Leading managerial role in appraisal process, also involved in project preparation		
	local						

2.2 Additional information

Denmark can be taken as an example. Together with Latvia it has probably the most advanced coastal legislation in Europe (see the Nature Conservation Act of 1994 en the Physical Planning Act of 1991).

Nature Protection Act 1992, the Act prohibits new buildings or other construction as well as fencing and location of camping and similar activities on the protected belt (see also coastal policy). The most important exceptions are constructions for military purposes and harbours. Existing farming is also to continue in the protected strip.

Physical Planning Act (1991 - 1994-amendment) incorporates the coastal planning rules, which were previously formulated in the Coastal Directive 1978), undeveloped coast shall remain essential nature landscape resources. Coastal areas shall be kept free from construction and installations that do not require a near-coast location. The Act establishes a coastal zone, generally three kilometres in width, where all land-use planning must be guided to this principle.

The regional planning authorities are to review all their plans in respect of the **Physical Planning Act of 1993**.

The local planning authorities are to review all their plans in respect of the **Physical Planning Act of 1993**.

Nature Protection Act 1994-amendment, enlarged the previously protected coastal strip from 100 to 300 metres. The distance is counted from the point where the continuous vegetation starts. Only within urbanised areas and areas designated in land-use plans for summer houses will the protected belt remain 100 metres.

The construction of major projects like manufacturing plants, airports, refineries and power stations requires a permit from the environmental authorities, according to the procedures applying to heavily polluting enterprises, instituted by the **Environmental Protection Act**.

2.3 Information sources

2.3.1 Literature:

CIA (Central Intelligence Agency), 1995, *The World Factbook*, Government printing office, Washington, D.C.

Provides basic facts on countries of the world including population size, length of shorelines, structure of government, etc.

Jacobsen, P.R., 1993, *Aspects of coastal zone management*, p 741-748, World Coast Conference 1993: Proceedings (Vol II), Coastal Zone Management Centre

Description of aspects of coastal zone management in Denmark. Written as a preparation for the World Coast Conference 1993 in Noordwijk. Includes relevant legislation and institutions.

Joint Declaration on the protection of the Waddensea, Signed by the Netherlands, Germany and Denmark, 1982

Vision and Strategies for the Baltic Sea 2010, Towards a framework for spatial development in the Baltic region, The Baltic institute, ISBN 91-630-3091-8

Spatial Planning

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visions for the Southern Danish Archipelago, sustainable tourism as a regional development Alternative, Action plans

Coastal Defence

Vestergaard, P., *Possible impact of sea-level rise on different habitat types at the Baltic coast of Denmark*, uit: Coastal Management and Habitat Conservation, Salman, Langeveld and Bonazountas, 1996, Volume II, published by EUCC, Leiden, the Netherlands.

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<http://www.helcom.fi/>

Website of the Helsinki Commission

<http://www.hollandhaven.nl/helcom/index.html>

Part of the Hollandhaven website. General description of targets and participants of HELCOM. Contains reference to HELCOM homepage.

<http://www.odci.gov/cia/publications/factbook/country-frame.html>

Contains general information about countries. Information like population size, land area, length of coastline, form of government and memberships of international organisations

<http://www.un.org/esa/agenda21/natlinfo/countr/denmark/index.htm>

Contains information about countries. Provides information on relevant legislation and institutions.

<http://www.un.org/esa/agenda21/natlinfo/countr/denmark/index.htm>

Denmark and sustainable development, legislation and more

<http://www.ecnc.nl/doc/europe/country/denmark.html>

nature conservation in Denmark, governmental authorities, ngo's

3 Estonia



3.1 Table format Spatial Planning in the European coastal zone

Country: Estonia

Coastal type:

Property rights:

Definition coastal zones:

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national		Act on Planning and Building 1995 Act on Sustainable Development 1995			
	regional					
	local					
Coastal policy	national		Government Decree on Shore Protection of 1992 ⁴ 1995 Act on the Protection of Marine and Freshwater Coast, Shores and Banks 1994 Act on Protected Natural Objects Act on Sustainable Development 1995			
	regional					
	local					
Coastal defence	national					
	regional					
	local					

⁴ Is a temporary solution, will later be replaced by an Act.

3.2 Additional information

3.3 Information sources

3.3.1 Literature:

Coastal Policy

Helsinki Commission- Baltic Marine Environment Protection Commission, HELCOM Programme Implementation Task Force Sixth Meeting, *Agenda Item 5: Policies, Laws and Regulations: Privatization and Environmental Liability in Estonia*, St. Petersburg, Russia, 31 May - 1 June 1995.

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Law on Sustainable Development

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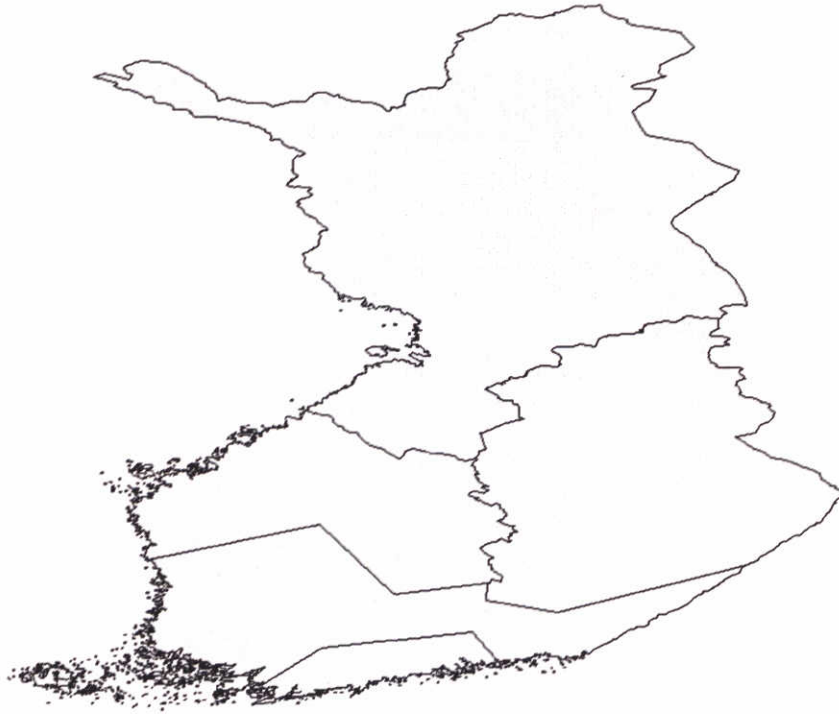
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sustainable development in Estonia, legislation and more

<http://www.ecnc.nl/doc/europe/country/estonia.html>

Nature conservation in Estonia, governmental authorities, ngo's

4 Finland



4.1 Table format Spatial Planning in the European coastal zone

Country: Finland

Coastal type:

Property rights:
Definition coastal zones:

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	Ministry of environment	Planning and Building Act 1995	Planning required for any development in a coastal or inland shore zone.		
			1997: provisions were included in the Building Act of 1958, <i>Other relevant legislation</i> ⇒ Nature Protection Act 1997 ⇒ Act on environmental impact assessment 1994 ⇒ Forest Act 1996 ⇒ Fishing act 1982 ⇒ Wilderness Act 1991 ⇒ Act on protection of rapids 1987 ⇒ Water act 1961			
	Ministry of agriculture					
Coastal policy	regional	Regional councils Regional Environment centres		Development programs Environmental programs		
	local	Municipalities		Municipal development programs Master Plan for Coastal Plans Town plan Shore plan building orders		
	national		1997: provisions were included in the Building Act of 1958 Nature Protection Act 1997	Planning required for any development in a coastal or inland shore zone.		

	Regional								
	local								
Coastal defence	national								
	regional								
	local								

4.2 Additional information

4.3 Information sources

4.3.1 Literature:

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Norberg, L., *Legislation on coastal conservation in Europe: Present approaches and ways to improve the situation*, Coastline, 1996, no.2

EUCC Archive

Coastlines 1992-1997

Nordberg, Lauri, Legislative Adviser, Ministry of the Environment, *Finland: The new Finnish Legislation on coasts and inland shores*,

EUCC Archive

Coastal Policy

Annex 2 *Coast Protection Legislation in the Baltic Sea Region*

EUCC Archive

European Coastal Management UBM Report No. 1991/2, Universitaire Beroepsopleiding Milieukunde, Leiden University

EUCC archive 17.6.2

Characteristics of the European coast, human activities in the coastal zone, European nature conservation policy, inventory by country.

