

Ministry of Transport and Construction

Department of Spatial Planning

Assumptions for the policy of coastal zone development:

***TOWARDS A NATIONAL STRATEGY OF
INTEGRATED COASTAL ZONE MANAGEMENT***

Work material – in-paper

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Introduction

The Recommendation on realisation of Integrated Coastal Zone Management in the EU, adopted by the European Parliament and Council in May 2002, requires coastal Member States to develop and adopt National ICZM Strategies.. Poland is at the beginning of the process of formulating such a strategy. On the other hand, a number of elements of the ICZM process already exists in Poland, some of them since many years.

It is assumed that “ICZM is a process, the objective of which is to ensure sustainable development in the coastal zone”. The key terms in this definition are:

sustainable development,

process (of management),

coastal zone (its delimitation).

Each of these terms needs some explanation.

The term “**sustainable development**” means „durable and self-supporting”, which is more than the often given to it understanding of “being balanced”. Secondly, the concept of sustainable development concerns the *welfare of people*. In the concept of sustainable development, protection of environment, in that nature conservation, is of course very important, but it is only one of many elements of human welfare, such as national and local economy, social matters, safety and risk management, spatial management, culture, cultural heritage, etc., but it is not the exclusive objective of sustainable development. Sustainable welfare of people is the overall objective of sustainable development, and therefore – of ICZM. In the concept of sustainable development man is not only a „fully entitled” party, but he is the leading part of nature and environment – not a foreign to nature and environment factor, standing outside them and hampering them, or even hostile to them. It results that the environment must be protected not for its own, but in the interests of man – both present and future generations.

ICZM as a **process of management** should result from the hitherto practice of managing development and enter into existing subjective structures. At the same time it should be more effective than the existing practices. This higher effectiveness is based on:

integration – taking into account the interactions between all sectors, temporal and spatial scales, ensuring co-participation of decision-makers of all levels – it may be therefore stated that the process must be holistic;

public participation – it is required that there is real participation of the public in management (decision-making) processes, which is not limited to consultation only; in effect even socially difficult decisions and regulations have a real chance of realisation and enforcement.

This process of management is to concern the coastal zone, because it is thought that the coastal zone provides exceptionally advantageous conditions for human development, and at the same time the area of sea/land contact contains an exceptionally complex system of interactions, dangers and limitations. Therefore the coastal zone requires best possible management. However, similar processes and methods of management could be used for any other, distinguishable part of the country.

Problems with the **delimitation of the coastal zone** concern mainly its land boundaries.. The propositions range from a line running about 3 or e.g. 10 km inland, through the boundaries of coastal communes (municipalities), boundaries of coastal regions (voivodships), boundaries changing in dependence of the analysed problem, to the boundaries of watersheds of rivers discharging into the sea. Remembering that ICZM (in agreement with its name) is a process of management, it seems that in the case of Poland the best solution is to assume that the land boundary of the coastal zone coincides with the boundaries of the coastal communes. In some cases a broader area could be included, e.g. in the case of neighbourhoods of larger cities. In effect of such delimitation – in accordance with administrative boundaries – ICZM easily falls into the existing subjective order of the management system, without the need to form new bodies or administrative organs. The necessary change is in the *way* the management is realised, with emphasis put on inter-subjective co-ordination.

As a rule, for the sea boundary, either the boundary of the territorial sea or the boundary of the Exclusive Economical Zone (EEZ) is proposed. In the specific conditions of the Baltic Sea it is suggested to assume that the Polish coastal zone includes the whole Polish sea area. Therefore the sea boundary of the Polish coastal zone would run along the external boundary of the Polish EEZ.

The issue of the basic for ICZM **inter-subjective co-ordination** should be underlined. In this sphere the key is mutual comprehending and then reaching mutual understanding. To attain this it is especially necessary:

- that all co-operating sides represent a high level of knowledge and probity,
- that there is an efficient flow and accessibility of reliable (true!) and understandably presented information.

It results, among others, that realisation of ICZM is impossible without well organised monitoring, which necessarily must contain clear, commonly understandable and accessible, and reliable presentation of results of the monitoring.

