



# A MARITIME SPATIAL PLANNING EXPERT FOR ONE DAY

*A Research on How to Improve Organisational Integration in Transnational  
Maritime Spatial Planning: a Southwest Baltic Sea Assessment*

by

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## Preface

I hereby present to you the master thesis that marks an end to my Master Environmental and Infrastructure Planning. Not only does it represent a closure to my Master Environmental and Infrastructure Planning, it also embodies the end of my study period at the University of Groningen.

Eight years ago I went on a journey, starting with the Bachelor Roman Languages and Culture, studying the Spanish language. However, focusing on one specific direction in study felt restricted. I needed a broader perspective that matched my interests in the world around me. Eventually, the Bachelor Human Geography and Planning turned out to be exactly what I was missing. This Bachelor has let and still lets me see the world through so many different perspectives; it became apparent that our environment has so much possibilities to offer, yet still has so many challenges to overcome. One of the many things I learned is that in today's spatial planning, plans do not work on a step-by-step instruction approach. Plans are pre-folded, aiming for an integrated planning approach, after which these folds are brought towards each other in the right way. Just like the origami figures on the front page. In order to pursue my interest in the environment and water- and sea management in particular, the choice for the Master Environmental and Infrastructure Planning was a no-brainer. Although the master addresses a variety of planning tools and institutional design perspectives in environmental, water and infrastructure challenges, a personal miss of sea management made me decide to write my thesis about maritime spatial planning.

Although I was having a hard time to get my head around the topic and the direction I would take, it all fell together eventually. Yet, this thesis cannot express the long days of doing research and writing (12 hours a day was no exception), the hours of beast-mode music I have played and the (not so sustainable) 30 cm of research papers piled up. Nevertheless, writing this research and the study in general was highly educational and after all I would not have missed it. This research has confirmed the direction I would like to take in my future career, which is pursuing and proceeding my interest in water management. In short, this research is the end result of an eight year study process and I can honestly say that I am proud of what I have accomplished.

All the above would not have been possible without the support I received of family, friends and teachers. However, I would like to thank a few people in particular. First of all, I would like to take this opportunity to thank my thesis supervisor dr. Ferry van Kann. Hereby, thank you for your patience, guidance and critical feedback. Without your effort I would not have presented a thesis as it is currently formulated. Above all, I would like to thank both of my parents. Mom, dad, I would like to thank you from the bottom of my heart for your understanding, support and (in particular) patience in the past eight years of study. Finally, Guus, you deserve a special inclusion in the minutes. I know I have been living a hermit's life the past few weeks in order to finish the thesis, but without your ongoing support, reflection and flexibility, writing this thesis would have been so much harder.

Finally, I hope you will enjoy reading this research, after which you might feel like you have become *a Maritime Spatial Planning Expert for One Day!* So, let's dive into it,

Lisa Katuin

Groningen, July 2018



## Executive summary

Our sea's and oceans experience an increasing amount of human activities, hence discussions and conflicts with regard to the use and space in these waters is inevitable. Maritime spatial planning aims at reducing these spatial conflicts while maintaining the sustainable use of the marine environment. Subsequently, maritime spatial planning comes across both cross-border and cross-sectoral issues in sea use management. Currently maritime spatial planning practices are often executed on national, regional and/or local level, lacking transnational joint decision-making or joint planning. Yet, cooperation on *transnational* level would benefit economic, ecologic and administrative branches across borders. However, multi-level governance and the overall institutional domain in transnational maritime spatial planning is the main challenge, due to institutional and conceptual fragmentation. Currently, a limited amount of research has been conducted on how to establish an effective coordinated transnational framework. Hence, this research's objective to provide a more concrete indication and contribution to further research on how this transnational maritime spatial planning framework can be improved, by focusing on the organisational integration. In order to obtain the aim of the research, the following main question is formulated: *How can organisational integration be improved to work towards effective transnational cooperation in European maritime spatial planning?* Based on scientific research, three secondary research questions have been established. These three questions come down to the analysis of the importance of *policy convergence*, *shared conceptualisation* and *transboundary organisations* in transnational organisational integration in maritime spatial planning. Here, planning theories regarding Healey's collaborative planning, stakeholder involvement, territorial governance and the ladder of transnational partnership of Kidd & McGowan will be introduced. The research methods in order to answer the main question and secondary questions entail a qualitative external and case-based secondary data analysis, strengthened by a single, in-depth, instrumental case study of the Southwest Baltic Sea basin. Based on the collection and analysis of this case-based secondary data analysis, a Likert type scale is used as a research method to identify and categorize the most important indicators for organisational integration. These indicators are identified in the theoretical framework of *policy convergence*, *shared conceptualisation* and *transboundary organisations*. Thus, these three research methods will lay the foundation for the identification of the challenges and opportunities in the current organisational integration of maritime spatial planning.

