



Baltic SCOPE

Towards coherence and cross-border solutions in Baltic Maritime Spatial Plans

Southwest Baltic Case

Topic Paper on Environment

This Topic paper is the working paper based on the joint Baltic SCOPE exercise and cannot be treated as the official opinion of the European Commission and Member States involved.

Swedish Agency
for Marine and
Water Management



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Preface

This Topic paper has been developed during the first two phases of the South West Case in the Baltic Scope project. In total four topic papers have been developed in the Case, one for each of the topic dealing with Energy, Shipping, Environment and Fishing. The Case study has also produced a technical paper about Shipping and safety distances to structures like offshore windfarms. The papers have been developed generically over a period from March 2015 to march 2016.

The main purpose of the topic papers was to initiate the discussions about which topics might be interesting, and why so, in a transboundary maritime spatial planning context in the region. Another aim was to create a joint knowledge's base for the planners to discuss common transboundary issues to be handled in the process of developing coherent maritime spatial planning in the region. Therefore; the papers shall be assessed in its context of the Case studies and the purpose of the Baltic Scope project and not as a full technical report stating the exact and current situation in South West Baltic.

The responsibility of developing the topic papers was a shared between the project partners with one country responsible for one topic each, Germany was topic lead for Energy, Denmark for Shipping, Poland for environment and Sweden for Fishing. In the process of developing the papers the Topic leader have had contacts with relevant authorities in the other countries to secure a comprehensive understanding and view. Earlier versions have been discussed and adjusted accordingly in the process to what is now the final version.

The topic papers have also been used to as knowledge base in stakeholder discussions and the final versions have been influenced by stakeholders input.

As the project moved on in to discussing planning solutions it was jointly decided that the topic papers has served its purpose and that it would not gain more to the project to do more work on the papers. Therefore it was decided to not spend time on layout, cross reading and updating of facts to make it in to a full Topic report. Therefore, once more, the papers should be understood as working documents and **not** technical reports as such.

Case study Coordinator for the South West Case in Baltic Scope.

Tomas Andersson

Conclusion and recommendation

The environmental aspect is one of the most important elements affecting the spatial planning process, which is a fundamental and important tool for environmental protection and management. Thus, in the whole process of planning, defining the directions of development, should take into account the principles of environmental protection. All planning elaborations must also introduce arrangements to ensure the protection and restoration of the environmental damage. On the basis of Baltic SCOPE work the following recommendations could be formulated:

- [The continuous access/build base/ to comprehensive and reliable data/ information / knowledge /expertise on cross-border protected areas should be provided.](#)

There is a need to have continued access to and share reliable knowledge/data on EIA procedures, in order to develop a common understanding of the key characteristics of protected areas designated in the border area of neighbouring countries. Early stage cooperation would help prevent other sectoral investments/uses from having a negative influence in these areas and avoid potential conflicts/collision in neighbouring countries' MSP and investment processes, saving time and money. Key issues to be taken under consideration are; for example, the legal basis for established protected areas, existing plans of protection/management and plans under preparation, objects of protection, defined influences and threats, prohibitions and injunctions, already implemented or planned protective actions, gradation of strength of activities having impact on the protected area.

- [Neighbouring countries should cooperate in the process of planning and management of cross-border marine protected areas \(MPA\) management.](#)

Areas with high ecological values, demanding legal protection, are sometimes divided by country borders. Different approaches to protection measures, objects and threads may result in competing prohibitions and demands influencing space and investments' planning. Cooperation and collaboration is therefore required in the process of planning and management of cross-border marine protected areas (MPA) management and should be performed / guaranteed / maintained on a regular basis in order to:

- a. Exchange early information about the intention to establish new protected area;
- b. Exchange information about the management / protection plans elaboration;
- c. Consult neighbouring countries to find solutions that may influence the competing human use of the sea;
- d. Joint development of solutions to be transferred to national management and protection plans;
- e. Joint elaboration / agreement of the basis of monitoring of sea use having potential negative influence on protection objects and connectivity.

- [Neighbouring countries should avoid planning such human uses which may negatively influence the cohesion and connectivity of cross-border protected/valuable areas](#)

Natural values in the Baltic Sea can only be restored, or maintained at a good level, when all Baltic Sea States cooperate. Most activities within cross-border areas present a potential long distance threat that may have an adverse effect on protected/valuable areas established in neighbouring countries. In order to provide sufficient protection and ensure that valuable objects and "special areas" go undisturbed, transboundary facilities, such as, "migration corridors", should be put in place.

- [Develop common criteria and approaches to protection measures and environmental objects of protection and consider criteria for other activities \(prohibitions, limitations, possible co-existence, synergies\).](#)

The Natura 2000 requirements applied in the Baltic States have a common EU legal basis, **but often** differ with regard to the same protected species. This often leads to differences in interpretation and inconsistency in the protective measures introduced and creates conflicts in decision-making processes regarding the location of investment/activity, as opposing criteria for setting prohibitions and limitations in bordering countries are binding.

- [Joint transboundary research in support of MSP processes should be conducted in the following areas:](#)

- a. Sensitivity / risk analyses, inter alia, on oil spills, underwater noise and vibrations;
- b. Monitoring / research programs to gather information on objects of protection which are not well enough recognized like e.g. harbour porpoise;
- c. Conditions for successful co-existence (e.g. OWF – fish resources, harbour porpoise);
- d. Cumulative effects of deploying OWF.

Background

Natural environment is one of the most important element in spatial planning. It is a whole animated and inanimate elements of nature, closely related to each other, surrounding living organisms. Within its framework we can distinguish the following elements:

- geological structure,
- relief,
- climate,
- water relations,
- soil,
- living organisms.

. The natural environment is in constant interaction with human activities.

Environmental protection is a range of actions aiming at repairing the damage caused or preventing infliction of physical surroundings or natural resources, as well as action to reduce the risk of such damage or to lead to more efficient use of natural resources, including energy-saving measures and the use of renewable energy sources .

Protecting the environment is the basis for spatial development policy, development strategy and the development of spatial plans. This protection consists in particular of rational management of the environment and management of environmental resources in accordance with the principle of sustainable development, pollution prevention, and to restore the natural elements to the proper state.

The basic principle of spatial policy is to provide spatial orderliness and conditions for sustainable development, i.e. the spatial organization that would eliminate conflicts between environmental protection and economic development and activities to improve the living conditions of residents.