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Coastlines 1992-1997

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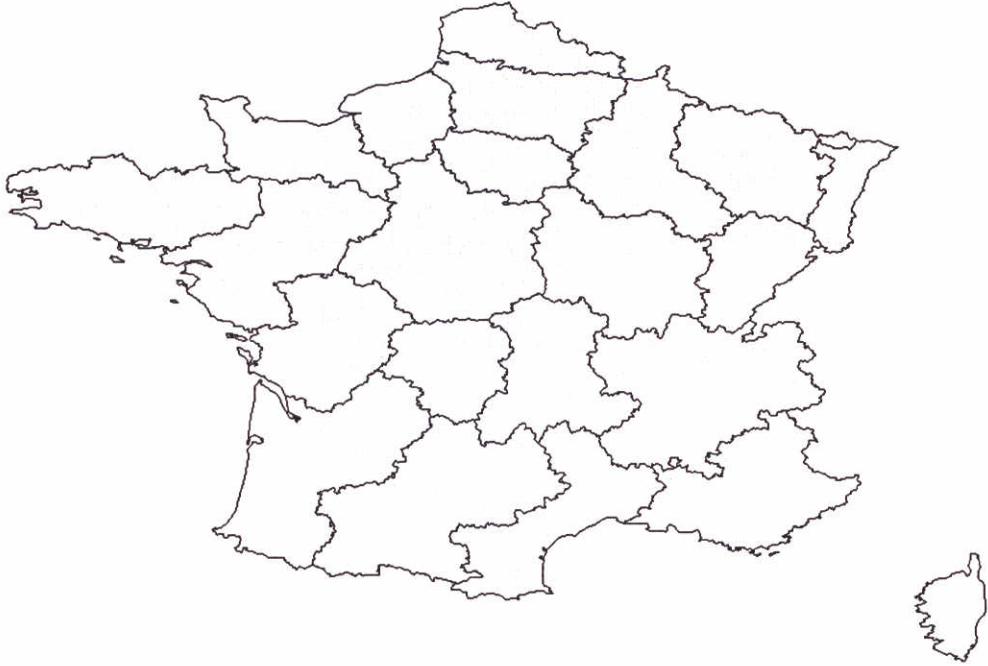
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Nature Conservation in Finland, governmental authorities and ngo's

<http://www.un.org/esa/agenda21/natlinfo/countr/finland/index.htm>

Sustainable development in Finland, legislation and more

5 France



5.1 Table format Spatial Planning in the European coastal zone

Country: France (2783 km + 644 km (Corsica))
Coastal type: Sand and pebbled beaches

Property rights:
Definition coastal zones: wetlands, dunes, beaches, coral reefs, seagrass beds

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	National government	Act 86-2, 1986	100 m coastal strip: construction prohibited		Coastal preservation for tourism
		Direction de l'Environnement	Schemas de mise en Valeur de la Mer (SMVM) 1983	Zoning, Landuse, environment protection	Administration of SMVM plans	SMVM less successful
		Direction de l'équipement	Code of Town and Country Planning Decree of 12 October 1977			
Coastal policy	national	Provincial government 22 regions 96 départements (arrondissement)				
		Communes (local government)		Must follow SMVM for creation of zoning plans	Issuing permits	An SMVM plan involves public and private consultation
		National coastal committee Ministry of the Sea (1981) now called Secretariat a la Mer (1995)	Conservatoire de l'Espace Littoral et des Rivages Lacustres 1975 Loi Littoral 1986 (land use and planning) Act on protected sites and areas 1930 Other relevant legislation:	Modification of land use and zoning laws to suit special needs of coastal area	Regulation of activities Set back lines Preservation of coastal zone Coordination of maritime undertakings	

		<p>Institut Français de Recherche sur l'Exploitation de la Mer (IFREMER) Centre pour l'exploitation des Océans</p>	<ul style="list-style-type: none"> ⇒ National Parks Act (Act no. 60.708) 1960 ⇒ Anti-pollution law of 16 December 1964 ⇒ Law of 19 July 1976 ⇒ National Directive on the protection and management of the coast 25 August 1979 ⇒ Coastal Areas Act ⇒ Article 407 of the Rural Code, derived from the 29 June Law 1984 ⇒ Coastal Law 1986 ⇒ Coastline Act 1986 ⇒ Conservatory of the Sea and Lakeside Shores Decree ⇒ Landscape Conservation and Improvement Act of 8 January 1993 ⇒ Nature Conservation Act (Act no. 76.629) 1995⁵ ⇒ Decree of 12 October 1977 ⇒ Loi sur le domaine public maritime 1963 	<p>Helpfull in interdisciplinary integration</p>		<p>Regional delegations for architecture and the environment responsible for the monitoring of impact studies at the regional level</p>
<p>Coastal defense</p>	<p>regional</p>		<p>Management for the lower Normandy Coasts (DATAR) 1979</p>			
	<p>local</p>					
	<p>national</p>					
	<p>regional</p>					
	<p>local</p>					

5.2 Additional information

Act 86-2, 1986, covering the development, conservation and evaluation of the coastal area (UNEP/IUCN, 1989): the legal controls instituted by this Act regulate offshore development and prohibit construction works within a 100 metres wide strip of the coastline.

National Parks Act (Act no. 60.708) 1960; only one coastal park, covering 22 km of coastline, 21 Nature Reserves are coastal.

Decree of 12 October 1977: to determine when an environmental impact study is necessary.

Anti-pollution law of 16 December 1964 and its implementation decrees specify the binding technical requirements for granting authorizations for "the overflow, run-off, discharge or direct or indirect deposit of any type of material or substance that could provoke or increase deterioration, modifying physical, chemical, biological or bacteriological characteristics.

Law of 19 July 1976, concerning installations classified for environmental protection purposes, also sets discharge rules (prohibiting the discharge of certain substances, necessitating purification treatment prior to discharge, etc.).

The 1964 and 1976 Laws establish the conditions for authorizing certain discharges into the sea, while Departemental Health Regulations prohibit discharging into the sea any used substances, any degradable vegetable or animal residue, any toxic or inflammable solid or liquid substance that could cause pollution.

Article 407 of the Rural Code, derived from the 29 June Law 1984 concerning fresh-water fishing and fish-resource management, is the principal legal provision withing French law making pollution a punishable crime, condemning "anyone who has- directly or indirectly - discharged, run off or drained into water any substances whose action and reactions have destroyed fish life or have damaged the nutrition, reproduction or food value of fish" to payment of a fine (2000 FF to 120.000 FF) and/or imprisonment (2 months to 2 years).

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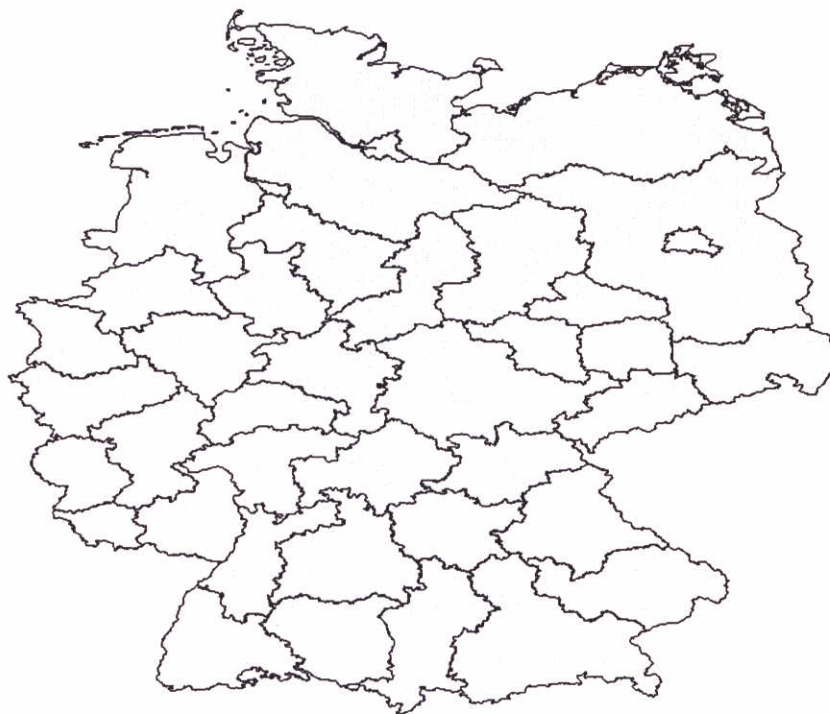
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Nature conservation in France, governmental authorities and ngo's

6 Germany



6.1 Table format Spatial Planning in the European coastal zone

Country: Germany (3300 km)

Coastal type:

North Sea Coast: marshlands, tidalflats, estuaries and islands

Baltic Coast: cliffs, beaches, dunes, marshes, micro-tidal environment

Property rights:

Definition coastal zones:

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	Federal government	Federal Nature conservation act (habitat approach)	States can determine certain habitats that need to be protected, National Parks Planning military areas	Selection of environmental protection areas and National Parks	
	regional	Federal ministry of defence <u>States government:</u> Hamburg Bremen Niedersachsen Schleswig-Holstein Mecklenburg-Vorpommern	Physical Planning Act of Schleswig-Holstein 1992 Physical Planning Act Nature conservation act 1992			
	local	<u>Local authority:</u> Hamburg Bremen Niedersachsen Schleswig-Holstein Mecklenburg-Vorpommern		Building bye-laws minimum distance		
Coastal policy	national	Federal government Federal ministry of defence Federal ministry of economy		Planning military areas Oil extraction		