Present state of coastal zone management in Poland

The term “Integrated Coastal Zone Management” is known in Poland, and gradually popularised, since the first workshop on ICZM in 1996. The participants in that workshop came from significant to ICZM ministries (including special central administrations), coastal voivodships (regions) and coastal self-government authorities. However, even much earlier it was clearly understood that in the coastal zone (both within a certain belt on land and in the sea area) decisions must take into account interactions between many sectors, in a range of spatial and temporal scales. This approach found its reflection in Polish law produced before 1989, and especially in legal solutions introduced after that year. In effect, the Polish legal system contains several institutions, regulations and competence solutions, which concern specially the coastal zone, in that processes of deciding on the use of sea areas, which are concordant with the concept of ICZM. The following are seen as the most important:

- Formally determined coastal belt, of up to 3 km width, consisting of a technical belt (width between 10 m and 1 km) and a protective belt (width from 100 m to 2.5 km),

within which all decision making processes must take special care of safety, risk management and environmental issues connected with sea↔land interactions.

- For the land area exists a system of spatial planning, and generally management of spatial development, with one of the longest in Europe traditions, with built-in mechanisms of co-decision making of a wide spectrum of authorities (in that of maritime administration in the areas of coastal belt, ports and harbours), consultation of interested parties and public consultation.
- Recently, as one of the first countries in the EU, by an Act of Parliament Poland extended statutory spatial planning to all sea areas (including the EEZ). Work on ministerial orders dealing with technical matters related to such planning will be shortly finished. Plans of spatial development of sea areas will be prepared by the maritime administration. However, the process of agreement and consultation of these plans is limited only to the central organs of the State. With the introduction of these new regulations, the existing before system of co-decision making and consultation of other processes concerning the development/use of sea areas became limited in a similar way. This is an important fault, clearly incompatible with the principles of ICZM, and must be corrected.
- Required by law monitoring of many aspects (elements) of the coastal zone is realised. However, this monitoring is as a rule sectoral, often limited to data collection, without the second integral part of monitoring, i.e. analysis and synthesis of results. A serious drawback is the incompatibility of many databases and the collection of some data exclusively in paper form.
- In 2003 the Parliament adopted the Act on the realisation the long-term programme “Programme of coastal protection”. This Act is based on the accepted by the Minister of Infrastructure coastal protection strategy, prepared with a 100-year perspective, which takes into account not only safety, but especially risk management and environment protection (in that nature conservation). Only a few countries have such a strategy.
- The competence of the maritime administration includes not only safety of navigation, but also the whole range of problems of sea area management, coastal protection and co-deciding on the management of the coastal belt and ports. In the opinion of external ICZM experts, existence of a central government agency with such a range of competence may be seen as one of the possible model solutions for ICZM.
- It is a standard practice in coastal zone management and planning that existing legal instruments are adapted and combined within legally acceptable boundaries.
- In February 2005 the Committee of European Integration of the Board of Ministers decided that at central level the ICZM process is to be co-ordinated by the Ministry of Infrastructure (at present it is the Ministry of Transport and Construction). Within the ministry the work is carried out by the Department of Spatial Planning, in co-operation with the Department of Maritime and Inland Administration.

Summing up, in spite of the presented reservations, the Polish legal system, distribution of competence, and at least some methods and practices of management already form good basis for realising and further development of ICZM.

Nevertheless, there is still a very long road to go. Besides the indicated above corrections of law and attaining a properly functioning comprehensive monitoring system of the coastal zone, the

most important work is to arrive at a real public participation in management. This is not a specifically Polish problem, but a question standing before all the other 19 coastal Member States of the EU.

ICZM in the structure of spatial development management

The only official document on the development of a national ICZM strategy is the information sent to DG Environment of the European Commission in March 2005, in which the basic objectives of the strategy, the way in which it will be developed and the time of its development are generally described.

It is assumed that there will be one national ICZM strategy (which however does not exclude the development of regional ICZM strategies). As a first approach, it is assumed that the main strategic aims of development in the coastal zone will be:

- 1) **improvement of welfare** of the coastal population,
- 2) **maintaining**, and where necessary **improving the safety** of hinterland (taking into account sea level rise),
- 3) **maintaining**, and where necessary **improving the state of environment**.