Planning documents should therefore establish conditions for implementation of projects, which can produce optimal results in terms of environmental protection, pointing to efforts to maintain the natural balance and rational management of environmental resources, and establish a proportion to preserve or restore the natural balance and proper living conditions, as well as the manner of management of areas degraded by human activities or natural disasters.

In order to meet the above conditions one should take such action, which through its implementation will achieve good environmental status (GES) not only in the regional and national level but also, as it is for instance in relation to maritime spatial planning, in the transnational level. Achieving good environmental status (GES) of marine waters / environment by 2020 is the core objective of the EU Marine Strategy Framework Directive (MSFD).

The EU **Marine Strategy Framework Directive** is an example of how our understanding of nature conservation policy has changed over the last 20 years. Moving away from a species-specific focus, it aims to implement a whole-ecosystem-based approach to the management of human activities in the marine environment in order to achieve good environmental status for European marine waters.

The Directive's purview encompasses all organisms present in the marine environment, and all human activities influencing them. One measure for achieving good environmental status that the Directive identifies is the establishment of a representative and coherent network of **Marine Protected Areas**. These MPAs should adequately cover the diversity of the constituent ecosystems together with existing MPAs, such as those designated under the Natura 2000 directives, the Regional Sea Conventions or as part of national initiatives. The Directive thus implies that something more

comprehensive than the existing marine MPA network (in its current form of implementation) is needed, in order to deliver representative and ecological coherent networks of MPAs.

Analysis of the topic/sector

At the core of the concept of spatial planning is an ecosystem approach, which should be considered an advantage of natural values and the consequential desire to preserve the ecological balance in the basic ecosystems. Protection of natural values is performed in the framework of:

- Spatial (territorial) forms of protection i.e. marine protected areas (MPA): national parks, nature reserves, landscape parks, Natura 2000 sites,
- Protection of species of plants and animals.

In order to analyse the above issues it is necessary to gather information that will enable the location of the forms of nature conservation (establishing acts) and the object of protection (habitat, species of plants and animals) in these areas. In addition, one should get information on prohibitions or injunctions applicable to the surface forms of nature and objects of protection. It should also be pointed out that forms of surface protection or protected subject matter - should be a priority in the region, the country and the transnational area for planning actions.

Figure 1 is showing European protected areas in South West Baltic case:

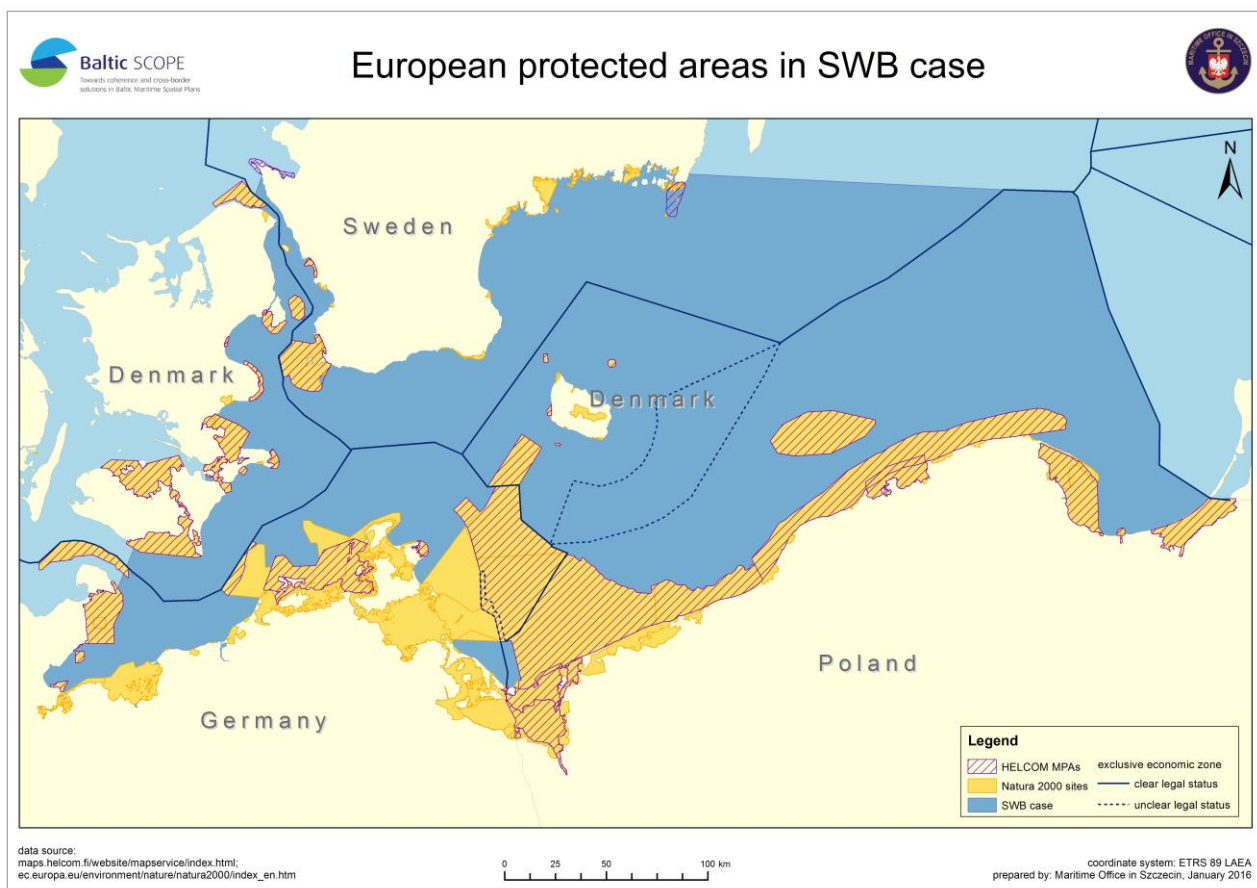


Figure 1: European protected areas in SWB case

Requirements for the sector

The relationship between environmental protection and the purpose of individual areas in spatial planning of marine areas should mutually penetrate. Therefore, we will include in it the conditions resulting, inter alia, from the current state of the environment, the size and quality of water resources and nature conservation requirements.