		<p>Federal ministry of transportation</p> <p>Federal Environmental Agency</p>	<p>Principles for the Assessment of Environmental Compatibility of State Planning Development in the Public Sector 1975(<i>Grundsätze für die Prüfung der Umweltverträglichkeit öffentlicher Maßnahmen des Bundes</i>)</p> <p><u>Other relevant legislation</u></p> <p>⇒ Waste Water Charges Act 1976 (Abwasserabgabengesetz)</p> <p>⇒ Detergent Act 1985 (Wachmittelgesetz)</p> <p>⇒ German Federal Nature Conservation/Protection Act 1987, amended in 1993 (Bundesnaturschutzgesetz)</p> <p>⇒ The Federal Species Protection Directive (Bundesartenschutzverordnung)</p> <p>⇒ Federal Water Management Act (Wasserhaushaltsgesetz)</p> <p>⇒ Federal Act on Land Consolidation 1991</p> <p>⇒ EIA obligations for harbours, reservoir-dams and coastal areas of land reclamation</p>	<p>Waterways, ship traffic</p>	<p>The Länder have to implement habitat protection through their own laws</p>	
		<p><u>States government:</u></p>				

regional	Hamburg Bremen Niedersachsen Schleswig-Holstein Mecklenburg- Vorpommern	Naturschutzgesetz 1997 Nature Protection Act 1992 National Environmental Policy Act (NEPA) 1970			
local	<u>Local authority:</u> Hamburg Bremen Niedersachsen Schleswig-Holstein Mecklenburg- Vorpommern		Summer resorts, planning by local government		
national	Federal government	Ministries of agriculture and transportation Artikel 91a Absatz 1 Nummer 3 des Grundgesetzes (GG) 1993 ⁶	Partly financing protection works Rahmen plan der GAK ⁷		
regional	<u>States government:</u> Hamburg Bremen Niedersachsen Schleswig-Holstein Two ministries, two authorities Mecklenburg-	Landeswassergesetz Landeswassergesetz	Deichverstärkung, Deichverkürzung und Küstenschutz 1986 Partly financing protection works Küsten- und Hochwasserschutz		

**Coastal
defence**

⁶ replacement of Artikel 91a Absatz 1 Nummer 3 des Grundgesetzes vom 3. September 1969

⁷ Verbesserung der Agrarstruktur und des Küstenschutzes

local	Vorpommern <u>Local authority:</u> Hamburg Bremen Niedersachsen Schleswig-Holstein Mecklenburg- Vorpommern	1995		
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6.2 Additional information

Schleswig-Holstein and Mecklenburg Vorpommern have, in addition to the generally protected belts of 100-200 metres, protected all dunes and sand banks, cliffs and steep shores, heaths, coastal meadows, coastal salt marshes, reedbeds, dry grasslands, wet forests, natural creeks and rivers including their banks, spring areas and pools with standing water.

German Federal Nature Conservation/Protection Act 1987, amended in 1993
(Bundesnaturschutzgesetz)

Contains list of generally protected habitats. The Länder can in their own law add further habitats to the list of protected habitats

Mecklenburg-Vorpommern, Nature Protection Act 1992: protected strip of 200 metres, including the bodden bay shores (Aussen unde Boddenkuste), building construction may not be erected of essentially enlarged within the protected strip.

Schleswig-Holstein has a protected strip of 100 metres from the high-water mark landwards on all coastal waters

The Nature Conservation Act, amended in 1993, stipulates on water protection and recreation within this belt

Lower Saxony: most of the natural coast belongs to the strictly protected nature reserve of the Wadden Sea

In Artikel 91a Absatz 1 Nummer 3 des Grundgesetzes (GG) ist seit 1969 u.a. die Verbesserung der Agrarstruktur und des Küstenschutzes (GAK) als Gemeinschaftsaufgabe festgelegt. Hierbei wirkt der Bund bei der Erfüllung von Aufgaben der Länder mit, wenn diese Aufgaben für die Gesamtheit bedeutsam sind und die Mitwirkung des Bundes zur Verbesserung der Lebensverhältnisse erforderlich ist.

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Contains information about countries. Provides information on relevant legislation and institutions.

<http://www.odci.gov/cia/publications/factbook/country-frame.html>

Contains general information about countries. Information like population size, land area, length of coastline, form of government and memberships of international organisations

<http://www.umweltbundesamt.de/uba-info-daten-e/daten-e/seas-and-coastal-waters.htm>

Information on coastal areas and coastal waters

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Nature conservation in Germany, governmental authorities and ngo's

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Sustainable development in Germany, legislation and more

7 Greece



7.1 Table format Spatial Planning in the European coastal zone

Country: Greece (16,500 km)

Coastal type: 30% flat (sedimentary origin); 70% abrupt lime stone

Property rights:

Definition coastal zones: 10-15 km landward limit, territorial waters is the seaward limit

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	Prime minister and minister of coordination:	Law 360/76	First systematic effort for policy coordination regarding Physical planning and Environment Zoning		
		National council of Physical planning and Environment (NCP&E)	Law 360/76		Assist NCP&E	
		National councils secretariat	Law 360/76			
		Ministry of the Environment, Physical planning and Public Works	Law 1032/80 and later Law 1650/86, The Environment Act (L.1650/1986) Joint Ministerial Decision on Environmental Impact Studies (MD 69269/5387/1990) Completed by MD on public information regarding content of EIS (MD 75308/5512/1990) Law 1337/1983 on Urban Planning	Developing policy regarding Physical planning and the Environment	Development of policy by specialised departments	Environmental impact studies
		President	Presidential Decree 30.6.1991	Allows hotel construction onshore at the main touristic coastal zones		
				Allows public ports and		

			Law 2160/1993	coastlines to become private and to reclaim land from the sea for private touristic establishments		
regional	Devisions for the Environment and Physical planning. Sections: - Environment - Physical and Urban planning - secretariat Directorat of regional planning Directorat of environmental planning KEPPES	Presidential decree 404/14.6.89 Ministerial decision 844/2579/13/12/90 Law 1622/86	Prefects get responsibilities for implementing environmental restrictions and provisions Responsible for planning and management of land resources Responsible for planning and management of land resources	Groups for control of Environmental Quality (KEPPE) Monitoring to determine the ability of the environment to withstand the burden of specific human activities		
local	Local Authorities	Law 1622/86	Implementation of measures for the protection of the environment	(are not operating so far)		
national	Ministry of Environment, Physical planning and Public Works Ministry of Environment, Physical planning and Public Works	Shoreline and Coastal zone act (L.2344/1940) Fishing act (L.420/1970) The Marine Environment Act (L.743/1977) modified by L.1147/81 and L.2252/94 The Housing act (L.1337/1983) The Ministerial decision on the quality of waterways, including bathing areas (M.D.46399/1352/1986) Complementary EC regulations <u>Other relevant legislation</u>	Preventive and pollution mitigation measures, obligations for ships and onshore installations National Program for the Sustainable Development of Coastal Areas and Islands	Assessment and control of Pollution in the mediterranean Region (MEDPOL) Bathing Water Quality monitoring		
Coastal policy						

			⇒ art. 24 Constitution: provides that the protection of the environment imposes an obligation on the State, which is also responsible for taking special preventive and/or repressive measures for conservation ⇒ 1981, Decree on the protection of wildlife: species protection ⇒ Joint Ministerial Decree (JMD) on the protection of bird species. ⇒ Law 996/1971 on National Parks, Aesthetic Forests and Protected National Monuments.				
	regional						
	local						
Coastal defence	national	Organisation for Planning and Environmental Protection of Athens	Attica's Coastline Protection and Management Program	Preservation and intensification of the coastal ecosystem	Coastline management organisation		
	regional						
	local						

7.2 Additional information

7.3 Information sources

7.3.1 Literature:

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General overview and case studies on coastal zone management efforts

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UNEP: *State of the Marine and Coastal Environment in the Mediterranean Region*, MAP Technical Reports Series No. 100, UNEP, Athens, 1996.

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Human Pressures and Economic Activities, State of the Marine and Coastal Environment, The Policy and Legislative Context, Assessment of the State of the Marine and Coastal Environment and Conclusions.

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<http://www.odci.gov/cia/publications/factbook/country-frame.html>

Contains general information about countries. Information like population size, land area, length of coastline, form of government and memberships of international organisations

<http://www.minenv.gr/1/11/113/11303/e1130309.html>

Website of ministry of environment of Greece. Provides relevant information on legislation and policy in relation to the coastal zone.

<http://www.un.org/esa/agenda21/natlinfo/countr/greece/index.htm>

Contains information about countries. Provides information on relevant legislation and institutions.

