

RESULTS OF BALTSEAPLAN

#02 AUTUMN 2011

Maritime Spatial Planning (MSP) has become a widely acknowledged and necessary tool for co-ordinating spatial use and balancing of interests in the sea. In view of expanding activities such as offshore wind energy parks and growing shipping traffic and at the same time increasing needs to protect the marine environment a systematic, integrative and forward-looking planning is required in order to safeguard the sustainable development of the seas. Currently, however, this tool is far from being established practice.

The 3.7 million € INTERREG IVB project "BaltSeaPlan" (2009–2012) has been the largest project in recent years dealing with maritime spatial planning throughout the

Baltic Sea Region. Under the lead of the German Federal Maritime and Hydrographic Agency (BSH) and covering partners from all Baltic Sea countries (except Finland) the project has not only developed pilots in 8 demonstration areas, but also advanced methods, instruments & tools as well as data exchange necessary for an effective maritime spatial planning.

The results of BaltSeaPlan are published in a series of reports which are briefly summarised in this bulletin. All reports are available for free download at www.baltseaplan.eu.

BALTSEAPLAN PUBLICATIONS

BaltSeaPlan Vision 2030 – Towards the sustainable planning of Baltic Sea space



Vision 2030

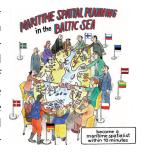


The BaltSeaPlan Vision 2030 was developed by all BaltSea-Plan partners jointly. It shows how MSP could ideally have been translated into practice by 2030 and outlines the necessary steps and principles such as pan-Baltic thinking and spatial connectivity, which should be followed by Baltic Sea Region States starting from today in order to reach this vision. The vision identifies as well key transnational topics for a sus-

tainable development of the Baltic Sea, which require crossborder co-operation: healthy marine environment, coherent pan-Baltic energy policy, safe maritime transport and sustainable fisheries.

Become a Maritime Spatialist within 10 Minutes

Maritime Spatial Planning is a complex topic, which is difficult to explain to non-specialists. Getting stakeholders involved in the maritime spatial planning process is, however, one of the key success factors. It it therefore important to get the issues at stake across to all of them, including local fishermen, hotel owners, nature pro-



tection groups, etc. The Baltic Sea office of the WWF / Germany has therefore produced a non-scientific brochure, which depicts issues in an easy-to-understand, humoristic, user friendly way.

BaltSeaPlan Bulletin #01

The BaltSeaPlan Bulletin #01 (spring 2010) is a 16 page long publication produced after the 1st year of implementation of the project. It provides an insight into the activities planned and methods to be used throughout the project. The main issues / conflicts at stake in each pilot MSP project area are shown and the approach and expected results by project partners for each area. It also explains the method used to analyse the impacts of national & regional strategies on maritime space in each BaltSeaPlan country and the working steps for developing the common vision.

BaltSeaPlan Bulletin #02

The BaltSeaPlan Bulletin #02 (autumn 2011) provides an overview of the various BaltSeaPlan publications and the 30 BaltSeaPlan reports. It should serve as a helping guide for an audience not familiar with the BaltSeaPlan project on which report to download from the BaltSeaPlan website.

BaltSeaPlan Project Flyer

The BaltSeaPlan flyer presents the project's rationale, its activities and partnership. It has been published in English, German, Polish, Estonian, Lithuanian, Latvian and Swedish languages.

BALTSEAPLAN REPORTS

Impact Assessments

The BaltSeaPlan Reports № 1–7 provide an overview of all policies and strategies currently in force in the respective countries and regions that influence the use of its sea space (e.g. energy, fishery, transport, tourism as well as nature conservation). Assessments are provided on how strong the impact of each strategy and/or policy is, whether it is of a direct or more indirect nature and whether the policies/strategies are compatible with each other. The reports show also those fields, where some strategy / policy would be needed, but are actually missing. As a result recommendations are developed on how to strengthen MSP related aspects within national maritime policies. The reports are meant to stimulate a cross-sectoral debate on goals & targets for dealing with space and filling gaps in national sectoral policies & strategies.

