

TERRA - Coastal Zone Management

Projectreport - English summary

Content of the project report

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Part I: International and European context of Integrated Coastal Zone Management

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1. Introduction

A good management of the coastal zone is of concern to all countries possessing a coastline. This part of the project report gives an overview of the International, European and Belgian context for ICZM.

In annex the conclusions of the demonstration programme “Integrated Coastal Zone Management” of the European Commission are summarised and the situation in Belgium anno 2000 is stated and compared with the conclusions of the EC.

2. The International context

About 60% of the world population lives in the coastal zone. This inevitably leads to specific coast related conflicts in terms of spatial use, disruption of natural systems and use of natural resources.

Interest in coastal management has grown considerably since the 70s. Several countries initiated coastal management programmes during the end of the 70s or the beginning of the 80s. During the mid 80s the concept of “**integrated**” coastal zone management (ICZM) was introduced, which in comparison to coastal zone management (CZM) takes into account more then one sector and aspect.

International interest in ICZM-initiatives is still growing, but in many cases the step to implementation lags behind. Many of the ICZM processes stop at the planning level.

ICZM has often been mentioned as an instrument for sustainable development since the 1990s. Several international organisations such as OECD (Organisation for Economic Co-operation and Development), FAO (Food and Agricultural Organisation of the United Nations), the EUCC (European Union for Coastal Conservation) and the World Bank, proposed guidelines for ICZM.

Despite the growing interest and the many good initiatives there is no international ICZM policy. There are no specific conventions concerning an integrated approach of coastal zones. This is disappointing, considering the existing conventions for the protection of the marine environment. Furthermore there is no council for implementing and discussing scientific research in relation to coastal areas (cfr. International Council for Exploration of the Sea). The marine area is much more recognised as an international theme then the coastal area.

Some examples of important international initiatives in relation to ICZM are:

- the US Coastal Zone Management Act and the US Coastal Zone Management Program
- the Regional Seas approach of UNEP
- Chapter 17 of Agenda 21: Coastal Management as a tool for sustainable management

3. The European context

In the year 1999 one third of the European population were living in the coastal zone. The most important reported problems in coastal areas are: bad water quality, erosion and lack of integrated management in the coastal zones. A general conclusion for European countries is that the ICZM process is still in a very early stage and sectoral approaches dominate.

The fact that many European countries participate in projects related to integrated coastal management, many of which are co-funded by European programmes (LIFE, TERRA, PHARE), proves that there is a growing interest for an integrated way of working.

There is no European ICZM policy. In 1997 the European Commission started the demonstration programme on integrated management in coastal zones. The programme finished in 1999 and must now form the basis for setting up a European strategy for ICZM.

4. Comparison of ICZM in Belgium and other European countries

The demonstration programme of the European Commission involves six thematic studies:

1. Legislation and regulatory instruments,
2. Participation,
3. Technology,
4. Sectoral and Territorial Co-operation,
5. Role of EU Policy,
6. Information.

35 demonstration projects spread over 13 European countries were involved.

More information on the demonstration programme can be found in the following documents:

- 1) Lessons from the European Commission's demonstration programme on integrated coastal zone management (ICZM). DG Environment, Nuclear Safety and Civil Protection, Fisheries, Regional Policies and Cohesion, 1999.
- 2) Towards a European Integrated Coastal Zone Management (ICZM) Strategy. General Principles and Policy Options. DG Environment, Nuclear Safety and Civil Protection, Fisheries, Regional Policies and Cohesion, 1999.

or on the website: <http://europa.eu.int/comm/dg11/iczm/home.htm>.

In annex of part one of the project report the conclusions of the demonstration programme “Integrated Coastal Zone Management” of the European Commission are summarised and the situation in Belgium in the year 2000 is stated and compared with the conclusions of the EC.