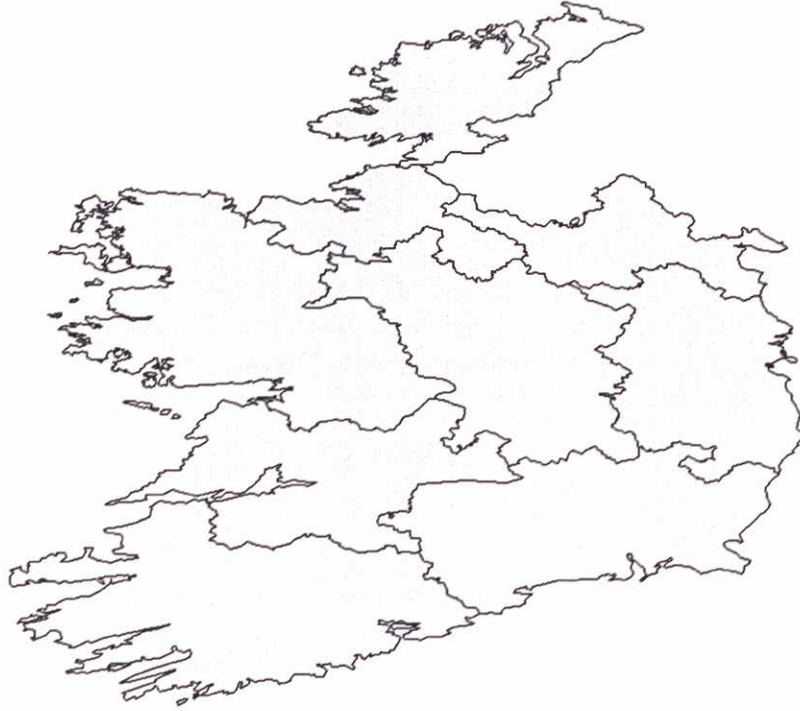
<http://www.un.org/esa/agenda21/natlinfo/countr/greece/index.htm>

Sustainable development in Greece, legislation and more

<http://www.ecnc.nl/doc/europe/country/greece.html>

Nature conservation in Greece, governmental authorities and ngo's

8 Ireland



8.1 Table format Spatial Planning in the European coastal zone

Country: Ireland (1448 km)

Coastal type:

Property rights:
Definition coastal zones:

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	Department of marine and Natural Resources Department of Environment and Local Government Department of Arts, Heritage, Gaeltacht and the Islands Environmental protection agency Foyle Fisheries commission Commissioners of Irish Lights Udaras na Gealtachta	Foreshoreact 1933 and 1992 Petroleum, Gas, Mineral Development and Continental shelf Acts Harbours Act 1946 and 1995 Fisheries Act 1959, 1962, 1978, 1980, 1983 Fisheries amendment Acts 1994, 1997 Common fisheries policy Wildlife Act 1976 Water pollution Acts 1977 and 1990 Environmental protection Agency Act 1992 Dumping at Sea Act 1996 Sea Pollution Act 1991 Waste Management Act 1996 Some EU directives on nature preserving and pollution	Control on the seabed: - foreshore leases - foreshore licences Control on the land Control on activity at sea	Issuing of circulars and guidelines to local governments on planning	Foreshore act needs review Monitoring of the overall planning process
	regional	Regional Authorities Harbour Authorities				

	Central and regional fisheries board	Local Government acts 1963-1993	Development and landuse - planning permission every 5 years at least			
	Local authorities	Local Government acts 1963-1993	Development and landuse - planning permission every 5 years at least			
	Department of Marine (DOM)	EC Bathing Water Directive	Development of Coastal Zone Management Strategy also responsible for addressing pollution incidents in the sea	No more disposal of industrial waste at sea (1992) and no more disposal of sewage sludge at sea (1998)		Environmental Impact Assessments
Coastal policy	national					
	regional					
	local					
	National government	Coastal protection act 1963				
Coastal defence	national					
	regional					
	Local Government					

8.2 Additional information

8.3 Information sources

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Spatial Planning

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Website from EU demonstrationprogram in Integrated Coastal Zone Management

<http://www.irishmarine.com/>

Website of marine and coastal communities in Ireland

- <http://www.marine.ie/>
Website of the Irish Marine Institute
- <http://www.marine.ie/datacentre/>
Website of the Irish marine data centre
- <http://www.odci.gov/cia/publications/factbook/country-frame.html>
Contains general information about countries. Information like population size, land area, length of coastline, form of government and memberships of international organisations
- <http://www.ucc.ie/ucc/research/adc/index.html>
Website from the aquaculture development centre from the University of Cork in Ireland
- <http://www.ucc.ie/ucc/research/crc/index.html>
Website from the coastal resources centre from the University of Cork in Ireland
- <http://www.ucc.ie/ucc/research/czi/>
Website of the coastal zone institute from the University of Cork in Ireland
- <http://www.un.org/esa/agenda21/natinfo/countr/ireland/index.htm>
Contains information about countries. Provides information on relevant legislation and institutions.
- <http://www.ecnc.nl/doc/europe/country/ireland.html>
Nature conservation in Ireland, governmental authorities and ngo's
- <http://www.un.org/esa/agenda21/natinfo/countr/ireland/index.htm>
Sustainable development in Ireland, legislation and more

9 Italy



9.1 Table format Spatial Planning in the European coastal zone

Country: Italy (8000 km)

Coastal type: 50% low level sandy beaches

Property rights: Public property

Definition coastal zones:

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	Ministry of environment	8 July 1986 Law no. 349 Interrelationship between National authorities and with local and regional authorities Territorial agreements 1985 Law 431 (Legge Galasso) on the protection of the coast Town Planning Law No. 1150, 1942			
	regional					
	local					
Coastal policy	national	Single authority under Council of Ministers Department of Merchant Marine together with private contractors	UN Convention on the Law of the Sea 1982 31 Dec 1982 Law no. 979 Measures for the ocean safeguard from pollution <u>Other relevant legislation</u> ⇒ 1985 Law 431 (Legge Galasso) on the protection of the coast	Coordinating activities in the coastal zone Defence from oilspills and the protection of special ecological areas		1500 km in state of erosion 600 km of concrete defences

			⇒ 1989 Law 183 on the protection of the soil ⇒ Framework Law on National Parks and the Other Protected Natural Areas ⇒ Law for the Sea 1992 ⇒ EC Directive 79/869 concerning methods for measuring surface water ⇒ EC Directive 86/290 concerning discharge of several types of hazardous substances	Sectoral plans	Basin Authorities	The Law of the Sea proposes the establishment of a Committee and central unit to monitor the marine and coastal environment
Coastal defence	regional					
	local					
	national					
	regional					
	local					

9.2 Additional information

1985 Law 431 (Legge Galasso) on the protection of the coast: focuses on various natural systems including the coastal zone. It provides further protection to the 8000 km Italian coast by restricting development within a 300m wide strip inland from the high-water mark.

1989 Law 183 on the protection of the soil: designed to ensure the protection of the soil, water quality, the exploitation and management of water resources.

Law for the Sea 1992; assists coastal management by strengthening the response to accidental pollution. It also proposes the establishment of a Committee and central unit to monitor the marine and coastal environment

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Organisation for Economic Co-operation and Development (OECD), *Coastal Zone Management, Selected Case Studies*, OECD Documents 1993. EUCC archive 17.6.3.2.

The Lagoon of Venice (the definition of the Lagoon of Venice and its problems, the coastal area, major issues arising out of the use of the resources of the Veneto Region, the institutional framework, measures currently undertaken, plans, policies and instruments, the future).

Papayannis, T., *Conservation of Mediterranean wetlands within the wider coastal context*, uit: Coastal Management and Habitat Conservation, Salman, Berends and Bonazountas, 1995, Volume I, published by EUCC, Leiden, The Netherlands

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9.3.2 Internet:

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Contains general information about countries. Information like population size, land area, length of coastline, form of government and memberships of international organisations

<http://www.un.org/esa/agenda21/natlinfo/countr/italy/index.htm>

Contains information about countries. Provides information on relevant legislation and institutions.

<http://www.ecnc.nl/doc/europe/country/italy.html>

Nature conservation in Italy, governmental authorities and ngo's

<http://www.un.org/esa/agenda21/natlinfo/countr/italy/index.htm>

Sustainable development in Italy, legislation and more

10 Latvia

10.1 Table format Spatial Planning in the European coastal zone

Country: Latvia (470 km)

Coastal type: 40-400m wide beach-zones, sand beaches with coniferous forest and zones of wetlands

Property rights:

Definition coastal zones: about 1030 km² coastal zone area

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	National Government Parliament/cabinet Environmental protection committee	Law on environmental protection (1991)	Protected belt min 300m from water edge max natural boundaries 3-5 (8)km belt restricted use	Special building permission Prohibition of certain activities	
		Ministry of agriculture and environment protection committee	Plans of landuse and water management			
		Ministry of Protection and Regional Development				
Coastal policy	regional	Regional government regional activities also conducted by the protection committe				
	local	Local Government				
	national	National government Minister of Naval affairs head of commission Environment Protection Department at the Ministry of Environmental Protection and Regional	Initiative for Integrated Program of Coastal Zone Management (IPCZM) Resolution No. 308 June 14 1993 of Council of Ministers Law on environmental protection 1991	Programme for operation of a port The National Environmental Policy Plan (NEPP) 1995		

				<p><u>Other relevant legislation</u></p> <p>⇒ Law on Human and Civil Rights and Duties 1991</p> <p>⇒ Law On State Environment Impact Assessment (EIA)</p> <p>⇒ Law on Particularly Protected Nature Areas</p> <p>⇒ Law On Natural Resource Taxes 1990</p> <p>⇒ The Regulation On Republic of Latvia State Environment Inspection 1990</p>			
Coastal defence	regional		Development				
	local				Involvement in ICZM development proces		
	national			No water defence plan present			
	regional						
	local						

10.2 Additional information

Law on environmental protection 1991: contains provisions for a protected belt along the shore of the Baltic Sea and the Riga Gulf (art.VIII). The belts are taken into consideration in planning and any activity within the littoral zone, including drawing of master plans and development of projects for towns and villages.