After conducting research, the findings show a case-based planning approach of six transboundary focus-areas in the Southwest Baltic Sea. These focus-areas and additional findings illustrate an important role of stakeholder involvement, strong consideration of the context and appropriate planning approaches. Still, lack of coherence in data, political involvement, time and resources counteract on effective organisational integration among national authorities. Regarding the three secondary questions, indicators *transnational communication*, *similarity in planning concepts*, *establishing mutual objectives* and the need for *cross-border agreements, information, protocols and programmes* are the main enablers for effective organisational integration. To conclude, policy convergence is determined to be *not* important, shared conceptualisation is *highly* important and transboundary organisations are *moderately* important for improving transnational organisational integration in. In addition, organisational integration can be for the greatest part improved by strong stakeholder engagement and deciding on a contextual case-based planning approach. Finally, the most important recommendations concern the intensification of political involvement and – support, to improve and accelerate decision-making in transboundary maritime spatial planning. Also, establishing a more permanent platform in order to increase transboundary collaboration, coherence and availability of data and collective data sources is highly recommended.

## Table of Content

List of Abbreviations .....	10
List of Figures .....	11
List of Tables .....	11
<b>1. Introducing Maritime Spatial Planning .....</b>	<b>16</b>
1.1 The incentive for maritime spatial planning .....	16
1.2 The need for – and added value of maritime spatial planning .....	16
1.3 Problem definition and research objective .....	17
1.4 Outline of the thesis .....	20
<b>2. Connecting European Maritime Spatial Planning to Theoretical Notions .....</b>	<b>22</b>
2.1 The concept of maritime spatial planning .....	22
2.1.1 <i>Defining the term</i> .....	22
2.1.2 <i>Marine or maritime?</i> .....	22
2.1.3 <i>Defining levels of planning practice</i> .....	23
2.2 Maritime spatial planning fitting in planning concepts .....	23
2.2.1 <i>Terrestrial planning</i> .....	23
2.2.2 <i>Ecosystem based approach</i> .....	25
2.2.3 <i>Integrated Coastal Zone Management</i> .....	26
2.3 Institutional challenges in European maritime spatial planning .....	27
2.3.1 <i>Governance framework of European maritime spatial planning</i> .....	27
2.3.2 <i>Organisational integration in maritime spatial planning</i> .....	30
2.4 The search for effective transnational maritime spatial planning .....	33
2.4.1 <i>Policy convergence</i> .....	33
2.4.2 <i>Shared conceptualisation</i> .....	35
2.4.3 <i>Transboundary organisations</i> .....	36
2.5 Conceptual model .....	38
<b>3. Methodology .....</b>	<b>40</b>
3.1 Justification of the research methods .....	40
3.2 Strengths and limitations of the research methods .....	45
3.3 Research ethics .....	47
3.4 Data collection .....	48
<b>4. Research Findings .....</b>	<b>52</b>
4.2 Southwest Baltic Sea case study: Methods and approaches .....	54
4.3 Stakeholder collaboration and participation .....	56
4.4 The inevitable role of context and culture in the Southwest Baltic Sea .....	58

4.5	Assessment of Southwest Baltic transboundary focus-areas .....	60
4.5.1	<i>The Pomeranian Bay</i> .....	60
4.5.2	<i>Kriegers Flak</i> .....	63
4.5.3	<i>Southern Middle Bank</i> .....	66
4.5.4	<i>Adlergrund</i> .....	68
4.5.5	<i>Öresund</i> .....	70
4.5.6	<i>Grey Zone</i> .....	72
4.6	Additional observations .....	75
<b>5.</b>	<b>Conclusion</b> .....	<b>80</b>
<b>6.</b>	<b>Research Points of Discussion</b> .....	<b>84</b>
<b>7.</b>	<b>Recommendations for Future Research</b> .....	<b>88</b>
	<b>Epilogue</b> .....	<b>93</b>
	<b>Literature</b> .....	<b>96</b>
Appendix i.	Scheme of governance structures of Southwest Baltic Sea countries .....	104
Appendix ii.	Pomeranian Bay .....	105
Appendix ii.	Kriegers Flak .....	107
Appendix iv.	Southern Middle Bank .....	110