5. The Belgian context

The main conclusions of the state-of-the-art of ICZM in Belgium are:

- there is no formal structure for ICZM as a whole. CZM is approached on a project basis;
- there is no administration appointed as responsible for ICZM. Policies are mainly sectoral and there is insufficient horizontal and vertical co-ordination;
- competencies are divided between sectors and administrations;
- there is a lack of vision on future development in several sectors;
- organisation of consultation and involvement is not a spontaneous process in administration and sectors;
- for most of the sectors, base-line information is available, but often not on a detailed scale or not for the whole coastal region;
- there is lack of monitoring of data;
- the sectors and administrations have sufficient access to IT;
- ICZM relies on ad-hoc initiatives. Continuity of ICZM is not ensured;
- there is no forum for permanent consultation on ICZM;
- there exists international and European co-operation for ICZM through several projects (TERRA, LIFE, Interreg IIC);
- there is no wide-spread communication about ICZM. Up till now only federal, regional and provincial administrations were involved in setting up an ICZM strategy.
- the private sector is not actively involved in ICZM;
- there is no legal framework for ICZM. Consequently there is no legal basis for the implementation of ICZM;
- there are no economic instruments available which stimulate integrated working;
- there is no training in ICZM available;
- there is no spatial planning in the marine area;

Belgium's institutional aspect

Belgium is a federal state. Its surface and population has been divided into different areas (regions) and population groups (communities).

Belgium is one country (a federal state), consisting of three parts: Flanders, Wallonia and Brussels. It used to be a unitary state, i.e. there was only one government and one parliament. They decided on everything that happened in our country, whether in Flanders, Wallonia or Brussels.

Since the state reform, Belgium consists of three regions : the Flemish Region, the Walloon Region and the Brussels Region. All territorial and economic related matters are controlled by these three regions. Examples are : agriculture, transport, housing, economy, public works and environment.

Though "only" three languages are spoken in Belgium, there are **four** linguistic areas. The Flemish Region is called Flanders. As the Flemish speak Dutch, this area is called the **Dutch speaking area**. In the Walloon Region, or Wallonia, mainly French is spoken. The largest part of Wallonia, where French is spoken, is called the **French speaking area**. In the south of the province Liege, however, German is spoken. These so-called East Cantons are part of the Walloon Region. They are called the **German speaking area**.

As Brussels is our country's capital, it must remain neutral. It neither belongs to Flanders, nor to Wallonia, so it constitutes a different region as well as a different linguistic area. In the Brussels Region people speak both French and Dutch, hence it is called the **bilingual Brussels-capital area**.

Flanders and the Dutch speaking part of Brussels together constitute the **Flemish Community**.

The French speaking part of Brussels and Wallonia is called the **French Community**. The German speaking East Cantons are the **German speaking Community**.

All matters related to culture, education and "persons" is controlled by the three communities.

The border between Flanders and Wallonia is the **linguistic frontier**.

When Belgium became independent in 1830, there were nine provinces. Now there are ten : five in Flanders and five in Wallonia. The Flemish provinces are situated north of the linguistic frontier, the Walloon provinces south of the linguistic frontier. Each province has its own provincial capital.

The Flemish provinces are Flemish-Brabant (capital : Louvain), Limburg (capital : Hasselt), Antwerp (capital : Antwerp), East-Flanders (capital : Ghent) and West-Flanders (capital : Bruges).

The Walloon provinces are Luxemburg (capital : Arlon), Namur (capital : Namur), Hainault (capital : Mons), Liege (capital : Liege) and Walloon-Brabant (capital : Wavre).

For a detailed description of the territorial and material division of competences in the coastal zone, a description of the different services and their tasks, as well as a schematic overview of the services by function see Cliquet et al. ("Juridische inventarisatie van de kustzone in België, 2000" (Juridical inventory of the coastal zone in Belgium))

Part II: A strategy for Integrated Coastal Zone Management

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1. General principles for ICZM

1.1. *Why an integrated approach?*

The European Commission states that “the ICZM process starts with the awareness of issues of common concern, which facilitates a dialogue and exchange of views among interested and affected parties, which in turn supports co-operation amongst the parties, and this is the basis for co-ordination of action, which - in time fosters integration of management.”

Coastal systems are complex. They are subjected to many natural and human changes, and furthermore coastal areas have many different users and many functions.

This dynamic system demands a *flexible, integrated and sustainable planning* in order to be able to propose long term solutions for local and more global conflicts.