The Act declares strict protection in a 300 m wide belt starting from the water-edge and including the beach and coastal formations directly above the slip-off slope. Where dunes or other coastal formation exceed 300 m the protected zone is extended to its natural boundaries. Besides the 300 m belt for strict protection there is a larger belt stretching from 3 to 5 km (in some places up to 8 km) where building is restricted and requires a special permission. The exact width of that zone is determined in land use planning.

Law on Human and Civil Rights and Duties 1991

the protection of nature, cultural environments, landscapes, historical and architectural monuments and the environment shall be the duty of every individual, the general public and the State.

Law On State Environmental Impact Assessment (EIA) regulates the impact assessment procedure in Latvia. The objective of the EIA is to evaluate economic or other types of activity on the level of hazard it presents, to define the ecological situation of concrete places and objects and to work out proposals for the improvement of environmental quality. A positive EIA report is an obligatory prerequisite for the realisation of any industrial project.

Law on Particularly Protected Nature Areas defines the importance of dispersed particularly protected nature areas. The Law distinguishes and defines the types of nature protection areas. The Decision of 1987 on Particularly Protected Nature objects still exists, but serious changes are necessary

Law on Natural Resource Taxes: its aim is to limit pollution and uneconomic use of natural resources and to collect funds to finance environmental protection undertakings. The Law determines taxes on pollution and natural resource use and procedures for payment. The taxes for pollution are different according to hazard level.

The Regulation On Republic of Latvia State Environmental Inspection determines the duties and rights of inspectors of environmental protection.

10.3 Information sources

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Contains general information about countries. Information like population size, land area, length of coastline, form of government and memberships of international organisations

<http://www.ecnc.nl/doc/europe/country/latvia.html>

Nature Conservation in Latvia, governmental authorities, ngo's

II Lithuania

1.1.1 Table format Spatial Planning in the European coastal zone

Country: Lithuania

Coastal type: Sand beaches with coniferous forest

Property rights: prohibition against privatisation

Definition coastal zones:

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	National government	<p>No general protection of the coastal strip (94 km) Plans for marine environment protection law</p> <p>Law on Territorial planning</p> <p>Law on Environmental impact assessment (1996)</p> <p>The general legislation and framework for water management includes:</p> <ul style="list-style-type: none"> ⇒ Law on Environmental Protection (1992), ⇒ Lithuanian Environmental Strategy. Action Programme (1996), ⇒ Law on Protected Areas (1993) ⇒ Water Law (1997), ⇒ Law on the Nature Resources Usage Taxes (1991), ⇒ Law on Environment Pollution Taxes (1991), ⇒ Draft Law on Drinking Water, ⇒ Draft Law on Reclamation, Law on Land (1994), ⇒ Law on Territorial Planning 	<p>Development according to landuse plans Natural stuff protected wherever it exists</p> <p>National environment protection strategy</p> <p>Development allong coast only allowed according to land-use plans (master plans, development projects for towns and management plans for protected areas</p>	<p>Policy development planning and management of the land system</p>	

			<p>(1995), ⇒ Law on Environmental Impact Assessment (1996), ⇒ Law on Monitoring (1997), ⇒ Draft Law on the Protection of Marine Environment, ⇒ Code on the Internal Water Transport (1996), ⇒ Code on Violation of Administrative Rights (1994), ⇒ Decisions of the Government, ⇒ Regulations on the Establishment of the Water Bodies Protection Zone Special Conditions of the Use of Land and Forest (1993)</p>			
	regional					
	local					
Coastal policy	national	Ministry of Environmental Protection and Ministry of Construction and Urban Development	There are plans to compile a draft for a Marine Environment Protection Law with more detailed provisions concerning the protection of the coastal strip.	In charge of Integrated Coastal Area Management Sanitary fees		
	regional	Local authorities				
						In charge of Integrated Coastal

Coastal defence	local			Area Management together with national government		
	national					
	regional					
	local					

11.2 Additional information

11.3 Information sources

11.3.1 Literature :

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Coastal Policy

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Contains general information about countries. Information like populationsize, land area, length of coastline, form of government and memberships of international organisations

<http://www.un.org/esa/agenda21/natinfo/countr/lithuan/index.htm>

Contains information about countries. Provides information on relevant legislation and institutions

<http://www.ecnc.nl/doc/europe/country/lithuani.html>

Nature conservation in Lithuania, governmental authorities and ngo's

<http://www.un.org/esa/agenda21/natinfo/countr/lithuan/index.htm>

Sustainable development in Lithuania, legislation and more

12 The Netherlands



12.1 Table format Spatial Planning in the European coastal zone

Country: The Netherlands (451 km)

Property rights: public access to beaches, dunes privately or publicly owned
Definition coastal zones: primary flood defence zone, coastal management zone

Coastal type: Dunes, Deltas and estuaries

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	Min. of Physical Planning Min. of Housing and Environment	Law on Physical Planning 1965 ⁸	4 th report on Physical Planning (VINEX) Sectoral Notes, PKB's		
	regional	Provinces		Regional Plans (Streekplannen)	Guideline for local planning efforts	
	local	Municipalities		Municipal plans (Bestemmingsplannen)	Issuing permits	
Coastal policy	national	Min. of Transport & Public Works (Rijkswaterstaat)		Note on Coastal Policy (Kustennota) PKB Waddensea		updates, evaluation notes
	regional	Regional Divisions of Rijkswaterstaat Provinces				
	local	Municipalities				
Coastal defence	national	Min. of Transport & Public Works (Rijkswaterstaat)	Law on Flood defence (Wet op de Waterkeringen) (Coastal defence act)	Note on Coastal Policy (Kustennota)	Basic coastline ('Basiskustlijn') Supervision national safety	database on beach profiles (JARKUS)
	regional	Provincial Government (GS)		Provincial boards (POK)	Supervision and coordination of local efforts	
	local	Water boards (Waterschappen, hoogheemraadschappen)		Legger	structures, beach nourishment, guidelines (TAW)	Local regulations ('Keur')

⁸ Major amendments in 1985 and 1994

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Link to the homepage of the Dutch Ministry of Spatial Planning and the Environment

<http://www.odci.gov/cia/publications/factbook/country-frame.html>

Contains general information about countries. Information like population size, land area, length of coastline, form of government and memberships of international organisations

<http://www.ucc.ie/ucc/research/crc/life.html>

Internetsite on the use of remote sensing for determination of bathymetry. Provides information on possible monitoring of the coast.

<http://www.un.org/esa/agenda21/natinfo/countr/nether/index.htm>

Contains information about countries. Provides information on relevant legislation and institutions.

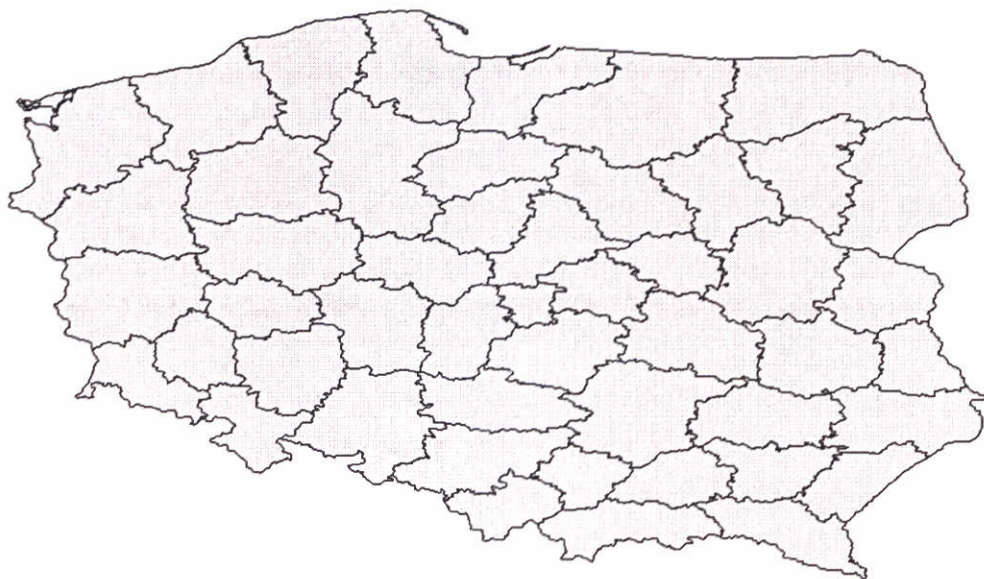
<http://www.un.org/esa/agenda21/natinfo/countr/nether/index.htm>

Sustainable in the Netherlands, legislation and more

<http://www.ecnc.nl/doc/europe/country/netherla.html>

Nature conservation in the Netherlands, governmental authorities, ngo's

13 Poland



13.1 Table format Spatial Planning in the European coastal zone

Country: Poland

Property rights: 68.6% coast protected, 10.5% in national parks, rest parks sev.restricted

Coastal type: Definition coastal zones:

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	Ministry of transport Ministry of economy	National environment policy Mining Law Nature Conservation Act	Technical belt Protective belt (See text for details)		Pollution indices
	regional	Maritime offices	Act on physical planning (1994) Act on nature conservation and forests (1991)	Guidelines for physical planning		
	local					
Coastal policy	national	Ministry of Transport and Maritime Economy, Supported by maritime offices Ministry of Environmental Protection, Natural Resources and Forestry	Law on Marine Regions of the Polish Republic and Maritime Administration 1991 Nature Conservation Act 1991	Plannings documents according to national guidelines Decisionmaking structure for protection of seaside and navigation Responsible for prevention of water pollution and nature protection		