BaltSeaPlan Report № 1:

National and regional strategies with relevance for Estonian maritime space

BaltSeaPlan Report № 2:

National and regional strategies with relevance for German maritime space

BaltSeaPlan Report № 3:

National and regional strategies with relevance for Latvian maritime space

BaltSeaPlan Report № 4:

National and regional strategies with relevance for Lithuanian maritime space

BaltSeaPlan Report №5:

National and regional strategies with relevance for Polish maritime space

BaltSeaPlan Report № 6:

National and regional strategies with relevance for Russian maritime space

BaltSeaPlan Report № 7:

National and regional strategies with relevance for Swedishmaritime space

BaltSeaPlan Report № 8 "Implications of the international and national policy context for Baltic Sea space and MSP"

provides an overview of policies, trends and strategies that will influence the use of Baltic sea space in the years to come. How much space is likely to be taken up by offshore wind parks in the future, and what is the forecast for shipping and transport? How much space will need to be set aside for nature conservation? Are these objectives all in line with each other or do active choices need to be made? The report also indicates those policy fields where no such clear objectives have been set yet. Its analysis lays the foundation for the BaltSeaPlan Vision 2030.



Examples of policies with a maritime dimension (© Jacek Zaucha, The Maritime Institute in Gdansk)

PILOT MSP REPORTS #02 AUTUMN 2011

Pilot MSP Reports

Pilot MSP for the Pomeranian Bight and Arkona Basin

The area of the Pomeranian Bight and Arkona Basin is situated between Denmark, Germany, Poland and southern Sweden west of the island of Bornholm. The area is subject to many uses and interests, such as shipping (with many ferry connections passing this area), offshore wind energy developments, sand & gravel extraction, pipelines & submarine cables, while at the same time being significant for nature conservation, fishery and tourism. BaltSeaPlan Report № 9 "Developing a Pilot Maritime Spatial Plan for the Pomeranian Bight and Arkona Basin" not only lays out the draft transboundary spatial plan developed jointly by an international working group, but also shows the challenges and possible solutions of a process involving five planning areas subject to different interests and planning cultures as well as varying availability of background information.

Pilot MSP for the Middle Bank

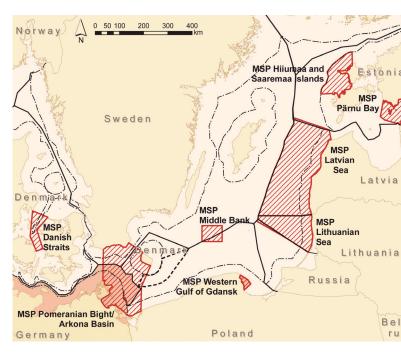
The Middle Bank is the largest shallow water area at the Baltic Sea. It is situated far from the coast at the Swedish / Polish EEZ border and has therefore only a very limited number of active stakeholders. The BaltSeaPlan Report № 10 "Developing a Pilot Maritime Spatial Plan for the Middle Bank" demonstrates, how a MSP can be prepared for such an area, where there are − in comparison to coastal zones − only a very few active stakeholders and much less information available, while at the same time dealing with two different countries. Being more of strategic nature, with the purpose of preventing possible future conflicts rather than mitigating current ones, the resulting MSP looks quite different from former samples and might potentially lay the basis for similar type of MSPs in other offshore areas.

Pilot SEA for the Western Gulf of Gdansk

As a pilot project on MSP in Poland a "Draft Spatial Plan for the Western Part of the Gulf of Gdansk" had been elaborated between 2007–2009 under the framework of the EU funded "PlanCoast" project. The main aim of the Strategical Environmental Impact Assessment was to identify and judge significant effects of the implementation of the provisions proposed under this draft MSP on the environment and objectives / subjects being under protection of Natura 2000 within this planning area. The BaltSeaPlan Report № 11 "Developing a Pilot Strategical Environmental Assessment for the Western Gulf of Gdansk" provides an English language summary of the steps applied for the SEA as well as the main findings and recommendations provided within the SEA.

Preparing for MSP at the Danish Straits

The area around the Hatter Barn is known as a notorious risk area for grounding and collision of ships passing the Danish straits to and from the Baltic. This risk might even increase in the coming future with more and larger ships passing by – resulting also in a potential discussion on deeping the (safer) diagonal route. At the same time the pilot area hosts a high



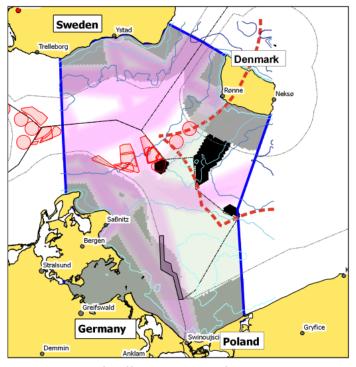
number of different habitats, large areas designated as Natura 2000 areas and is a key area for marine mammals. The BaltSeaPlan Report № 12 "Preparing for MSP at the Danish Straits" summarises the results of studies undertaken related to effects of shipping noise on Harbour Porpoise (BaltSeaPlan Report N° XX) and new methods for seabed & habitat mapping (BaltSeaPlan Report N° XX) and brings them into context with Maritime Spatial Planning, i.e. how this information would/ should be used for decisions to be taken in allocating areas for specific purposes.