The philosophy behind ICZM includes recognising that:

- ICZM can help to develop democratic systems and strive to create mechanisms to facilitate the meaningful engagement of organisations and individuals at all levels of society;
- co-ordination amongst sectors and between administrative levels is a key element of good governance;
- any ICZM effort must develop a vision of what sustainable society will look like. This vision represents the framework within which actions can be formulated and implemented;
- the future is inherently uncertain;
- problems need solving, not moving;
- ICZM is a highly complex and iterative process requiring time to develop. Capacity needs to be built up and a climate of participation needs to be encouraged and developed over time;
- there is no standard formula for ICZM;
- ICZM initiatives need to work within the existing institutional and political structures and ensure that any ICZM effort has political legitimacy, and respects culture and traditions.

1.2. *General principles for integrated coastal zone management (ICZM)*

Through an analysis of the 35 projects in the Demonstration Programme, the European Commission proposed certain general principles for ICZM:

- take a wide-ranging perspective;
- ICZM must be built on an understanding of specific conditions in the area of interest;
- natural processes must be taken into account;
- the decisions taken today must not foreclose options for the future;
- it is important to use participatory planning to develop consensus;
- the support and involvement of all relevant administrative bodies must be ensured;
- a combination of instruments must be used.

Spatial planning will be a very important tool in ICZM. Not only on the land side, but also on the marine (sea) side. Furthermore ICZM must involve ALL sectors, and not only environment and nature.

There is no universal method for ICZM. However, here are some basic principles for good practice:

- ICZM must be based on both participatory and statutory elements;
- a pro-active approach of the national and regional level is important;
- an integrated approach is not relevant everywhere, and must be used in a selective way;
- the ICZM-process starts with identifying the problems in the coastal zone;
- ICZM needs a good insight in the coastal system and an efficient dissemination of knowledge.

1.3. *Limitations/barriers for ICZM in Belgium*

The need for an integrated approach of coastal management to come to a sustainable management was emphasised in several initiatives in Belgium:

- in 1994 an inter-cabinet steering committee on ICZM was founded;
- in 1994 the vzw Natuurreservaten (nature conservation organisation) proposed a 10-point action plan for ICZM. This plan was evaluated in 1999;
- several European projects related to coastal management started in Flanders. They try to approach specific problems in an integrated way.

Despite these initiatives Belgium still has no ICZM strategy. To reach this point several obstacles must be taken

Priority obstacles are:

- there is no formal structure (responsible) for ICZM;
- the competences are fragmented between policy levels and between sectors;
- there is no legal framework for coastal management;
- there is a lack of monitoring of parameters in the coastal zone;
- there is a strong sectoral approach and planning;
- there is a lack of co-ordination, consultation and communication;
- there is no planning at sea.

2. General strategy for ICZM

ICZM is a continuous process with the general aim of implementing sustainable development in coastal zones and maintaining their diversity. It aims, by more effective management, to establish and maintain optimum (sustainable) levels of use, development and activity in coastal zones, and eventually to improve the state of the coastal environment.

Several steps can be undertaken to set up a general strategy for ICZM in a coastal region:

STEP 1: Determine the basic principles for the coastal zone

What are the basic principles for sustainable management and planning in the coastal zone? How do you see the future development of the coastal area?

STEP 2: Determine the goals and actions

What are the goals of your coastal management? What will the actions be to reach the goals?

STEP 3: Set your priorities

The priorities can be derived from a conflict analysis for all sectors active in the coastal zone.

STEP 4: Formulate priority actions

What actions should be taken?

How can they be realised? In what term?

Who takes the initiative for the action?

Who is responsible for the realisation and follow-up of the action?

An important leading idea through the whole ICZM-process is: consultation and participation.

3. General principles and goals for ICZM in Belgium

The main goal for integrated coastal zone management in general and for the TERRA-CZM project in particular, is achieving a methodical, coherent and reflective policy for sustainable development in the coastal zone.

Sustainable development strives to meet the needs of the present without compromising those of the future generations. This implicates that all human activities will have to take ecological preconditions into account. These ecological preconditions are also strongly related to social preconditions. They must allow to meet the following four basic needs:

- feeding;
- housing;
- recreation;
- care taking (safety, health, personal care);

In the coastal area three important focus fields have been assigned: material flows (input and output of water, energy, waste, traffic,...), areas and actors.