The condition for drawing up proper spatial plan for marine areas is gathering and analysing information on the areas' natural values in order to determine the places most valuable, but also sensitive to any kind of human intervention, the valorisation of marine space for individual elements of the environment including both quantitative as well as quality criteria.

The quantitative criteria include:

- number, biomass of species (eg. high concentration of wintering waterbirds)
- species richness (biodiversity).

Quality criteria are the following:

- rarity of species / habitats (uniqueness)
- naturalness (degree of conservation of group / intact habitat).
- presence of protected species / habitat,
- significance of species / habitats for ecological processes.

For the proper functioning of the ecosystem its ecological coherence plays a crucial role. To determine the values of marine areas at least two dimensions should be considered - spatial (the significance of a particular place for the individual element of environment) and temporal dimension, meaning the requirements of individual elements of ecosystem for a specified quality marine space. It is primarily to preserve the ability of individual elements of biota (living organisms) to access important areas in their development cycle – dedicated to breeding, resting and feeding.

Current status

Due attention should be paid to the current issues which determine the state of the environment including the state of nature conservation in the area. Important issue is to determine and identify all activities that affect the environment, both activities implemented or planned for implementation.

In order to ensure the reliable and proper MSP process it should be considered necessary to undertake the following activities related to environmental and nature protection:

- Identification of protected areas - existing and proposed to be protected, taking into account EU legislation (the Birds and Habitats Directives - Natura 2000, HELCOM MPAs) and national (national parks, nature reserves and other national forms of nature conservation).
- determination on the basis of existing data (e.g. protection plans for nature conservation forms) of the presence of protected marine and coastal habitats, valuable and rare species of plants and animals, as well as the comparison of protected objects in the neighboring cross-border protected areas in order to achieve the coherence and continuity of habitats;
- identification of existing and potential threats to the natural values of the analysed area, to preserve the favourable conservation status of the objects of protection, for example in Natura 2000 sites (e.g. anthropopressure, discharges of sewage and geothermal brines, extraction of aggregates, post-war warfare chemical agents);
- analysis of existing and proposed activities at sea and in the coastal zone, the implementation of which may have an impact on the marine environment in a transboundary context, e.g.:

- a) the location of marine and land projects likely have a significant impact on the environment and projects that could potentially have a significant impact on the environment (e.g. nuclear power plants);
 - b) measures related to the coastal protection and analysis of the impact of these activities on hydro-morphological processes of seabed and shores and natural processes (e.g. gravel extraction dedicated to beach supply);
 - c) development of port infrastructure, tourism (fairways, anchorages, piers, harbors, marinas);
- Verification of prohibitions and injunctions in relation to the forms of nature conservation in individual countries and determination whether there is the same or a different approach to the same forms of nature conservation.
 - Verification of procedures and requirements arising from the environmental impact assessment and strategic environmental impact assessments in individual countries - with respect to the impact of planned investments /spatial plans in protected areas.
 - Comparison of public participation procedures in each country in proceedings for environmental impact assessment and strategic environmental impact assessments.

Within the project framework, in the area of South - West Baltic Sea Case (SWB case) several geographical areas have been selected taking into account the existing or future potential conflicts and cross-border aspect (Figure 2). In the aforementioned geographical areas the following Natura 2000 sites has been identified:

I. Odra Bank and the approach fairway to ports Świnoujście and Szczecin (PL, DK, DE)
(Figure 3)

- Zatoka Pomorska PLB990003

An area of diverse bottom structure - from sandbanks to large gravel and stones deposits. The central part constitutes large shallow area called Odrabank. It is one of the most important resting place for migrating Baltic water birdlife. Several bird species listed in Annex I of the Birds Directive appear in the area, like great crested grebe, red-throated loon, black-throated loon, slavianian grebe or smew, long-tailed duck, common scoter, guillemot (at least 1% of population during migrations and wintering), wetland birdlife is present in concentrations in excess of 20,000 individuals – in the winter time – over 100,000. In total, in the Pomeranian Bight occur annually about 20 species of seabirds.

- Pommersche Bucht DE1552401 and

- Westliche Pommersche Bucht DE1649401

One of the most important resting ground for migrating birds in the Baltic Sea. Up to half million individuals stay there overwinter. It is especially important for the crested grebe, long-tailed duck and scoter. Also an moulting ground of black scoters. In total, in the Pomeranian Bight occur annually about 20 species of seabirds.

- Ostoja na Zatoce Pomorskiej PLH990002

This is a key area for the protection of the 1110 habitat. The Oderbank constitutes the central morphological element of Pommeranian Bright, which is the largest Southern Baltic sandbank (the most representative example of this type of habitat in the whole Baltic Sea). It is an important birds wintering area, moreover it is the feeding ground of juvenile flatfish. The area is also important for the Baltic twaite shad population. Two harbor porpoises populations are regularly observed here – the western stock in summer and autumn, the southern stock in winter.

- Pommersche Bucht mit Oderbank DE1652301

The Oderbank constitutes the central morphological element of Pommeranian Bight, which is the largest Southern Baltic sandbank (the most representative example of this type of habitat in the whole Baltic Sea). It rise up till 8 m of depth and is an important birds wintering area, moreover it is the feeding ground of juvenile flatfish. The area is also important for the Baltictwaite shad population. Two harbor porpoises populations are regularly observed here – the western stock in summer and autumn, the southern stock in winter. This is a key area for the protection of the 1110 habitat.