Coastal defence			Act concerning the marine areas of the Polish Republic and the marine administration 1991			
	regional	Provincial offices		Responsible for prevention of water pollution and nature protection		
	local					
	national					
	regional					
	local					

13.2 Additional information

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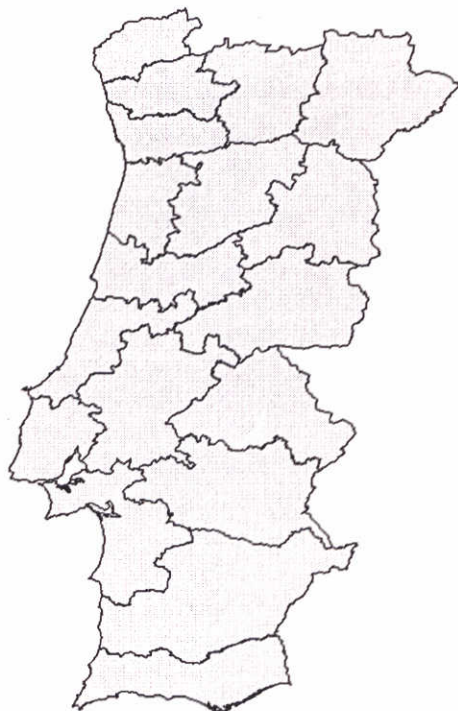
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13.3.2 Internet:

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Contains general information about countries. Information like population size, land area, length of coastline, form of government and memberships of international organisations
- <http://www.un.org/esa/agenda21/natinfo/countr/poland/index.htm>
Contains information about countries. Provides information on relevant legislation and institutions.
- <http://www.ecnc.nl/doc/europe/country/poland.html>
Nature conservation in Poland, governmental authorities and ngo's
- <http://www.un.org/esa/agenda21/natinfo/countr/poland/index.htm>
Sustainable development in Poland, legislation and more

14 Portugal



14.1 Table format Spatial Planning in the European coastal zone

Country: Portugal
Coastal type:

Property rights:
Definition coastal zones:

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	Ministry of Planning and Land management (MPAT)	Law 338/83 on Physical Planning Decree Law 302/90, the coastal law, limits and regulates the urban development in the coastal zone.			
		Ministry of the Environment	1987 Basic Law of the Environment 11/87: requires impact studies to be carried out for town planning			
	Responsible for ports					
Coastal policy	Regional					
	local					
	national		Law on integrated management of the coast Law 263/81 forbids the capture of all species of marine mammals in internal			

⁹ former National Ecological Reserve R.E.N 321/83

¹⁰ basic concepts about EIA specified, also gives form to the basic principles, goals, definitions and instruments for environmental management.

			and territorial waters Decree Law 613/76 enables conservation and management of natural areas, whose protection is essential from the scientific, landscape or cultural viewpoints. National Ecological Reserve R.E.N. 93/90 ⁹ , states that an area 50 m from the high tide line is the public property and that within a strip of land of 1 kilometer the coastal zone is protected, including all wildlife Decree Law 302/90, the coastal law, limits and regulates the urban development in the coastal zone. Law on Integrated Management of the Coast, Decree Law 309/93 Environmental Framework Law 1987 ¹⁰		
	regional				
	local				
Coastal defence	national				
	regional				
	local				

14.2 Additional information

In Portugal the width of the protected coastal strip, as defined in an Act (?) of 1992, depends on the type of the coast. The coast is in the public domain, Outside urban areas, the protected belt seems to be 200 metres from the shoreline on cliff or rocky shores and on the dunes 200 metres from the landward limit of the dune. On other coasts, like pebbled coasts, wetlands and dry grassland, the protected zone can be extended up to 500 metres from the shoreline.

About 25% of the coast in mainland Portugal is protected with a national protection status.

One can exempt from the protected coastal strip by a land use plan and therefor it looks more like a planning zone than a protected zone.

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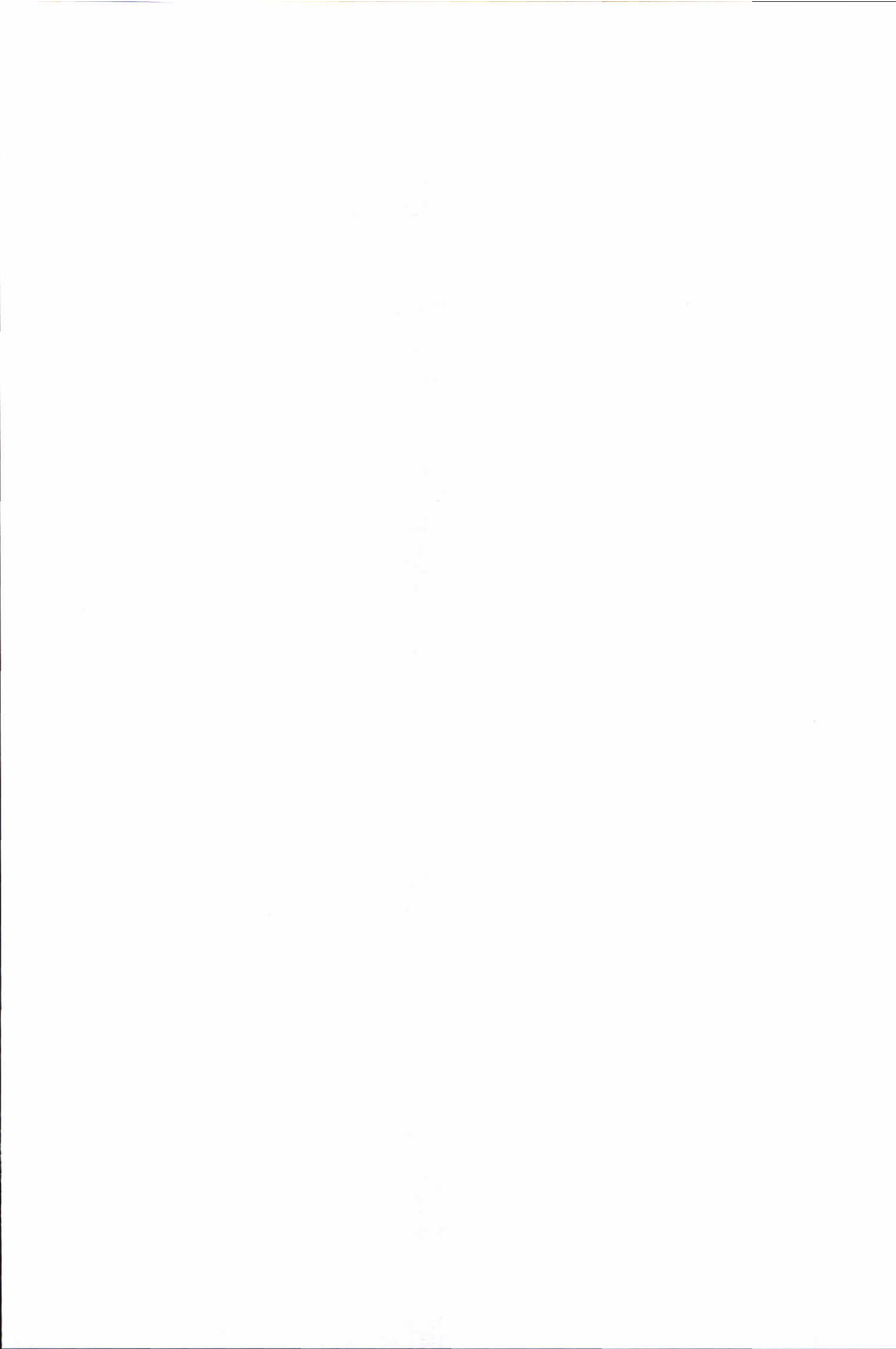
14.3.2 Internet:

<http://www.ecnc.nl/doc/europe/country/portugal.html>

Nature Conservation in Portugal, governmental authorities and ngo's

<http://www.un.org/esa/agenda21/natlinfo/countr/portugal/index.htm>

Sustainable development in Portugal, legislation and more



15 Russia

Table format Spatial Planning in the European coastal zone

Country: Russia
 Coastal type: Definition coastal zones:
 Property rights:
 Definition coastal zones:

	planning levels	responsible agency	legal framework	planning instruments	implementation	monitoring and evaluation
Spatial Planning	national					
	regional					
	local					
Coastal policy	national	Ministry of Natural Resources/ Ministry of Water Economy	<p>Law on Protected Areas 1994</p> <p>Environmental Protection Act 1992</p> <p>Water Code</p> <p>Decree by the President of the Russian Federation of July 6th 1994 N 1470 "On natural resources of coasts of the Black and Azov Seas</p> <p>The Statute of water-protective zones of water objects and their coastal protective zones: Approved by decree of Government of the Russian Federation of November 23th 1996 N 1404</p> <p>A law regime of water-protective zones is determined in accordance</p>			