The general principles for the Belgian coast in each of these focus fields are:

For focus field “material flows”:

1. sustainable flow management: this means sustainable use of natural resources
2. planning for prevention: where possible the use of limited resources must be cut back, re-use and use of sustainable resources must be stimulated and alternatives should be found for finite resources

For focus field “areas”:

1. conservation of natural areas in the coastal zone;
2. planning with local potentials: new development in the coastal zone must take into account the environment and the ecological carrying capacity in the coastal zone;

For focus field “actors”:

1. create sustainable environmental commitment;
2. planning for self-organisation and co-operation;

4. Action plan ICZM for the Belgian coast

4.1. Objectives and action plan for ICZM in Belgium

For each of the focus fields mentioned under 3, the objectives for the Belgian coast were defined. For each of these objectives priority actions were put forward. These actions aim at reaching the objectives.

All objectives and actions are summed up below.

Focus field 1: “material flow”

Objectives:

1. integrated water management

Actions

1.A. water quantity

- sustainable drinking water production 1 : evaluating the ground water winning for the supply of drinking water according to its ecological impact (where interweaving of ecology and water winning is not possible, a separation of both functions should be aimed at)
- sustainable drinking water production 2 : looking for alternatives for water winning in the dunes and reducing ground water winning in the dunes
- stimulating sustainable use of water (re-use, rational water use)
- inserting measures/obligations in building-permits to avoid the negative effects of well-pointing - solutions must be sought for the catching of pure ground water, caught by well-pointing
- paying special attention to the draining of inland water towards the coast

1.B. water quality

- taking more efficient action against all forms of navigational pollution (consists of different aspects : international cooperation, supervision in ports, port terminals, navigational safety, technical developments on board, legal aspects, aerial supervision, oil abatement at sea and on the beach, ...)
- avoiding point emission and diffuse emission by target group handling and product standardisation
- purifying all waste water - the waste water that is not connected to purifying installations must be purified by small scale water purification
- respecting the purifying installations' draining norms

2. sustainable energy supply

Action

- looking for alternatives for energy production and promoting sustainable energy use (re-use, use of renewable sources, prevention)

3. mobility decrease & alternative modes of transportation for materials

Actions

- limiting goods transportation through study of the forwarding of goods to the coast (e.g. for catering establishments) and through local economy
- studying alternatives for road transportation for inland connection
- paying attention to economy other than tourism (employment not only depending on tourism) - controlled industrial development must remain possible

4. sustainable agriculture and aquaculture

Actions

- reorienting agriculture
- developing sustainable aquaculture in order to take pressure off agriculture and off the natural fish population due to over-fishing

5. good environmental quality at the coast

Actions

- targeting residents and tourists for waste prevention
- applying the principle "polluter pays"
- communicating on environmental quality in the coastal zone
- building appropriate infrastructure to reduce human activities' environmental impact (recreation, tourism, ...), e.g. environmental measures in marinas
- conducting a policy (regional/national) against pollution of the coastal zone
- tracing (point)sources of pollution
- drawing up calamity plans for chemical and oil pollution along the coast and applying them conscientiously

Objectives

1. intense connection between sea and land (beaches, dunes, dune/polder transition zones)

Actions

- realising an attractive combination sea-dunes-beaches as an important attraction pole for the coast, attractive for tourism on the one hand, but also for enjoying open space and serenity. This combination must remain a qualitative offer that is not completely neutralised by other developments, such as port or industrial developments
- providing the coastline with natural coastal protection where possible

2. considering (developments in) the coastal zone in a broad context - the relation with both the maritime environment and the polders must be maintained

Actions

- considering the coast within a European and international context - crossing the border is important
- considering recreation on a large scale : taking recreational pressure off the coast by making the inland more attractive for recreation

3. recreating natural systems and Large Natural Units (vast nature areas, e.g. estuaries, dune areas) and Large Natural Units under Development

Actions

- protecting open spaces
- protecting all remaining valuable dune areas and dune/polder transition zones
- designation of nature reserves on beaches and at sea
- designate and develop *integrated* coastal reserves, in which protected areas can develop going from sand banks at sea over beach, dunes and polders landinward.
- applying spatial recovery measures, such as removal of disturbing elements and alien buildings
- recovering green corridors for fauna and flora (by defragmentation of fragmented areas)