Towards a Pilot MSP for the Pärnu Bay

The Pärnu Bay pilot area – located in the northern part of the Gulf of Riga – is characterised by intensive human uses as well as problematic environmental conditions. In addition to traditional uses such as shipping, fishing and recreation activities, there are also plans for offshore wind parks as well as an expansion of Pärnu Port. The main environmental issue is eutrophication, which manifests itself in increased biological production and worsened light conditions for the seabed while at the same time positively affecting fish populations. The BaltSeaPlan Report № 13 "Towards a Pilot MSP for Pärnu Bay" shows the stocktake of the area including methods for how to generate information in case of missing data sources. It also describes the stakeholder involvement and conflict analysis undertaken. In view of missing legislation for MSP in Estonia at the current stage it does not go the full cycle by actually proposing an MSP for the area.

Towards a Pilot MSP for the Saaremaa and Hijumaa Islands

The Hiiumaa-Saaremaa pilot area – located in the open part of the Baltic Sea – has the most "sea-like conditions" of the Estonian coastal waters, with higher salinity & waves, lower nutrient concentration and less human activities than other areas. Also nature protection is only in place in coastal areas. Due to favourable wind conditions and shallow water the area is



Example scenario for offshore wind power from the Marxan model.

showing good prerequisites for development of offshore wind farms and development of sailing & surfing sports. The BaltSeaPlan Report № 14 "Towards a Pilot MSP for Saaremaa & Hiiumaa Islands" shows the stocktake of the area including methods for how to generate information in case of missing data sources. It also describes the stakeholder involvement and conflict analysis undertaken. In view of missing legislation for MSP in Estonia at the current stage it does not go the full cycle by actually proposing an MSP for the area.

Towards a Pilot MSP for the Lithuanian Sea

The demand for maritime space has increased substantially in Lithuania during the past several years – be it plans for offshore wind parks, port developments, underwater electricity cables or expansion of Natura 2000 sites. At the same time MSP is not yet formally introduced in Lithuania. The BaltSea-Plan Report № 15 "Towards a Pilot MSP for the Lithuanian Sea" shows the compilation of current sea uses, identifies potential conflicts & synergies as well as MSP related strategic targets and describes the efforts undertaken towards raising the general public awareness – all activities meant to smoothen the upcoming planning procedures expected to start by 2012.

A Pilot MSP for the Western Coast of Latvia

Latvia is having a 500 km long coastline and a significant share of the Baltic Sea with numerous traditional as well as newly upcoming activities competing for its space. The importance of MSP has been underlined in numerous strategies as well as laws, but is not yet readily implemented. The BaltSeaPlan Report № 16 "Developing a Pilot MSP for the Western Coast of Latvia" describes experience of the Baltic Environmental Forum in testing how maritime spatial planning could be carried out in Latvia and thus developing basis for the process and potential structure of a national maritime spatial plan in fu-

ture. The pilot plan was developed with substantial stakeholder involvement and inputs from all relevant actors. It does not only set a sample for the national maritime spatial planning process to be launched in 2014 in Latvia, but should also be seen as a good practice for a MSP process to be launched elsewhere.

MSPs and SEA

Pilot MSP for the Western Coast of Latvia

BaltSeaPlan Report № 17 "Pilot Maritime Spatial Plan for the Western Coast of Latvia" includes the full text of the planning document in Latvian language, which has served as discussion material in communication with the stakeholders of the project pilot area. The report provides information on the methodology used for planning of the sea uses in the pilot area, overview on existing strategies having impact on sea use, the legal background, and description of the pilot area as well as extensive analysis of the key economy sectors important for this area. Further on the conflict analysis of the different sea uses and the proposal of the spatial plan are provided.

SEA for the Western Gulf of Gdansk

As a pilot project on MSP in Poland a "Draft Spatial Plan for the Western Part of the Gulf of Gdansk" had been elaborated between 2007–2009 under the framework of the EU funded "PlanCoast" project. The main aim of the Strategical Environmental Impact Assessment was to identify and judge significant effects of the implementation of the provisions proposed under this draft MSP on the environment and objectives / subjects being under protection of Natura 2000 within this planning area. The BaltSeaPlan Report № 18 "Strategic Environmental Assessment for the Western Gulf of Gdansk" is the full Polish version showing all analytical steps as well as the detailed findings and recommendations provided.