Aims 2 and 3 form the infrastructural basis, without which attainment of the main objective – increase and sustainability of welfare – will not be possible.

It should be reminded here that ICZM is a process of management, not a policy (strategy) for the coastal zone. ICZM is a tool for attaining the objectives defined in such a policy. Therefore in the long term ICZM strategy (national, regional, local) first of all the political objectives of coastal zone development (of the state, region, commune respectively) must be taken into account.

It results, that the development of the national ICZM strategy should proceed in several stages:

- 1) Development of a document defining the social and economical chances and dangers standing before the coastal zone (a document indicating which parts of the coastal zone, or which its elements, are important for the social and economical development, explaining their wider role in the spatial development of the country and region).
- 2) Development of draft long term policies on the use of the land and sea part of the coastal zone.
- 3) Public discussion and verification of both aspects of development and adoption of priorities covering jointly the land and sea area.
- 4) Appropriately to need – development of a timetable and adoption of changes in law.

- 5) Development of a national action plan, and on its basis of regional, sectoral, and if needed – of local action plans.

It is expected that this work will not be finished before 2007. Stages 1-3 correspond to the development of the national policy for the coastal zone. In stages 4 and 5 the ICZM strategy is developed.

Stage 1 is of key importance. Correct analysis of the posed problems may determine whether the realised in consequence programme of development will prove really sustainable.

Conditions of coastal zone development

Having in mind the mentioned earlier strategic objectives of coastal zone development, the following conditions in which these objectives will be realised can be indicated:

Dangers

- Present and expected in the future reduction of work places in agriculture and fishing, and in processing industries connected with these branches of economy.
- Significant reduction of work places in the shipbuilding industry and in the co-operating plants.
- In result unemployment, in some coastal communes reaching now 30%.
- Lack of prospects for growth of employment in traditional types of production, even if the volume of production would grow, due to the introduction of modern, labour-saving production techniques.
- Degradation of marine environment, resulting in continued reduction of productivity of the sea, reduction of the quality of coastal recreation and reduced quality of life in the coastal zone.
- Degradation of environment and landscape of the coastal belt, pressure of urbanisation on the coast, resulting in a lack of spatial order; together they lead to increased probability of disasters caused by natural phenomena, decreased quality of life and of recreational values, also resulting in a significant growth of costs of use and investment costs in the coastal belt; they also may result in irretrievable loss of some chances of development.
- Pressure on sea area use, solved on an *ad hoc* basis or only sectorally, which in final effect limits future chances and results in increased use and investment costs.
- Treating the land and sea areas as two (nearly) separate units; this results in discordant decisions, impeding a harmonious development of the region.
- Climate change, resulting in increased flood risks (sea flooding, significant growth of groundwater level) and strengthened coastal erosion.

Chances

- Coastal location and lack of significant terrain obstructions, which provide good conditions for investment and cargo movement.
- Technical progress, which allows using cleaner production techniques, and general progress in knowledge allowing better planning (of space, actions, investments, protection against risk, etc.).
- New methods of using the sea area (among others energy production, aquaculture) and development of some old ones (oil and gas, aggregate, other mineral resource mining).
- Tradition of high quality of work, due to the exceptionally complex and restrictive international and national requirements, among others concerning safety and environmental issues, put on all ways of using the sea.
- Values of landscape and environment (in that climatic values) and historical values of the coastal zone and its close hinterland, encouraging permanent settlement and providing a good basis for the development of tourism, therapeutics and recreation.

Expected trends and vision of development

The coastal zone provides very good conditions for various types of tourism and recreation. However, it is thought that the development of these branches and of the network of supporting enterprises, and the building of summer residences (second homes), will not ensure enough new workplaces to fill up the empty space on the work market which resulted from reductions of employment in agriculture, fishery, shipbuilding industry, and in co-operating branches of production. Tourism and recreation is certainly an important and developing branch of coastal economy. But it is limited by climatic conditions (seasonality). Especially in its traditional form, it offers mainly rather unattractive types of work, requiring relatively low qualifications. Because of that, in many touristic regions (not only in Poland) flow-off of young people is observed.