4. the coast as an agreeable recreational and residential space (livable cities)

Actions

- creating agreeable bicycle and walking tracks
- planting woods at the urban (town) outskirts (urban fringe) wherever it is desirable and possible
- offering a qualitative tourist product : augmenting the present product's quality
- offering a broad choice of possibilities for recreation, not only coastwise recreation (led by the demand)
- revaluing archaeological sites for tourism and recreation
- drawing up rules for water-bound recreation
- promoting safe recreational forms
- applying multifunctional use of spaces - interweaving of functions where possible, separation where necessary - keeping strict boundaries will be necessary
- zoning of certain activities in terms of space and time
- reconsidering mobility (such as the function of the Koninklijke Baan (sea lane), town skirts parking areas) and guaranteeing a good accessibility of the coastal zone
- introducing innovative mobility systems
- guaranteeing that new developments at the coast are of high quality
- retaining local and permanent residents at the coast (not only the elderly, but the young as well)
- take measures for limiting the number of new second homes at the coast
- take measures to avoid (seasonal) unoccupied houses coastal towns
- realising play dunes and play grounds for the youth
- establishing a regional authority for the coast (see the coastal zone as one region, as proposed in the Provincial Structural plan)

5. high nature values at the coast

Actions

- protecting of valuable landscapes
- limiting mechanical cleaning of beaches
- introducing a management obligation for linked dune areas
- creating "new" nature through ecological/nature management measures
- guarantee an active implementation of the Birds and Habitatsdirective in the coastal dunes and polders
- protecting the maritime environment
- stimulating sustainable fishery (discouraging fishery that has a negative impact on the marine ecosystem by changing over to more environmental friendly fishery techniques, regulating beach fishery, establishing marine reserves)

- apply species directed conservation measures

Focus field 3: “actors”

General objectives (all target groups)

- adapting the individual's mobility (e.g. the mobile poor, new or other forms of communication reduce the need for mobility)
- informing, consulting and having participate all target groups and actors
- associating the actors' attitude with the ecosystem itself and the circle of materials and energy
- creating the notion of the need of integrated coastal zone management with all target groups
- making environmentally friendly behaviour economically attractive (e.g. by modelling taxes)

Target group specific objectives

1. socially disadvantaged residents and tourists

- avoiding the growth of the gap between population groups

2. coastal residents

- educating/making residents conscious
- increasing employment at the coast by creating operational local markets
- making the coast more attractive for the local residents

3. the elderly

- providing services for the elderly at the coast
- studying specific needs for the elderly in the coastal zone

4. day tourists/short stayers

- educating/making tourists conscious
- promoting new forms of tourism (touristic camping places/houses/apartments)
- controlling the tourist flow
- placing the link between tourist industry and other economic sectors
- drawing up a general vision on "coastal tourism"
- providing quality reception of tourists

5. (economic) sectors

- using the own natural, touristic and cultural potential of the coast
- taking into account the coastal ecosystem's carrying capacity when designing new or adapting existing infrastructure in the coastal zone
- drawing up an EIA is desirable for all new developments in the coastal zone

4.2. Recommendations

4.2.1. Recommendations for ICZM in Belgium

The project report presents some very practical recommendations, which should lead to results in ICZM in the short term.

When further elaborating an ICZM strategy it is however recommended to also take into consideration the recommendations given by the European Commission in their Communication and the recommendations of other European projects (e.g. the NORCOAST project).

The recommendations for Belgium are:

1. set up a **co-ordination centre** for **ICZM**. This centre could initiate the whole ICZM process.