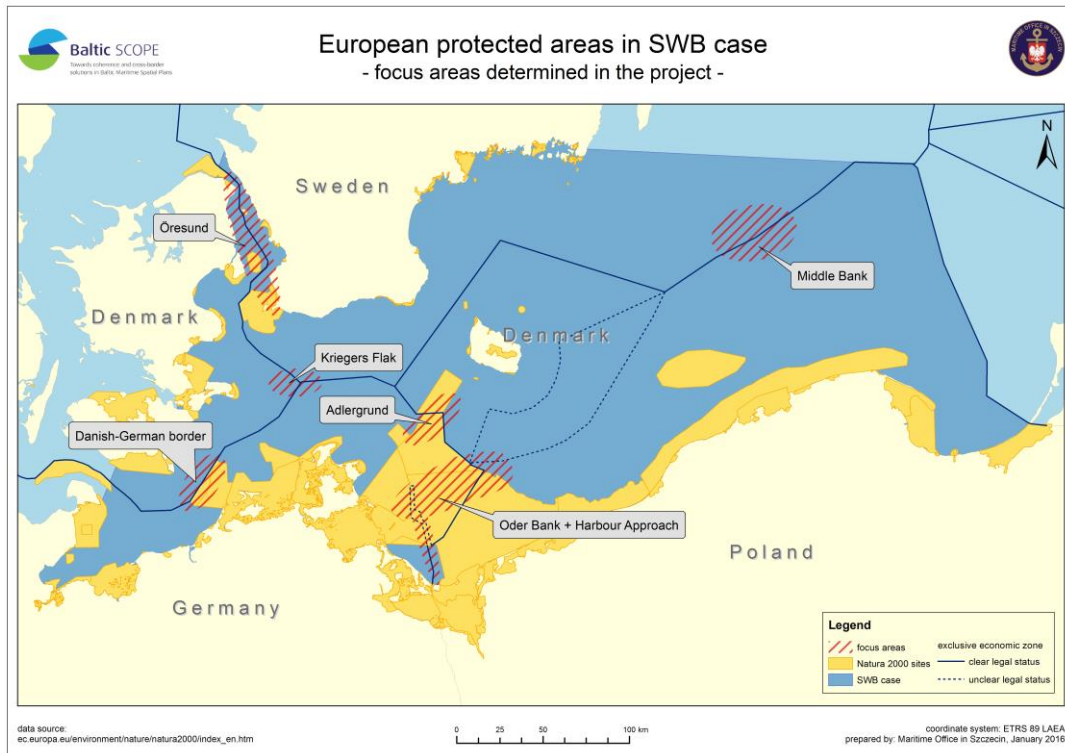


Figure 2: Focus areas determined in SWB case

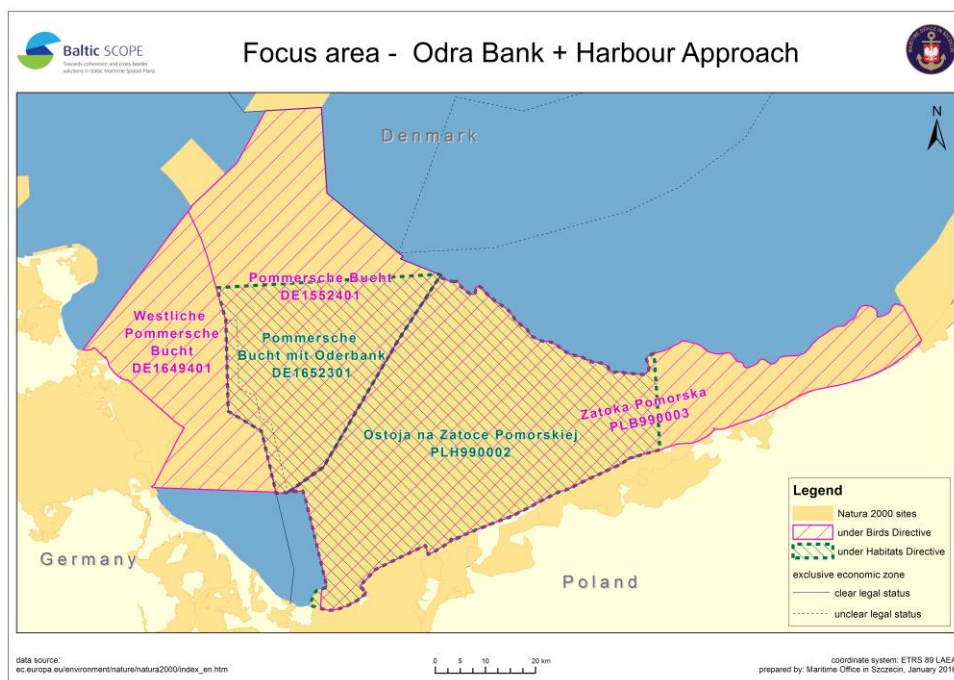


Figure 3: Natura 2000 sites under Birds Directive and Habitats Directive in the area of Odra Bank + Harbour Approach

II. Adlergrund (SE, DK, DE) (Figure 4)

- Adler Grund og Rønne Banke DK00VA261

The area is situated south of Bornholm it is a rockreef of the length of 4 km. The bank represents rare, undisturbed natural habitats in the Baltic Sea – submerged sandbanks and stony bottom (reefs). It is also an area of harbour porpoise occurrence.

- Adlergrund DE1251301

The area encompasses the most shallow parts of the Rønne bank between Bornholm and Rugen. It represents the largest reefs and sandbank area (as listed in the Annex I of the Habitats Directive) in the southern Baltic - at its outer edges the glacial sandbanks dominate. It is an important winter feeding ground for sea ducks and guillemots, during the strong winters it give shelter to the Pomeranian bright birdlife. With regard to the species listed in Appendix II of the Habitats Directive, this area is important because of the presence of harbour porpoises and grey seals.

- Pommersche Bucht DE1552401

See the description in point I.