Technical Reports

Modelling for MSP

The BaltSeaPlan Report № 19 "Modelling for Maritime Spatial Planning – Tools, concepts, applications" describes the potential role of models and modelled data within the MSP / SEA process. Furthermore, it provides several case studies of model applications in MSP. The report concludes with an overview of existing modelling concepts and tools from previous and ongoing projects and initiatives around the Baltic Sea, which could be of use for Maritime Spatial Planning (MSP).

Data exchange structure for MSP

Good knowledge of the sea and the trends & pressures it faces is essential for MSP to be delivered successfully. For this data needs to be translated into spatially relevant information and cooperation has to be ensured among data networks so that information is easily accessible when needed. The BaltSeaPlan Report № 20 "Integrated Pan-Baltic Data Infrastructure for MSP − Framework Analysis and Recommendations for an MSP Data Model, Data Exchange and Good Governance"

TECHNICAL REPORTS #02 AUTUMN 2012

identifies content related and technical conditions as well as problems & gaps associated to data and information sources at the current stage. Further it describes the conceptual data model for MSP developed within the framework of BaltSeaPlan and provides recommendations on the steps which need to be gone, in order to reach the information basis necessary to undertake MSP at satisfactory level within the BSR.

Effects of underwater noise on harbour porpoises around major shipping lanes

The Baltic Sea is a special environment that requires extra care. When developing an MSP, planners need to respect the natural conditions and needs set by the environment as well as goals set by political decision making bodies for the wellbeing of society. The BaltSeaPlan Report № 21 "Effects of underwater noise on harbour porpoises around major shipping lanes" explores the relationship between shipping and harbour porpoises (phocoena) by assessing the effect of noise from ship traffic on them in the Great Belt area, Denmark. The report analyses the acoustic activity levels of porpoises, describes the noise patterns around shipping lanes and links these to estimate the effect of ship noise on the distribution of porpoise.

Remote sensing methods for detecting small fishing vessels and fishing gear

Fishery is among some of the most important uses of maritime space and is thus obviously of high relevance for MSP. Currently, however, it is difficult to include fishery in MSPs in view of lacking spatial data & information on where fishery is taking place and what methods are used. Whereas several methods and reporting systems are in place in the fisheries management to track larger vessels, the use of satellite data for fishery activities of small vessels is still under development. The BaltSeaPlan Report № 22 "Remote sensing methods for detecting small fishing vessels and fishing gear" shows the results of a feasibility study undertaken in the pilot area "Pomeranian Bight and Arkona Sea".

Legal and planning options for integrating Fisheries into **Maritime Spatial Planning**

Although fisheries is almost omnipresent on the sea and is influencing the marine ecosystem like almost no other human activity it is often neglected in MSP largely due to the belief that there is little that could be regulated on national or regional basis in view of the Common Fishery Policy. The BaltSeaPlan Report № 23 "Legal and Planning Options for integrating fisheries into MSP at the Baltic Sea" investigates the possibilities on opportunities & suitability of using spatial planning to prepare regulations in fisheries management; analyses the current legal situation and provides samples for proposed regulations to be included in MSPs on the basis of the pilot case area "Pomeranian Bight".

Stakeholder Involvement in MSP

The BaltSeaPlan Report № 24 "Stakeholder Involvement in Maritime Spatial Planning" aims to help to bridge the gap between stakeholder management theory and practice by showing and discussing the methods / tools and experience gained by BaltSeaPlan partners then dealing with stakeholders in MSP.

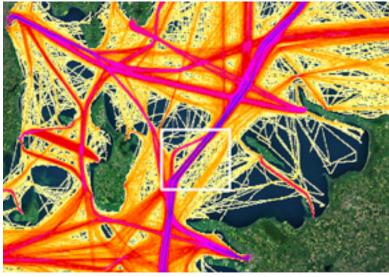
On this basis the report provides recommendations, guidance and inspiration for stakeholder management of future MSP processes, while at the same time showing that there is not something like a "one size fits all" approach or solution.

Strategic Environmental Assessment in MSP

A Strategic Environmental Assessment needs to be carried out in accordance to the EU SEA Directive for any kind of Maritime Spatial Plan. The main aim of such a SEA is to identify and assess the potentially signifianct impacts of the provisions suggested within the MSP on the environment and Natura 2000 areas. In view of lacking experience in the actual drafting of MSPs, there is even less practical experience on how to prepare such a SEA. The BaltSeaPlan Report № 25 "SEA in MSP: Recommendations from the German and Polish experience" shows how the SEA has been carried out in two very different MSP areas (namely the German EEZ of the Baltic Sea and the Gulf of Gdansk). It highlights current challenges, extracts general lessons to be learned on SEA for MSP as well as showing differences in how to approach SEA.