The role of this co-ordination centre can be:

- stimulate the integration of planning and management of the different sectors and authorities
 - stimulate the co-operation between authorities and sectors
 - (international) contact point in the coastal zone
 - follow-up of international and European developments for ICZM
 - develop and monitor a list of sustainability indicators for the coastal zone
 - follow-up and co-ordination of all activities in the coastal zone
2. work out a **legal framework for co-operation between different authority levels** (especially the federal and regional level): such framework should help to overcome the problems of fragmented competencies at sea and on land.
 3. Develop a **monitoring system** and **datamanagement system** for relevant information for ICZM.
 4. Start a **policy cycle** for ICZM in the longer term. This cycle is a never ending process and contains the following elements:
 - problem analysis = preparing the ICZM policy
 - setting the objectives for the short term and the long term = drawing up of the ICZM policy
 - implement the ICZM policy
 - evaluate the ICZM policy

4.2.2. Some important remarks concerning ICZM

When drawing up an ICZM strategy, we would like to draw the attention to the following points:

- the ICZM approach might be integrated into an “area directed approach” (use by the provincial government)
- pay attention to the threats of sea level rise and climate change
- be flexible in your definition of “coastal zone”. The sea is also part of this coastal zone, and should therefore be considered in ICZM plans
- stimulate “good practice” in ICZM, e.g. by using financial and legal instruments.

5. Trends and conclusions

5.1. Trends for the coastal zone

The coast is a dynamic system. The ICZM planning should take into account already identified future trends.

Important trends are:

In general:

- offshore activities will become increasingly important;
- the physical and biological environment changes continuously;
- the needs and expectations of the community change;
- there is a fast technical development, always offering new and different opportunities.

Some specific trends for the Belgian coastal zone:

- continued population growth and ageing on the coast;
- increased demand for housing on the coast;
- the level of social deprivation in the coastal zone is higher than the average for Flanders, and so is the crime rate;
- there are many social and economical problems in the fisheries sector;
- tourism stays the main economic activity (in the coastal zone);
- important economical developments are situated around the harbour of Zeebrugge, the harbour of Ostend, and the airport of Ostend;
- human activities constantly cause a pressure on the natural ecosystem.

5.2. Conclusions for ICZM in the Belgian coastal zone

To achieve an integrated policy and management in the coastal zone, a **future vision** for this zone is needed. This vision should give the image of a sustainable coast. In putting together such a vision **consultation** with all relevant stakeholders will be of major importance, only this will guarantee a solid basis for your coastal vision.

The action plan proposed in the TERRA-ICZM document did not yet go through such a consultation phase, but was set up with the help of a steering group in which three administrative levels (federal, regional and provincial) were represented.

A coastal vision should also consider the long-term visions of all sectors, put together in an integrated way, and seen in the light of sustainable development.

At present there is no legal basis for working in an integrated way which can ensure the follow-up and implementation of the proposed ICZM action plan. Certain action however are part of the sectoral policies, and can be implemented in that frame.

ICZM should become part of a policy cycle, and be applied in all steps of the cycle: preparation, drawing up of the policy plans, implementation and evaluation. Monitoring of the evolution of certain identified parameters will be very important. Sustainability indicators can be helpful instruments for this purpose.

The ICZM process in Belgium is only in its starting phase. It will not be a simple job and difficult choices will often have to be made. However, our ambitions for ICZM should be high, and all sectors and stakeholders should work together towards this common aim: “towards a sustainable coast”. Not exceeding the carrying capacity of the coastal ecosystem will be a pre-condition for future development.

In order to evaluate possibilities for future activities, an evaluating scheme or framework will have to be developed.

ICZM has been in many persons minds the last ten years, and a lot of preparatory work has been done. Now the time has come to develop a coastal vision and to start thinking about the implementation phase.

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1. Inventory of available reports and documents

2. Conflict analysis

1. Inventory of available reports and documents

1.1. *Introduction*

To get an insight in all available coastal information in all sectors, an inventory has been made of all relevant reports and policy documents which specifically relate to the coast, which are covering the whole coastal region, and which can be useful for the development of the ICZM-plan. The documents can also be relevant to give a description, a conflict analysis and future visions for the concerned sector.

An overview of the legislation in the Belgian coastal zone has been drawn up by the university of Ghent, Belgium (January, 2000). The summary of this study is given in annex.

1.2. *Description and appraisal per sector*

For each sector the existing reports were evaluated using certain criteria. The relevance for policy, the resolution, the analytical approach and the measurability of the results were evaluated.