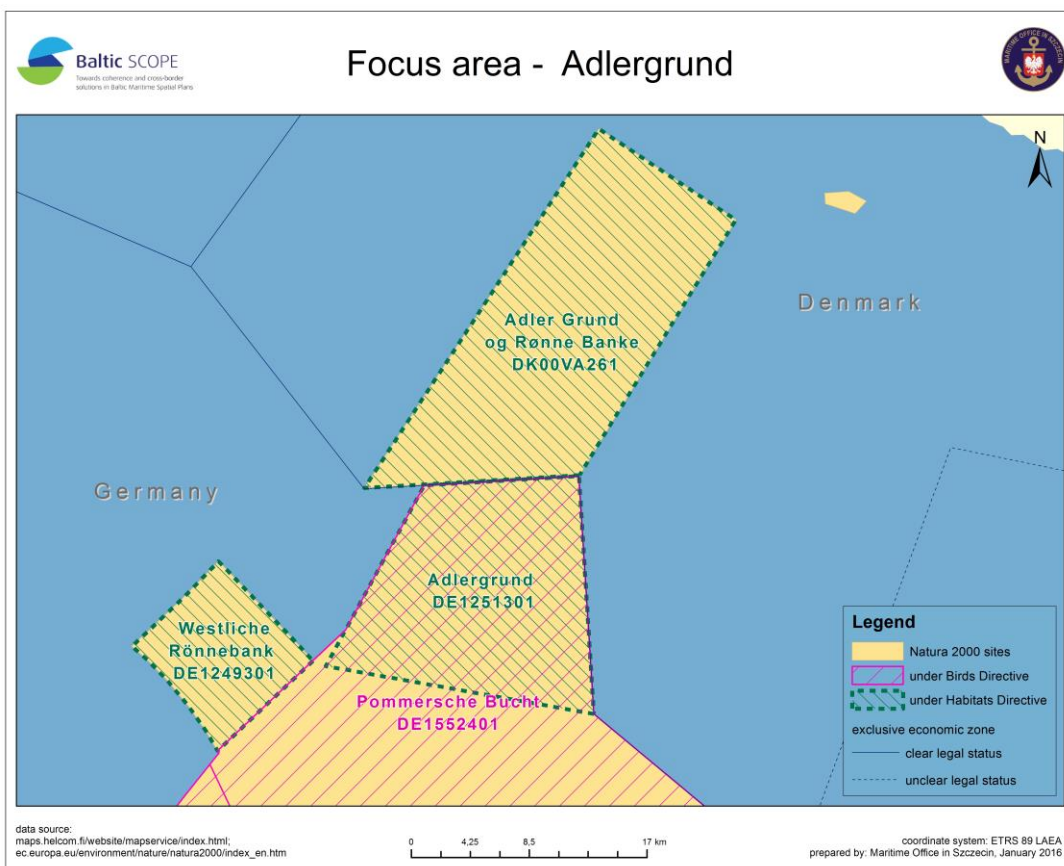


Figure 4: Natura 2000 sites under Birds Directive and Habitats Directive in the area of Adlergrund

III. Oresund (SE, DK) (Figure 5)

- Saltholm og omliggende hav DK002X110

It is a flat island (16 km²) situated between Malmö and Copenhagen, rising 5-9 m above the sea level, with the highest point at 11 m. There are several smaller islands on its southern side. Saltholm is surrounded by the 1,5 km wide shallow waters zone, which represents the important habitats like submerged sandbanks, salt meadows, large shallow inlets and bays, reefs, annual

vegetation of drift lines, *Salicornia* and other annuals colonizing mud and sand. It is one of the most important coastal avifauna breeding areas in Denmark – number of eider colonies could be found here as well as significant Eurasian Curlew and dunlin population, the greylag goose moulting ground and an area of international importance for avocet. Moreover the grey and common seal as well as harbour porpoise can be found here.

- Falsterbohalvön SE0430095

Mainly marine areas with sandy beaches and an almost natural development with abrasion and accumulation. The northeastern parts have shallow waters and some small islands in connection with a peninsula. The western part of the main-land peninsula is very special with an odd type of several open dune slacks filled with water (locally named Flommen). The central part of the main land is a moraine deposit and an open heathland. The site is very important to rare amphibians and to breeding birds. It is one of the best known places for migrating birds in northwestern Europe, especially birds of prey. The former island Måkläppen - today a peninsula - is important to seals. The shallow waters are important to fish reproduction. 18 different types of protected habitats are present here, also grey and common seals as well as Great Crested Newt can be observed here.

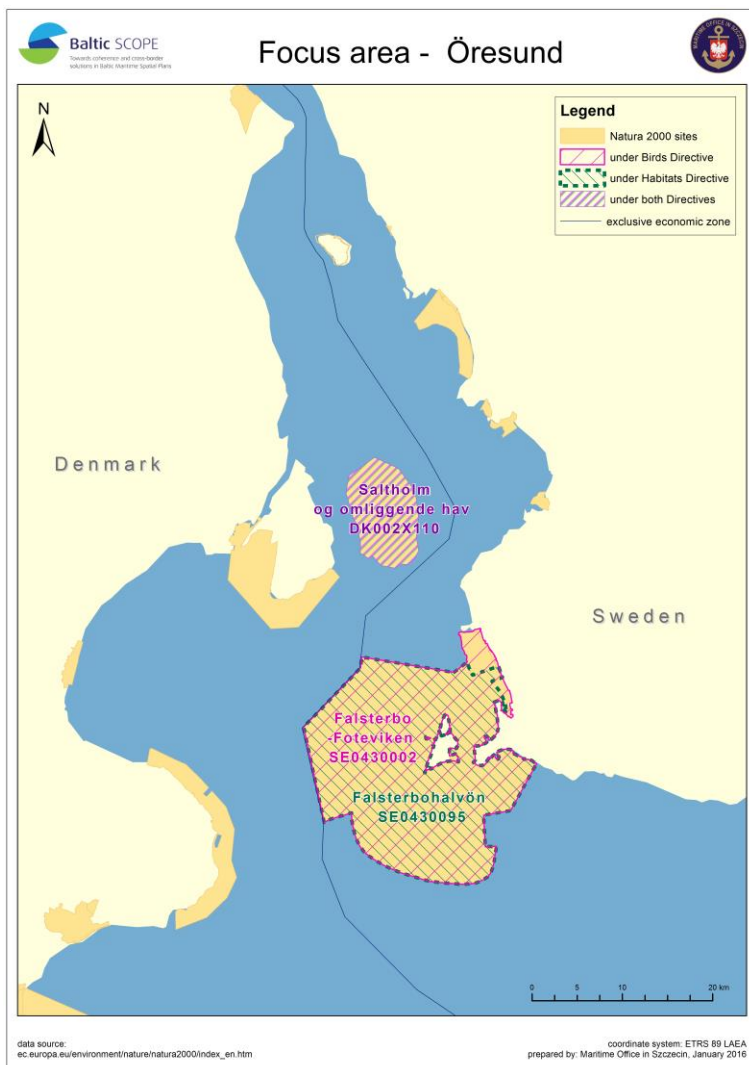


Figure 5: Natura 2000 sites under Birds Directive, Habitats Directive and under both Directives in the area of Öresund

- Falsterbo-Foteviken SE0430002

This marine area along the coast is characterized by high geomorphological values. Observation and monitoring of many migratory birds are carried out here. There are different coastal habitats and pastures that constitute a very important place for resting and nesting of migratory birds and the occurrence of amphibians. There have been approx. 40 species of birds, the most important are inter alia: Red Kite, Woodlark, Wood Sandpiper, Kentish Plover, Black-throated Diver, Caspian Tern, Little Stint,, Hobby, Ruff, Black Kite, Hen Harrier, Little Tern, Honey Buzzard, Avocet, Sandwich Tern, Arctic Tern, Sparrowhawk, Osprey, Short-eared Owl, Golden Plover.