Chances for development of tourism and extending the season, among others, may arise with the development of good and versatile transport infrastructure, extending the offer by non-touristic services (e.g. conferences, therapeutics), extending tourism and recreation services (e.g. thematic excursions, supplementary sport – also under roof), popularising the history and building up of an attractive image of the region, maintaining/improving a good state of land and sea environment, improving the aesthetics of coastal settlements. The more complex will be the offer, the better will be the chances to stop the outflow of young, well educated people.

The main chance of development is connected with ports. However, they should not be seen only as logistics centres, but first of all, thanks to the exceptional availability of large volumes of a wide range of goods, as places, which generate the development of production in the neighbouring region.

It seems that due to the special environmental requirements put on the coastal zone, production activity in this region should be increasingly “clean”, this would result in improved automatisa-

tion. In other words, the most up-to-date methods of production should be used. Production activities should make use of the offered by ports easiness of importing large amounts of various types of raw materials, semi-finished products, means of production, and the possibilities of exporting own products. The range of possible types of products manufactured in the region (in a radius of e.g. 10, 50, 100 km – depending on the type and volume of production, transport infrastructure, size and type of cargo which can be handled by the port) is very wide; from ships built inside the ports, through machines to smallest consumption goods, preparation and processing of foodstuffs, etc. In this way, conditions for a durable (sustainable) growth would be formed. The based on ports production will result in a growth of cargo traffic through the ports, which in turn results in further development of the port, and this in turn provides possibilities of further development of production and widening of the region's offer. It may be worth reminding that more than half of the cargo passing through even the largest European ports (e.g. Rotterdam) comes from or goes to regions located within about 100 km from the port.

It should also be expected that besides the traditional ones, new ways of using the sea will appear. Wind farms located on sea are a first indication of these uses. Experience of other countries (Denmark, UK) show that the efficiency and effectiveness of wind generators located at sea is significantly higher than of generators on land. There are important indications that the future of wind energy is not energy production directly for consumption needs, but production of energy for hydrogen production for hydrogen cells. In this context wind farms located at sea take on a special additional significance, since sea water is a weak electrolyte, suitable for hydrogen winning. Marine wind energy industry, other present and future ways of economical and technical utilisation of the sea area, require using state-of-art solutions and constant improvement of production, construction and maintenance techniques.

The high quality and modernity of located in the coastal zone techniques of production means that, together with the development of production, the demand for highly qualified personnel will grow, i.e. attractiveness of work available in the coastal zone will grow. The demand for highly qualified personnel, maintaining the modernness of products and of methods of their manufacturing, requires a strong (stronger than now) supporting educational and scientific background. It is obvious that with increasing qualifications of people engaged in production and with development of education and science, demand for higher order services – culture, arts, but also weekend recreation within e.g. 2-hour driving distance, will also grow. This last effect may result, provided that a proper offer and infrastructure are prepared, in an extension of the season in towns and villages basing mainly on tourism and recreation.

The development of production, science, education and culture requires a corresponding quantitative and qualitative development of the whole sphere of services, administration (management), public services and enterprises involved in maintenance and development of infrastructure.

All actions in the coastal zone, especially spatial management, must take into account sea↔land interactions, in that especially danger to land resulting from sea floods and coastal erosion and dangers to the sea and land environment. Without proper level of protection against extreme occurrences and proper ecological safety, sustainable development of the coastal zone is impossible.

The presented trends and vision of development create chances to reverse the observed negative changes of social structure in the coastal zone, ensuring attractive and durable workplaces. The basic conditions for the realisation of such an optimistic scenario are:

- a basic change in the outlook on port functions – not as at present as just a place where cargo is handled, but as centres generating, appropriately to scale, social and economical development of the state, region or commune/municipality,

- a change in the outlook on functions of the sea area – not as an area which fulfils transport, fishery and ecological functions, but also as an area of future intense development of other, as a rule very modern types of economical activity, where space is a value equally precious as on land,
- ensuring a proper level of safety and state of environment.