For each sector an appraisal of the available base-line data for the coast is given in the table below on page 16. The appraisal is based on the following criteria:

- what is the quality of the available data? (1)
- does the sector has a vision for the coastal zone's future? (2)
- does the sector propose solutions for conflicts? (3)

1.3. *Conclusions*

The analysis of reports and documents leads to the following conclusions

- 1) for all sectors base-line information is available, but not always with sufficient detail or covering the whole coastal area to be relevant for ICZM. Many of the data are gained on a project base;
- 2) in few sectors there is sufficient monitoring of data;
- 3) there is no future vision for all sectors. A future vision can mainly be found with the non-economic fields of interest: nature, environment, spatial planning, coastal defence, monuments and landscapes;
- 4) very few sectors propose solutions to solve conflicts and problems.

Sector	(1) measure of description	(2) future vision?	(3) solutions for conflicts?
Economy	+ good detail, regular monitoring	no	no
Tourism and recreation	+/-, insufficient details for certain aspects	no	no
Agriculture	only basic-line information	no	no
Fishery	+ good details, monitoring	no	no
Harbours	only basic-line information	no	no
Forestry	only basic-line information	no	no
Water supply	only basic-line information	no	no
Nature	only details for small areas, no monitoring	yes	yes
Environment	+, good detail for certain aspects, monitoring	yes, for selected parameters	yes
Transport	only basic-line information	yes (structural plans)	+/-
Social sector	+, good detail, monitoring	no	no
Monuments and landscape	+, good detail, monitoring	yes	yes
Military activities	No reports available		
Coastal protection	+, good detail, monitoring	yes	yes
Spatial planning	+, good detail, monitoring	yes	yes

2. Conflict analysis

2.1. Introduction

Many activities take place in the coastal area: forestry, economy, agriculture, fishery, environmental and nature protection, protection of landscapes, spatial planning, tourism and recreation, coastal protection. All these activities meet each other at a certain point, and in some cases this leads to a good co-operation, but in other to restrictions and conflicts.

In the report an overview of all inter- and intrasectoral conflicts has been given, based on the information available from the sector

2.2. Conclusions

The conflict analysis led to the conclusion that for the conflicts within and between sectors six categories can be distinguished. Conflicts in terms of:

- (1) spatial use and fragmentation of open space;
- (2) decline in quality of nature, environment and landscape;
- (3) pressure caused by tourism and recreation;
- (4) visual impact caused by infrastructures;
- (5) transport problems (traffic jams, etc.)
- (6) insufficient guarantee for safety and good quality of life.

The conflict analysis was used as a basis for setting up a strategy and action plan for ICZM in Belgium (Part II: ICZM strategy).

Inventory of legislation in the Flemish coastal zone

drawn up by Maritime Institute (International Law Department), University Ghent
by order of the Ministry of the Flemish Community, Waterways Division/Waterways and
Marine Affairs administration.

This study was drawn up in the frame of the **TERRA-Coastal Zone Management** project
(EC, DG XI).

January 2000

1. Introduction and purpose of the study

This study was meant to give an overview of all legislation with regard to the coastal zone. Both land and marine aspects were covered. Some of the legislation is also applicable beyond the coastal zone, some is specific for the coast. This overview can serve as a basis for further research on legal instruments for Integrated Coastal Zone Management. In a next step there should be an analysis of gaps in the legislation, conflicting legislation, overlaps, and conflicts in authority and co-operation between different authorities.

For each theme the existing international, European, national and regional legislation is given. For each legislation the reference is given, and a summary of the content relevant for the coastal zone.

2. Contents of the study

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- Coastal Zone
- Integrated Coastal Zone Management

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- 2.2. Regional Government
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III. Review of legislation in the coastal zone