IV. German - Danish border area (DE, DK) (Figure 6)

- Kadetrinne DE1339301

It is an area of high importance for harbour porpoise, characterised by high macrophytes and macrozoobenthos biodiversity of due to the water exchange between North and Baltic seas. Together with the Fehmarn Belt it creates the system, important for the exchange of species, and the Baltic oxygenation and salinity. At the depth of 18-32 meters stony reefs are present covered with algae and mussels. It is also important for the populations of long-tailed duck, little gull, black-throated loon, red-throated loon and sea ducks.

- Darßer Schwelle DE1540302

An area of sandy-gravel bottom, designated due to the habitat listed in the Annex I of the Habitat Directive - sandbanks which are slightly covered by sea water all the time and reefs. Moreover the grey and common seal as well as harbour porpoise can be observed here.

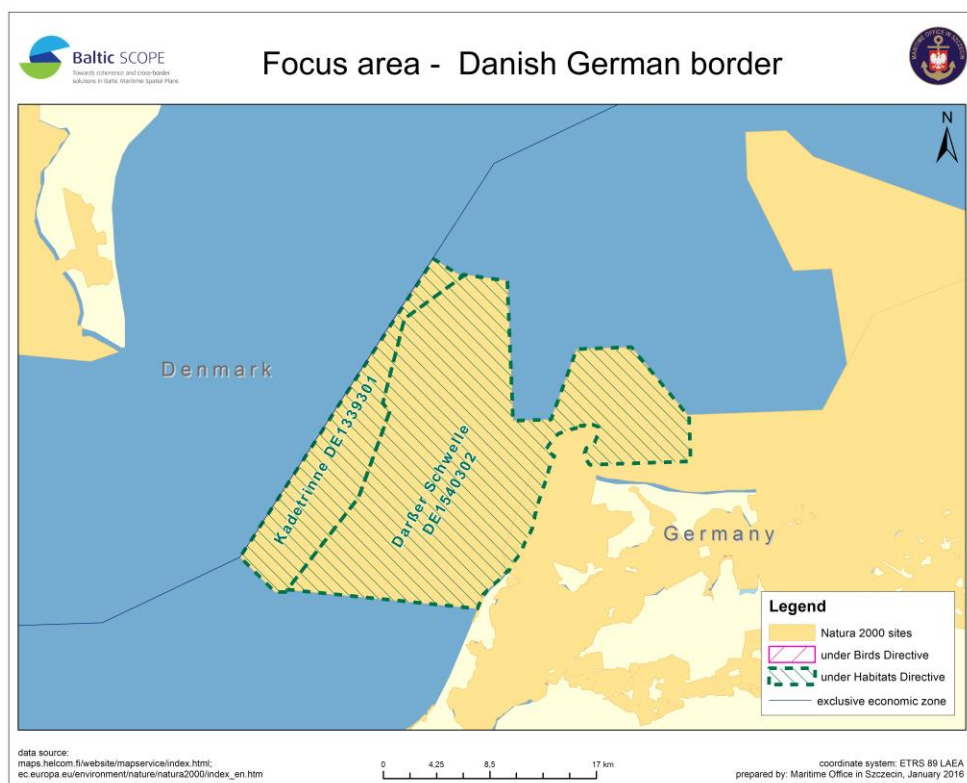


Figure 6: Natura 2000 sites under Birds Directive and under Habitats Directive in the area of Adlergrund

V. Kriegers Flak (SE, DK, DE)

There are no Natura 2000 sites located within the area. The information regarding other nature conservation areas or interests are lacking.

Regulations

In order to determine the role of environmental protection one should pay attention to the legal conditions which sanction the role and importance of all activities that may have an impact on the environment and nature. There are a number of legal acts governing the matter of protection of Baltic Sea waters. These include, inter alia:

- Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention 1992);
- Convention "On the Law of the Sea" (UNCLOS, 1982);
- International Convention for the Prevention of Pollution from Ships (MARPOL 73/78);
- Convention "On fishing and conservation of living resources in the Baltic Sea and the Belts" (Gdansk Convention, 1973);
- Convention on biological biodiversity" (Rio de Janeiro Convention, 1992);
- Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991) - the 'Espoo (EIA) Convention';
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, and Protocol (London Convention, 1972);
- International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention, 2004);
- International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS Convention, 2008);

EU regulations:

- Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive - MSFD)
- Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy (EU Water Framework Directive - WFD)
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (Bird Directive)
- Council Directive 92 /43 /EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitat Directive)

Current needs and future use

On the basis of consultation with project partners a preliminary list have been elaborated compiling the activities of significant national interest (based on on-going or planned activities in particular area) that constitute or may constitute a threat to the pointed out Natura 2000 sites.

I. Odrabank with approach fairway to ports Świnoujście and Szczecin (PL, DK, DE)

➤ Odrabank:

The strongest interests are related to location of offshore wind farms -OWF (PL), lying high voltage cables (PL, less importance for DK, DE), sand and gravel extraction (PL), environmental protection (PL, DE), pipe lines (PL, DE), military activities (PL, less importance for DE). Smaller interest is associated to shipping (DE), fishery (PL, DE).

➤ Approach fairway to ports Świnoujście and Szczecin:

The strongest interests are related to: lying pipe lines (PL, less importance for DE), shipping (PL, DE), fishery (PL, less importance for DE), environmental protection (DE, PL), military activities (PL, DE). Smaller interest is associated to lying data cables (DE).

II. Middle Bank (PL, SE)

The strongest interests are related to location of offshore wind farms -OWF, lying high voltage cables (PL, SE), shipping (SE, less importance for PL), sand and gravel extraction (PL, less importance for SE) and other environmental protective measures due to the occurrence of harbour porpoise. Smaller interest is associated to lying pipe lines (SE), data cables (PL, SE), fishery (PL, SE), protected areas (PL, SE).

III. Adlergrund (SE, DK, DE)

The strongest interests are related to location of offshore wind farms -OWF (DE), lying high voltage cables (DE, DK), pipe lines (DE), sand and gravel extraction (DE, DK, less importance for SE), environmental protection (DK, DE, less importance for SE) and shipping (DE, SE, less importance for DK). Smaller interest is associated to fishery (SE, DE), military activities (DE).