			<p>with art. 95 of the Land Code of RSFDR, art 108 and 111 of the Water Code of the Russian Federation, Statute of water-protective zones of objects and their coastal protective zones, approved by Decrees of the Government of the Russian Federation of November 23rd 1996 N 1404.</p> <p>Rules of Protection of coastal sea waters from pollution, approved by the Ministry of Water Economy of the USSR, Ministry of Fish Industry of the USSR.</p> <p>Sanitarian Rules and Normatives for protection of coastal sea waters from pollution in places of water exploration by people (SanRN N 4631-88, Ministry of Public Health Service of the USSR)</p> <p>Instruction on standardization on realization of state control of preventing pollution of sea by ships and facilities for investigation and exploration of sea ground, approved by the Ministry of Water Economy of the USSR in 1984</p>			
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				Protection of coastal waters when using resources of continental shelf, is adjusted by the Law "On continental shelf of the Russian Federation" of November 30th 1995				
	regional							
	local							
Coastal defence	national							
	regional							
	local							

15.1 Additional information

15.2 Information sources

15.2.1 Literature:

Coastal Policy

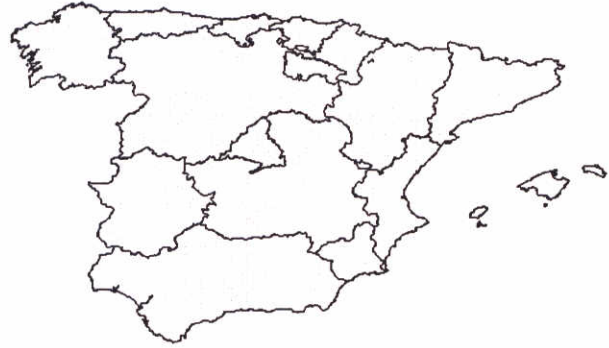
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15.2.2 Internet:

<http://www.ecnc.nl/doc/europe/country/russia.html>

Nature conservation in Russia, governmental authorities and ngo's

16 Spain



16.1 Table format Spatial Planning in the European coastal zone

Country: Spain (4,964 km)

Coastal type: sandy beaches and cliffs

Property rights: Public property by constitutional law

Definition coastal zones: estuaries, wetlands

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	National government Ministry of public works, and City planning	Constitution of Spain 1978 National Shores act 1988	To define, protect and regulate the use and government policy power on the coastal public property and in particular the shores Establishment of Marine Protected Areas (MPA 's)	Setting coastal boundaries Regulation of use	Need for CZM: increase in population density and tourism in the coast. Shores public property by law: Seashore, includes the foreshore behind the dunes, the dune line itself, the berm of the beach and the submerged areas in coastal waters administration has to be further developed to carry out this task adequately Regions claim similar piece of the beach (foreshore and beach area)
	regional	Regional government 17 communities	Constitution 1978 Royal Legislative Decree on Land and Urban Planning of 1992	exclusive jurisdiction over territorial and urban planning		
	local	Local Government Municipalities		Land use plans	Issuing of building permits	
Coastal policy	national	National government Ministry of public works, transport and environment (MOPU)	Royal Decree 1471/1989, 1 December (adopting the regulations which developed the Shores Act)	Establishment of Marine Protected Areas (MPA 's)	Ensure public access to the beach	Pollution monitoring More attention needed for integration of marine and coastal management
		General Directorate of the Environment	Royal legislative Decree on Environmental Impact Assessment 1302/1986 Other relevant legislation ⇒ National Shores Act 1988, was amended in			

¹¹ replaces the Natural Areas Protection Law of 1975

¹² replaces that of 1879

			1991 ⇒ Law on Natural Areas, Wild Flora and Fauna Protection 4/1989 ¹¹ ⇒ Ports and Merchant Navy Act 1992 ⇒ The Water Code of 1985 ⇒ Water Law 29 of 2 August 1985 ¹² ⇒ Royal Decree 819/1986 on state waters ⇒ Royal Decree 927/1988 on water planning			
	regional	Regional government 17 communities	The 1978 Constitution Regional guidelines for the Coastal Zone 1992 The EIA is regulated by Decree 23 Jan. 1986 Law 1 of 30 Nov. 1987 ¹³ Law 13 of 28 Nov. 1986 ¹⁴ Decree 48 of 26 Feb. 1987 ¹⁵	General Zoning Plans ¹⁶	The DGC (Dirección General de Costas) has a Regional Coastal Department in each coastal autonomous region.	
	local	The Balearics The Asturias The Navarre Local Government Municipalities				
Coastal defence	national	National government			Prevention of erosion	Coastal erosion and pollution calls for coastal protection
		Regional government				

¹³ concerning land zoning and co-ordination provides for environmental impact evaluations in the case of town and country planning

¹⁴ on road zoning and protection makes an environmental impact assessment obligatory for any highway project

¹⁵ sets down the conditions that must be observed by activities producing disturbing levels of noise and vibrations, and makes an environmental noise impact evaluation mandatory for new road or motorway projects

¹⁶ coastal provinces make up these plans, specifying which areas are to be excluded from urbanization

regional	17 communities				
local	Local Government Municipalities				

16.2 Additional information

National Shores Act 1988, was amended in 1991; to ensure free public access to the coastline and, as well as its protection through the restriction of the activities which may be carried out in this zone.

As a direct result of the 1978 constitution, regional governments have exclusive jurisdiction over territorial and urban planning including, in many cases coastal management and planning in the beach and foreshore area.

Regional governments also have jurisdiction over small commercial and pleasure harbors as well as fishing in inland water, and they must manage marine resources in cooperation with the national government.

The local governments are responsible for reports on the fixing of boundary, allocations and concessions in public property, and for exploiting seasonal services, maintaining beaches and public places in clean and healthy condition, and ensuring that the rules and instructions issued by the Central Government with regard to safety and saving of human lives are observed.

One of the main powers of Local Councils is to design urban development in their municipality. Unfortunately, most of the times the basic recommendations for town and territorial planning in coastal areas are contradicted by the Local councils policies. Wide areas of coastline are urbanized for use as tourist resorts or as second residences. The Local Agendas 21 are hardly used by City Councils in Spain.

Ministry of Public Works, Transport and the Environment (MOPU), responsible for:

- * coastal public property boundary delimitation as well as its allocation and declassification and acquisition and taking of land for its addition to this public property
- * Management of the coastal public property
- * protection and surveillance of the coastal public property and its easements
- * carrying out works and activities of general interest or those which affect more than one Regional Government

The autonomous regions are responsible for the protection easement zone and for any other competence on environment and planning established by their Statutes in compliance with the Constitution. The

National Shores Act, in principle, confers the following powers to the autonomous regions:

- * territorial and coastal planning
- * ports
- * urban planning
- * the authorization of waste disposals from the land to the sea
- * management of the protection easement zone (authorizations and concessions)
- * and in general those granted in their Statutes

Coastal and management measures adopted by the Spanish government include a **programme to monitor pollution of the Mediterranean Sea**. This and a related programme monitoring

hydrocarbon pollution in the Mediterranean are included in a national pollution control plan implemented in the early 1990s in relation to Spain's UNCED agenda (MOPT 1992).

The Autonomous regions do not have uniform structures. Some regions have a specific organ responsible for the planning and management (see above) of the coast and environmental agencies for environmental protection in general. In others the Executive Board is in charge of the implementation of the law upon the general guidelines provided by the State.

16.3 Information sources

16.3.1 Literature:

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Characteristics of the European coast, human activities in the coastal zone, European nature conservation policy, inventory by country.
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EUCC archive 20.6.1 (Coastal Guide kast, box: agriculture, forestry and general).
Human Pressures and Economic Activities, State of the Marine and Coastal Environment, The Policy and Legislative Context, Assessment of the State of the Marine and Coastal Environment and Conclusions.

16.3.2 Internet:

<http://www.un.org/esa/agenda21/natlinfo/countr/spain/index.htm>

Sustainable development in Spain, legislation and more

<http://www.ecnc.nl/doc/europe/country/spain.html>

Nature conservation in Spain, governmental authorities and ngo's



17 Sweden



17.1 Table format Spatial Planning in the European coastal zone

Country: Sweden

Property rights: the water 300 m out from the shoreline is privately owned. Beyond this limit the water belongs to the public and is represented by a special Government Agency (The Swedish National Judicial Board for Lands and Funds)
Definition coastal zones:

Coastal type:

	planning levels	responsible agency	legal framework	planning instruments	implementation	monitoring and evaluation
Physical Planning	national		Act concerning the management of natural resources 1987 Planning and Building Act 1987			
	regional				Regional County Administrative Board	
	local	In Sweden the responsibility for the physical planning is at the local level (the municipalities (called communes in Sweden)) Swedish territory, including its waters, is divided into municipalities		Comprehensive Plan		
Coastal policy	national	County Administrative Board/ Natial Licensing Board for Environment Protection (NLBEP)	Water Act Environmental Protection Act 1969 Nature Conservation Act 1974 Act on the Creation,		The Country Administrative Board is responsible for supervising the management of natural resources in the country. Swedish Environmental Protection Agency	

				Widening and Suspension of Sea Lanes and Public Harbours. Act concerning the management of natural resources 1987 Environment Protection Ordinance 1989 Water Pollution Act				
		regional						
		local						
Coastal defence		national						
		regional						
		local						

17.2 Additional information

The coastline is legally protected in a 100 metre belt from the mean water mark landwards and seawards. The protected zone can, however, be enlarged up to 300 metres in both directions by the provincial government. It can also, if an area is of no importance for recreation, exclude the area from the shore protection. In the protected belt it is prohibited to construct new buildings, change the use of existing buildings, extract substances from the soil and build fences which could prevent people from walking along the shore. Constructions necessary for farming, fishing or forestry are exempted.