1. Marine zones
 - 1.1. General
 - 1.2. Territorial sea
 - 1.3. Connecting zones
 - 1.4. Fishery zones
 - 1.5. Exclusive Economic Zone
 - 1.6. Continental Shelf
2. Management of open space in the coastal zone
 - 2.1. Beaches (definition, status and concessions, permits)
 - 2.2. Polders (= low-lying zone behind the dunes)
 - 2.3. Dikes
 - 2.4. Not-navigable streams
3. Spatial planning
4. Nature and landscape conservation
 - 4.1. General
 - 4.2. Protection of habitats
 - 4.3. Protection of dune areas
 - 4.4. Forests
 - 4.5. Protected monuments and landscapes
 - 4.6. Land consolidation
 - 4.7. Regional landscapes
 - 4.8. Management of shoulders
 - 4.9. Nature development plans of municipalities
 - 4.10. Protection of species
 - 4.11. International tread in endangered species
 - 4.12. The hunt
 - 4.13. Introduction of non-endemic species
5. Environmental Impact Assessment
6. Shipping
 - 6.1. General
 - 6.2. Safety at sea
 - 6.3. Piloting
7. Fisheries
 - 7.1. Access to and management of fisheries
 - 7.2. Structural policy
 - 7.3. Fishery markets
 - 7.4. Control systems
8. Tourism and recreation
 - 8.1. Accommodation
 - 8.2. Water sports (swimming, sailing, water-ski's, waterscooters, jet-ski's, kayak, pleasure boats)
 - 8.3. Fishery sports
 - 8.4. Horse riding

- 8.5. Sail wagons
- 8.6. Beach cabins
- 8.7. Publicity
- 8.8. Plays on the beach and animation
- 8.9. Loudspeakers
- 8.10. Dogs
- 8.11. Vehicles
- 8.12. Biking
- 8.13. Windscreens
- 8.14. Miscellaneous themes (gulf terrain, works in the coastal zones, Delta, feeding of birds, smoking)

9. Sand extraction

10. Dredging

11. Harbours and industry

- 11.1. Coastal harbours
- 11.2. Industrial activities
- 11.3. Wind energy

12. Coastal defence

13. Military activities

14. Cables and pipes

15. Agriculture

16. Drinking water production

17. Marine pollution (by ships, dumping, from main land)

18. Social sector

19. Dispersing ashes on sea

3. Conclusions

This overview of the legislation in the coastal zone will not allow to draw conclusions for the specific changes in legislation which would be needed for a specific *legislation on integrated coastal zone management*. This would need a more detailed analysis of the legal structures (identify overlaps, lacunae, inconsistencies), the possible formal co-operations between administrations, and the content of the legal frame. This analysis then would allow to determine what is encouraging or limiting the implementation of an integrated legal framework at present.

Integrated Coastal Zone Management should take into account the different functions of the coastal zone and the different sectors acting in this zone, while considering the carrying capacity of the natural ecosystem. The conservation of the coastal ecosystem is the indisputable condition for a sustainable management of the coast in the long run.

The competencies in the coastal zone are divided between different administrative levels. The international forum will be an important source for legislation, such as European Directives.

In Belgium the Federal government is competent for matters at sea (from the low waterline onwards), whereas the Flemish Region has authority for the land side. The territory of the Flemish region stops at the low waterline. However the Flemish region has a number of competencies on the North Sea below the low water line : navigation channels, harbours, dredging works, coastal defence, pilotage, beaconage, sea rescue and towage services. These are the responsibility of the Waterways and Marine Affairs Administration.

Within both administrative levels different departments are competent for different user functions. On top of that, there are the competencies at the Provincial level and of the coastal municipalities.

From the overview, one can conclude that there is no specific legal framework for an integrated approach of coastal zone management in Belgium. The existing legislation covers the different users' functions and is set up sectorally. Besides this, there is also a non-sectoral legislation, e.g. for the delimitation of the marine zones, the management of open spaces in the coastal zone, spatial planning, nature conservation and pollution control. These last examples reach beyond the sectors, and are of public importance.

The non-sectoral as well as the sectoral legislation is situated at different administrative levels (international, national, regional, or municipal law).

No analysis of the legislation was made in this study, but it is quite clear that there are discrepancies and inadequacies in the legislation today (e.g. out-of-date laws at the municipality level, not adapted to higher laws).

In conclusion, to allow a legal frame for integrated coastal zone management, the first recommended steps can be:

- relevant sectoral legislation should be amended or replaced by provisions that explicitly define the responsibilities of each authority, and explain the relationship between them
- a formal basis for co-operation between administrations should be set up
- inadequacies should be corrected to harmonise the relevant legislation.