IV. Öresund (SE, DK)

The strongest interests are related to location of offshore wind farms -OWF (SE, DK), high voltage cables (SE, DK), data cables (SE, DK), rurociągami (SE, DK), constructions like bridges or tunnels (SE, DK), shipping (SE, DK), fishery (SE, DK), environmental protection (SE, DK), sand and gravel extraction (DK, less importance for SE).

V. German - Danish border area

The strongest interests are related to location of offshore wind farms -OWF (DK), data cables (DK, DE), constructions like tunnels (DK, DE), shipping (DK, DE) environmental protection (DK, DE). Smaller interest is associated to sand and gravel extraction (DK).

VI. Kriegers Flak (SE, DK, DE)

The strongest interests are related to location of offshore wind farms -OWF (SE, DK, DE), high voltage cables (SE, DE, DK), data cables (SE, DE), pipelines (SE, DE, DK), shipping (SE, DE, less importance for DK), sand and gravel extraction (DK, less importance for SE), fishery (SE, less importance for DE). Smaller interest is associated to environmental protection (SE, DE) i military functions (SE, DE).

Potential threats

The marine environment (including the conservation status of Natura 2000 sites) is influenced by many anthropogenic factors. Their effects can include changes in ecosystems (including those relating to habitats and populations of species), degradation or loss of biodiversity and water contamination. Among the factors that may in the future cause these transformations in the marine environment are:

- a) intentional or accidental introduction of alien, invasive species (e.g. species transferred from ballast water or so called „fugitives from breeding”);
- b) pollution (causing changes in species composition) from the land, from ships or which result from deliberate dumping of materials, and noise (including sonar devices);

- c) prospecting and exploration of mineral deposits of subsea hydrocarbons; the adverse impacts on the marine environment may include noise, discharge of waste into the sea, causing oil spills disasters by platforms;
- d) dredging of shipping lanes and sand and gravel extraction causes the degradation of seabed habitat;
- e) fisheries (including aquaculture) leads to changes in food chains, changes in habitats (e.g caused by fishing with bottom trawls); another problem is the excessive overfishing of certain species that may lead to their extinction at the local level;
- f) commercial shipping - or more precisely: shipping accidents, oil pollution, discharge of ballast water;
- g) army/military activity - most reservations concerns the impact of sonar on marine mammals and protected fish and their behavior;
- h) the production of electricity at sea (offshore wind farms, tidal power, etc.), the construction phase especially of wind power plants may adversely affect the landscape, disrupt migration routes of animals; the objects themselves cause noise and electromagnetic fields
- i) tourism (recreational shipping, diving and other water sports and leisure activities) - excessive tourist traffic causes the degradation of coastal zones, noise frightens animals, due to trampling or misalignment may be destroyed eggs and chicks of nesting birds directly on the sand, in addition, with respect to the coastal zone, the state of preservation and integrity of Natura 2000 areas could be affected by the following: development of residential areas, touristic-recreational objects, technical infrastructure, mining of sand for building needs or to adjust the beaches, the determination of sewage discharge sites and to protect the coast against erosion.hat plans for future uses exists?

On the basis of consultation with project partners a preliminary list have been created compiling significant interests resulting from to ongoing or planned activities in particular area that constitute or may constitute a threat to the pointed out Natura 2000 sites.

Below in the form of tables, a comparison of these interests and threats, pressures and activities having an impact on individual Natura 2000 sites identified in the Standard Data Forms - SDF have been carried out. On the basis of this comparison the potential conflicts that have to be countered in the context of planning decisions were identified.

Table 1
Odrabank (PL, DK, DE)

Threats, pressures and activities with impacts on the Natura 2000 sites	Indicated interests						
	OWF	pipelines	cables	shipping	military areas	fishery	sand & gravel
PLB990003							
H- fishery (netting)						H	
H- pollution to surface waters	*	*	*	*	H		*
H- eutrophication				*			
H- wind energy production (OWF)	H						
H- cargo and passenger ferry lanes				H			
M- marine water pollution				*	H		*
M- military manouvres					M		
M- other siltation rate changes	*	*	*				*
M- professional passive fishing						M	
M- other forms of pollution					M		

L- motorized and non-motorized nautical sports							
DE1552-401							
H- fishery (potting)						H	
M- pelagic trawling (drift-net fishing)						M	
M- shipping lanes				H			
M-military manouvres					M		
M- air pollution, air-borne pollutants				*			
M- noise nuisance	*	*	*	*	M		*
M- Other urbanisation, industrial and similar activities (includes bridges, tunnels?..)							
L- sand and gravel extraction							L
L- nautical sports (sailing)							
L- leisure fishing						L	
L- utility and service lines ('electricity lines - submerged or suspended)			L				
DE1649-401							
H- sand and gravel extraction							H
H- pipe lines		H					
H- Professional active fishing							
H-other forms of transport							
H- utility and service lines ('electricity lines - submerged or suspended)			H				
H- other human intrusions and disturbances industry related etc.							
M- fishery (potting)						M	
M-'Leisure fishing						M	
M-'Military manouvres					M		
PLH990002							
H- sand and gravel extraction				*			H
H- pelagic trawling (drift-net fishing)						H	
H- eutrophication							
M- wind energy production	M						
M-'Leisure fishing						M	
M- oil spills in the sea		*		*			
M- toxic chemical discharge from material dumped at sea		*		*	*		
DE1652301							
H- fishery (potting)						H	
M- pelagic trawling (drift-net fishing)						M	
M- military manouvres					M		
M- Air pollution, air-borne pollutants				*			
M- other human intrusions and disturbances							
L- shipping lanes				L			
L- nautical sports (sailing)							
L - leisure fishing						L	

Threats, pressures and activities with impacts on the Natura 2000 sites:

H - pressures and activities with high negative impacts on the site

M - pressures and activities with medium negative impacts on the site

L - pressures and activities with low negative impacts on the site

* - potential conflicts with permanent or temporary nature (occurring during construction phase)

Table 2
Adlergrund (SE, DK, DE)