Basic directions of development of the national policy

Providing a stable basis for sustainable development and improvement of the quality of life of citizens is, and always will be, one of the main objectives of the State. The presented above trends and vision of development allow realising these objectives. They concern not only the people living within the coastal zone, but also people from other regions of the country, which naturally tend to move to regions offering chances for durable and attractive work. Therefore a national policy for the coastal zone is needed, which will provide necessary conditions for the developed vision of development. Defining the basic directions of actions, it should focus especially on:

- priorities and basic principles of use and development of the coastal land and sea areas,
- infrastructural conditions of development of ports and harbours, their neighbourhood and of the remaining coastal regions,
- directions of changes of law concerning the management of the sea areas, ports and near-port regions, the rest of coastal land, taking into account the participation of port cities/towns, regions, voivodships, coastal communes and public participation,
- principles and main directions of ensuring safety of the hinterland, in that of risk management in the coastal zone,
- principles and main directions of environment protection, nature conservation and protection of cultural and historical heritage of the coastal zone,
- formal and financial involvement of the State.

It is recommended that similar documents be developed for the coastal voivodships and communes/municipalities (or groups of communes in functional regions).

Directions of work on the national ICZM strategy

The national ICZM strategy should, among others, define the way in which the formal framework of attaining the objectives of development, adopted in the national policy for the coastal zone, should be built. At present, only a very general sketch of such a strategy can be drawn. It can be stated that the strategy should include, among others, the following:

- Determination of the subjects participating in coastal management, and of their competences, in such a way that they will be complementary and clearly divided/distributed, and that the subjects will be oriented towards mutual co-operation.
- Achieving that representations or organisations of coastal zone stakeholder interest groups are formed, such that they will be responsible participants in planning and decision-making processes.
- Improvement of public consultation processes to transform them into real public *participation* in planning and management processes.
- Introduction of the problems of sustainable coastal zone development into consecutive National Development Plans.
- Connecting land and sea problems in development plans elaborated for coastal voivodships (communes, counties) and for the sea areas.
- Enforcement of elaboration of statutory spatial development plans (the so called „local spatial plans”) for the whole area of the coastal belt, ports and harbours.
- Covering the whole Polish sea area with spatial development plans.
- Ensuring responsible management of space in the coastal zone – not only with respect to economical uses, but also with respect to nature conservation uses.
- Making sure that in the multi-subjective processes of planning and decision-making, participate all sea and land organs, interest groups and coastal zone communities.
- Introducing into the legal system more effective instruments to monitor the realisation of solutions of the spatial development plans.
- Introducing standards of safety of hinterland and principles of safe development in the coastal zone into the legal system.
- Providing easily accessible, understandable, reliable and full information about the coastal zone.
- Determination and enforcement by law of the scope of investigations and monitoring of the coastal zone and of the connected with them databases (the term monitoring covers not only measurements, but also systematically realised comprehensive syntheses and evaluations of results of the measurements); it is suggested that the range of monitoring should agree with the SD indicator set developed by the Working Group “Indicators and Data” established by DG Environment.
- Ensuring continuity and proper level of financing of infrastructural (safety, protection of environment, transport and technical infrastructure) and planning actions (spatial planning including necessary studies) and of actions of administrations (*int. alia* information processes, organisation of participation processes in planning and decision-making).
- Elaboration of Act of Parliament on ports and harbours, which should contain regulations ensuring real involvement both of the State and the port towns/communes into the development and management of ports *within the whole area of the ports*.

- Development of a *realistic* program of development of individual and group sea and nearshore tourism (yachting, passenger traffic), including into the program tourism in areas neighbouring with the coast.
- Defining physical, economical and social sea↔land interactions.
- Development of a comprehensive research programme for the needs of ICZM, and ensuring its realisation.
- Formulation and realisation of an information policy on sustainable development of the coastal zone and on ICZM.
- Development of a forum, supported by central government, for systematic, periodical exchange of information and experience, and for systematic assessing progress in the ICZM process

The above list presents rather fields of actions, than a full list of actions, which should be included in the final version of the national ICZM strategy. This list will be gradually improved in more detail with the progress of work on the national policy for the coastal zone, and with the development of discussion on this policy and on the connected with this policy way of managing the coastal zone.