Nature Conservation Act 1974; governs nature conservation and shore protection. The general shore protection zone extends 100 m from the shoreline inland and out to sea. It may extend by up to 300 m. The aim is to safeguard public access to the water for recreation. Buildings, constructions and activities preventing public access to the shore require a permit under the act. Consideration of permit applications under the act is the responsibility of the county administration board. Some issues are dealt with by the municipality.

The Environment Protection Act (1969) and the Environment Protection Ordinance (1989), provide a coordinated regulation of air and water pollution, noise, etc from real estate. Under a licensing system the Act requires prior approval of plans, specifications and other data for new constructions or alterations. The Act aims at preventing rather than curing environmental problems.

Act concerning the management of natural resources 1987, gives general management regulations concerning how and for what purposes land and water areas shall be used and gives guidelines for the resolution of conflicts of interest. The act contains regulations for most coastal areas in Sweden. (Umbrella-Act).

Planning and Building Act (1987), emphasises the decentralisation of the decision-making to regional and local level. The Act stipulates that all municipalities must have a structure plan covering the whole of their area. Current town and building plans are replaced by one type of plan called a local plan. The local municipal council fixes the plan after an exhibition and an invitation to the inhabitants to react.

Act concerning the management of natural resources (Natural Resources Act) 1987, which was developed in parallel with the new Planning and Building Act, contains:

- *basic regulation on the conservation and development of natural resources;*
- *special regulation for certain geographical areas;*
- *regulations concerning the Government's consideration of permits for certain classes of industrial development.*

In addition, it sets out the responsibilities of the state and local government for land and water use and other aspects of the physical environment.

Environmental Impact Assessment

Applications under most of these acts must include an environmental impact assessment (EIA), the applicant being responsible for the work needed for the assessment. This requirement encompasses even small projects and detailed plans, although the scope of the EIA is not regulated. Instead, the specific circumstances of each project determine how the EIA is to be carried out. Environmental impact assessments are a fairly new tool in Swedish environmental policy. They have been carried out in the past but not systematically. Nowadays EIAs are used as a way of ensuring that greater account is taken of environmental consideration and the management of natural resources in decisions taken in various sectors of society. In Sweden EIAs are not followed by an Environmental Impact Statement but are related to different laws, according to the Ordinance on EIA. The EIA

contains the basic information about the environmental impact to be taken into consideration in the planning process together with other effects.

EIAs examine forms of impact and effects on soil, air, fresh water, coastal waters, flora and fauna, recreation, infrastructure, natural resources, rescue activities and health using methods for modelling and risk analysis.

The following are some important points in the Swedish EIA process

* The objective of EIAs is to obtain the basic information on which to base an overall evaluation of the impact of projects and detailed plans on the environment, health and the use of natural resources.

* An EIA must include a statement of reasons for alternative locations.

* The county administrative board is to state whether the EIA suffices or whether supplementary information is needed.

* Notifications of EIAs must specify where the document is available for scrutiny.

* The EIA process must precede the decision.

* EIA should focus on crucial problems.

17.3 Information sources

17.3.1 Literature:

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Coastal Policy

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17.3.2 Internet:

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Nature conservation in Sweden, governmental authorities and ngo's

<http://www.un.org/esa/agenda21/natinfo/countr/sweden/index.htm>

Sustainable development in Sweden, legislation and more

18 United Kingdom



18.1 Table format Spatial Planning in the European coastal zone

Country: England and Wales (4,200 km)

Coastal type: from rock cliffs(256 km) and headlands to sand beaches, shingle ridges, sand dunes(119 km²), saline lagoons(12 km²) salt marshes(325 km²) and inter tidal flats (2,334 km²)

Property rights:

Definition coastal zones: 25-30% of coastline is developed, 45% is subject to environmental designation as Heritage Coast, Area of Outstanding Natural Beauty or National Park.

	planning levels	responsible agency	legal framework	planning mechanisms	implementation	monitoring and evaluation
Spatial Planning	national	House of Commons House of Lords Department of the Environment, Transport and the Regions The Environment Agency	Town and Country planning act (1947) Directory of coastal planning and Management initiatives in England Coastal Heritage plan Statutory consultee Harbourworks regulations 1988 and 1989	Regulation of land use from low-water mark, landward List of coastal initiatives List of protected areas Advise in development planning		Inquiries in case of conflicts resulting in recommendations Shortcoming: Integration of land and sea use
	Regional	(Metropolitan) counties <u>England</u> <u>Wales</u> <u>Scotland</u> <u>Northern Ireland</u>	Town and Country planning act (1947) Town and Country Planning Regulations 1988	Decide on development policy	Giving planning guidelines	
	Local	Districts, Regions Islands Areas Towns	Planning Regulations 1989 Local authorities must prepare a Structure Plan for their area and take account of national policy guidelines set up for land use planning.	Drawing up more detailed plans Initiative towards ICZM	Issuing permits	

Coastal policy	National			Coast protection	Countryside Commission	
	<p>Ministry of Agriculture, Fisheries and Food (MAFF)</p> <p>Department of the Environment, Transport and the Regions</p> <p>Department of the Environment, Transport and the Regions</p> <p>Department of Trade and Industry</p> <p>Interdepartmental Group on Coastal Policy Coastal forum</p> <p>Crown Estate Commissioners</p>	<p>The Wildlife and Countryside Act 1986¹⁷</p> <p>National Park and Access to the Countryside Act (1949)</p> <p>The Countryside Act (1968)</p> <p><u>Other relevant legislation</u></p> <p>⇒ Guidelines for Coastal Planning¹⁸ (1992);</p> <p>⇒ Coast Protection Act (1949)</p> <p>⇒ Environmental Protection Act (1990)</p> <p>⇒ Conservation of Seals Act 1970</p> <p>⇒ Prevention of Oil Pollution Act 1971</p> <p>⇒ Merchant Shipping Act 1995¹⁹</p> <p>⇒ Food and Environmental Protection Act 1985</p> <p>⇒ EC Directive on the Environment</p> <p>⇒ Assessment of Certain Public and Private Projects (85/337/EC)</p> <p>⇒ Environmental Assessment Regulations 1988</p> <p>⇒ Water Act 1989</p> <p>⇒ Water Resources Act 1991</p> <p>⇒ Environmental Act 1995</p>	<p>Responsible for shipping matters, navigation and ports</p> <p>Responsible for gas exploration and associated facilities</p> <p>Planning Policy Guidance on Coastal Planning for England and Wales.</p> <p>Give out licences</p>			

¹⁷ replacement of the Wildlife and Countryside Act of 1981

¹⁸ undeveloped coast should not be expected to accommodate new development that could be located inland or in existing developed areas.

¹⁹ Replacement of the Merchant Shipping (Oil Pollution) Act 1971

			<p>⇒ EC Directive on the quality of water for fresh water fish</p> <p>⇒ EC Directive on the quality of water for shellfish</p> <p>⇒ EC Directive on the quality of water for bathing</p> <p>⇒ EC Directive on the discharge of dangerous substances and daughter directives</p>			
regional	<p><u>England</u></p> <p><u>Wales</u> Welsh office</p> <p><u>Scotland</u></p>	<p>The Statutory Instrument 1996: The Coastal Protection Amendment Regulations 1996</p> <p>The Environmental Assessment Regulations 1988</p> <p>Nature Conservation and Amenity Lands Order 1985</p> <p>The Environmental Assessment Regulations 1989</p> <p>The Water Regulations (Assessment of Environmental Effects) 1989</p>	<p>Planning Policy Guidance on Coastal Planning for England and Wales.</p> <p>Planning Policy Guidance on Coastal Planning for England and Wales.</p> <p>Marine Nature Reserves (MNRs)</p>			
local	<p><u>Northern Ireland</u> Department of the Environment for Northern Ireland (DOEN)/for the control of wate pollution</p>	<p>Local authorities must prepare a Structure Plan for their area and take account of national policy guidelines set up for land use planning.</p>	<p>Directory of Coastal Planning and Management Initiatives</p>			

Coastal defence	national	Ministry of Agriculture, Fisheries and Food (MAFF) The Environment Agency		Flood defence Planning execution and maintenance of major flood defence works on the coast		
	regional					
	local	Maritime district councils		Carry out works to control coastal erosion and provide local flood alleviation		

18.2 Additional information

18.3 Information sources

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18.3.2 Internet:

<http://www.odci.gov/cia/publications/factbook/country-frame.html>

Contains general information about countries. Information like population size, land area, length of coastline, form of government and memberships of international organisations

<http://www.un.org/esa/agenda21/natinfo/countr/uk/index.htm>

Contains information about countries. Provides information on relevant legislation and institutions.

<http://www.un.org/esa/agenda21/natinfo/countr/uk/index.htm>

Sustainable development in the UK, legislation and more

<http://www.ecnc.nl/doc/europe/country/uk.html>

Nature conservation in the UK, governmental authorities and ngo's

<http://www.eco-uk.com/localaut.htm>

local authority conservation and countryside contacts





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