Fisheries in the Maritime Spatial Planning context

Fishing is one of the economically and environmentally most significant uses of the sea, but is often neglected in MSP. This is due to a variety of reasons. Many believe that it cannot be regulated on national or regional basis in view of the Common Fishery Policy. Also there is a lack of data and information and a general lack of samples on possible instruments on how fishery could be included in MSP. Further it is a "hot topic" in many stakeholder processes. The BaltSeaPlan Report № 26 "Fisheries in the MSP context" provides an overview of results and solutions found within the BaltSeaPlan project on these various aspects and should therefore offer guidance, inspiration and recommendations for Maritime Spatial Planners on how to better deal with the important topic of fishery in MSP.



Ship traffic registered by AIS in the Belt Sea area during two summer months.

Seabed and habitat mapping in the Hatter Barn area

The area around the Hatter Barn is known as a notorious risk area for grounding and collision of ships passing the Danish straits to and from the Baltic. One of the suggestions for more safe shipping was a deepening of the present shallow water route southeast of this reef area. The BaltSeaPlan Report № 27 "Seabed and habitat mapping in the Hatter Barn area" aims to provide an assessment of such a deepening on the valuable hard bottom habitats based on a results achieved with the new mapping methods applied. The study also investigates effects of ship traffic on the benthic seaweed forest.

A GIS Map application for MSP

Every MSP process starts with an analysis of the current situation in the area, i.e. where does which use take place and which use is planned in which area. Based on this stocktake a conflict analysis is undertaken and one or several scenarios are developed for the plan, which are discussed with stakeholders. The BaltSeaPlan Web application for MSP developed in the framework of the BaltSeaPlan project and based on Boundary-GIS Geoportal is a supporting tool which should facilitate such stakeholder involvement. The application allows any kind of stakeholder to view the current planning status of the area and to comment upon them. The user can do so without any specific computer knowledge and/or computer program. The BaltSeaPlan Report № 28 "A GIS Map application for MSP" explains the main features of the application, how it can be applied for MSP and who to contact in order to get access to the tool as such. The tool itself can be viewed on www.baltseaplan.eu, showing all BaltSeaPlan pilot MSPs.

Systematic site selection for offshore wind power

The development of offshore wind energy is a driving force for looking at sea uses in a more integrated way and to develop Maritime Spatial Planning. The modelling tool MARXAN is a tool known to be used for selection of sites for nature protection. The BaltSeaPlan Report № 29 "Case Study: Systematic site selection for offshore windpower" shows how this tool was adapted during BaltSeaPlan to identify suitable sites for offshore wind energy production taking into account the targets of the wind sector and the limitations to it set by nature conservation demands, tourism or shipping. The model was used in the pilot area Pomeranian Bight /Arcona Sea to identify locations for offshore wind energy.



Site selection of fisheries areas for MSP

Although specific data exist for selected fisheries management issues, maps about the most valuable areas for fish spawning, recruitment and catches which also take the limitations by operation range or by competing uses and functions of the sea into account do practically not exist. The BaltSeaPlan Report № 29 "Case Study: Site selection of fisheries areas for MSP" shows the attempt undertaken within BaltSeaPlan to use the tool "Marxan with Zones" to produce such maps. It is a first trial to localize those areas with the help of a MSP related decision making tool. The results of the report can – due to very scarce spatial data – be only preliminary. However they demonstrate a new way how to get to this very valuable information for appropriate MSP.

IMPRINT

Lead Partner

Dr. Nico Nolte

Bundesamt für Seeschifffahrt und Hydrographie (BSH) Bernhard-Nocht-Str. 78, 20359 Hamburg, Germany

Tel: +49 (40) 3190-3520 Fax: +49 (40) 3190-5000

nico.nolte@bsh.de www.bsh.de

External Project Coordination Office

Angela Schultz-Zehden

s.Pro - sustainable projects GmbH Rheinstraße 34, 12161 Berlin, Germany

Tel. +49 (30) 832 14 17-40 Fax. +49 (30) 832 14 17-50

asz@sustainable-projects.eu www.sustainable-projects.eu

www.baltseaplan.eu

This bulletin has been produced with the assistance of the European Union. Its content is the sole responsibility of the authors and can in no way be taken to reflect the views of the European Union.





Project part-financed by the European Union (European Regional Development Fund)