Threats, pressures and activities with impacts on the Natura 2000 sites	Indicated interests						
	OWF	rurociagi	kable	żegluga	Milit	Fish	Sand & gravel
DE1251301							
M- sand and gravel extraction							M
M- fishery (potting)						M	
M-'Military manouvres					M		
M- Air pollution, air-borne pollutants				*			
M- noise nuisance	*	*	*	*	*		*
M- other human intrusions and disturbances							
L- nautical sports (sailing)							
L- utility and service lines ('electricity lines - submerged or suspended)			L				
L- pelagic trawling (drift-net fishing)						L	
L- Shipping lanes				L			
L-'Leisure fishing						L	
DE1552-401							
H- fishery (potting)						H	
M- pelagic trawling (drift-net fishing)						M	
M- shipping lanes				H			
M-'Military manouvres					M		
M- air pollution, air-borne pollutants				*			
M- noise nuisance	*	*	*	*	*		*
M- other human intrusions and disturbances							
L- sand and gravel extraction							L
L- nautical sports (sailing)							
L-'Leisure fishing						L	
L- Utility and service lines ('electricity lines - submerged or suspended)			L				
DK00VA261							
Data lacking							

Threats, pressures and activities with impacts on the Natura 2000 sites:

H - pressures and activities with high negative impacts on the site

M - pressures and activities with medium negative impacts on the site

L - pressures and activities with low negative impacts on the site

* - potential conflicts with permanent or temporary nature (occurring during construction phase)

Table 3
German - Danish border area (DK, DE)

Threats, pressures and activities with impacts on the Natura 2000 sites	Indicated interests				
	OWF	tunnel	cables	shipp nga	Sand & gravel
DE1339301					
H- shipping lanes				H	
H- noise nuisance	*	*	*	*	*
M- air pollution, air-borne pollutants				*	
M- leisure fishing					
M- other human intrusions and disturbances					
L- utility and service lines ('electricity lines - submerged or suspended)			L		
DE1540302					
H- fishery (potting)					

H- pelagic trawling (drift-net fishing)					
H- professional active fishing					
H- sand and gravel extraction					H
H- shipping lanes				H	
M-leisure fishing					
L- invasive non-native / alien species				L	

Threats, pressures and activities with impacts on the Natura 2000 sites:

H - pressures and activities with high negative impacts on the site

M - pressures and activities with medium negative impacts on the site

L - pressures and activities with low negative impacts on the site

* - potential conflicts with permanent or temporary nature (occurring during construction phase)

The most important identified conflicts (pressures and activities with negative impacts on marine environment) within the identified protected areas:

Odra Bank:

- offshore wind farms (OWF) in PLB990003 (H) i PLB990002 (M)
- pipe lines in DE1649-401 (H)
- cables in DE1649-401 (H) and DE1552401 (L)
- shipping in: PLB990003 (H), DE1552401 (H), DE1652301 (L)
- sand and gravel extraction in: DE1649-401 (H), PLB990002 (H), DE1552401 (L)
- fishery in: PLB990003 (M), PLB990002 (H), DE1552401 (H), DE1649401 (M), DE1652301 (M)
- military activities in : PLB990003 (M), DE1552401 (M), DE1649401 (M), DE1652301 (M)

Marine water pollution, noise may be posed by: OWF, pipelines, cables, shipping, military activities, sand and gravel extraction. Shipping has its contribution to eutrophication and air pollution. Oil and other harmful substances pollution may result from shipping, pipe lines and military activities.

Adlergrund:

- pipe lines in DE1251301 (L) i DE1552401 (L)
- shipping in: DE1552401 (H), DE1251301 (L)
- sand and gravel extraction in DE1251301 (M), DE1552401 (L)
- fishery in DE1251301 (M), DE1552401 (L)
- military activities in DE1251301 (M), DE1552401 (L)

Noise is posed by all indicated activities in this area. Shipping has its contribution to air pollution. Nevertheless it should be noted that some efforts have been carried out (legislative, technical) to eliminate the negative impacts from shipping.

German - Danish border area:

- shipping
- sand and gravel extraction

Noise is posed by all indicated activities in this area. Shipping has its contribution to air pollution and introduction of invasive non-native / alien species

Transboundary implications

In order to ensure consistency of cross-border procedures, during environmental proceedings in relation to the activities in marine areas, one should identify the sites posing a potential or existing conflicts with environmental background. Any action that may have an impact on the environment should be analyzed in a broader sense, inter alia taking into account the location, because the sea area contains no barriers and boundaries that could inhibit the spread of influence.

Planning evidence

- HELCOM database
- NATURA 2000 database available on European Commission webpage
- the information obtained from the project partners during the planners meetings

Motive/discussion for including this topic/sector in the project

Protection and preservation of the environment is a priority action in the maritime spatial planning process. It should be noted that the concept of sustainable development which is socio-economic development, in which the political, economic and social activities are integrated, maintaining natural balance and permanence of basic natural processes in order to guarantee the ability to meet the basic needs of communities or citizens both of the contemporary generation as well as future generations. Formation and protection of the environment generally understood as measures aimed at halting the degradation and improvement of the natural environment are the elements of eco-development. Eco-development in practice means integration activities within the spatial orderliness, determining the need for a new approach to spatial planning and spatial policy making. Therefore, spatial planning should take into account environmental considerations related to:

- status of the environment, size and quality of water resources and nature and environmental requirements, and cultural landscape;
- protection of the earth's surface and soil, for example reclamation of existing industrial landfills and management of areas featuring weak and poor natural conditions,
- protection of areas with valuable natural and landscape values;
- Protection of areas in need of restructuring or rehabilitation;
- Protection of animals and plants, including establishing a system of protected areas of nature and the landscape;
- Protection of symptomatic documented mineral resources.

These principles may as well have reference to marine areas.

The purpose of planning the is "the efficient use of space, which leaves as much as possible space for the future, including those not yet known, methods of use of the sea. In order to facilitate the conservation and sustainable use of the Baltic Sea rules of maritime spatial planning (HELCOM-VASAB 2012) have been developed. The overriding principle is the so-called „ecosystem approach”, which requires inter-sectoral and sustainable management of human activities, and its objective is to achieve good status of the Baltic Sea ecosystem. Sustainable management is to reconcile the economic, social and environmental interests. The environmental aspect is therefore one of the most important elements of planning. Natural conditions apply to practically any space, covering both the natural characteristics of the area, as well as their legal status.