## List of Abbreviations

CFP: Common Fisheries Policy

DE: Germany

DK: Denmark

EBA: Ecosystem Based Approach

EEZ: Exclusive Economic Zone

EIA: Environmental Impact Assessment

EU: European Union

GES: Good Environmental Status

HELCOM: Helsinki Commission

ICZM: Integrated Coastal Zone Management

IMO: International Maritime Organization

IMP: Integrated Maritime Policy

MPA: Marine Protected Area

MSFD: Maritime Strategy Framework Directive

MSP: Maritime Spatial Planning

PL: Poland

PSSA: Particular Sensitive Sea Area

SE: Sweden

SEA: Strategic Environmental Assessment

SWBS: Southwest Baltic Sea

UN: United Nations

VASAB: Visions and strategies for the Baltic Sea 2010

WFD: Water Framework Directive

## List of Figures

<b>Figure 1:</b> Research framework.....	19
<b>Figure 2:</b> Soft sustainability .....	25
<b>Figure 3:</b> Hard sustainability.....	25
<b>Figure 4:</b> Timeline of major European policy initiatives addressing marine spatial planning .....	27
<b>Figure 5:</b> The policy landscape for MSP in the EU. ....	28
<b>Figure 6:</b> Framework of the categories in maritime spatial planning.....	31
<b>Figure 7:</b> Conceptual model.....	38
<b>Figure 8:</b> Southwest Baltic Sea case study area .....	53
<b>Figure 9:</b> (Dis) agreement of stakeholders regarding the focus on sub-areas and working in bi- and trilateral meetings to establish solutions in the SWBS case study .....	55
<b>Figure 10:</b> Opinions of project partners regarding the question if being at different stages of national MSP processes did challenge collaboration .....	59
<b>Figure 11:</b> Transboundary focus-areas identified by the Southwest Baltic case study .....	60
<b>Figure 12:</b> Pomeranian Bay: overview of overlapping sectoral interest .....	61
<b>Figure 13:</b> Kriegers Flak: overlapping interest on the Danish side between offshore wind farms and the TT ferry line Trelleborg – Travemünde .....	64
<b>Figure 14:</b> Southern Middle Bank: overview of the overlapping sectoral interests .....	66
<b>Figure 15:</b> Adlergrund: German interests to build offshore wind farms attached to the Danish border .....	69
<b>Figure 16:</b> Öresund: illustration of complex situation, including current issues and future ideas for development.....	71
<b>Figure 17:</b> The Grey Zone: illustrating different border calculations by Germany and Poland.....	73
<b>Figure 18:</b> SWBS Stakeholder perceptions regarding their contribution to identify conflicts and synergies between sectors .....	76
<b>Figure 19:</b> SWBS Stakeholder perceptions regarding their contribution to identify solutions .....	76
<b>Figure 20:</b> Increasing synergies between specific sectors.....	77
<b>Figure 21:</b> Sectoral engagement perceived by SWBS stakeholders .....	78

## List of Tables

<b>Table 1:</b> Mechanisms of policy convergence.....	33
<b>Table 2:</b> A ladder of transnational partnership in order to support maritime spatial planning.....	37
<b>Table 3:</b> Indicators for policy convergence.....	44
<b>Table 4:</b> Indicators for shared conceptualisation .....	45
<b>Table 5:</b> Indicators for the influence of transboundary organisations .....	45
<b>Table 6:</b> Participating authorities in the Southwest Baltic Sea case study.....	56
<b>Table 7:</b> Accumulation and gradation of identified indicators in transboundary focus- areas in Southwest Baltic Sea case study.....	75



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# 1

## **Introducing Maritime Spatial Planning**

## 1. Introducing Maritime Spatial Planning

### 1.1 *The incentive for maritime spatial planning*

In 1987 the *Brundtland Report: Our common future* was published, in which *The World Commission on Environment and Development* discussed the changes our world is coming to face in the short and long-term future. The report discussed how the environment was able to adapt to these so called ‘environmental insecurities’ and subsequently a shift in the way of how environmental issues were approached became necessary (United Nations, 1987). However, at the time, in environmental management it was assumed that ecosystems or natural resources could be controlled and that human and natural systems could be handled separately (Folke et al., 2002). Fortunately, nowadays the growing population and utilization of natural resources in coastal zones are identified as the underlying causes for pollution, loss of biodiversity and destruction of habitats (European Commission, 2018<sup>a</sup>). This acknowledgement of the inextricable connection between human and nature requested a renewed way of thinking in planning practice with regard to the sustainable use of environmental resources. Hence, in the last century, the framework of negotiation and coalitions moved from a steering and controlled perspective towards the preservations, development and safeguarding of water resources (Wilson & Piper, 2010).

The recognition of the need for a more integrated and sustainable use of our water resources subsequently created also awareness for the necessity for sustainable development in our oceans and seas. Since our seas and oceans experience an increased amount of human activities, discussions and conflicts regarding the (unsustainable) use and space of these waters are inevitable. As a reaction on these increasing environmental issues, the need for a more integrated spatial planning framework – which was already been established on land – emerged (Gilliland & Laffoley, 2008; Backer, 2011; Jay et al., 2016). Consequently, the concept of *maritime spatial planning* (MSP) became the cornerstone of reducing spatial conflicts (Flannery et al., 2014; Kyvelou, 2017), while simultaneously focusing on the mean objective which is providing a sustainable marine environment (Gilliland & Laffoley, 2008; Kyvelou, 2017; Van Tatenhove, 2017).

### 1.2 *The need for – and added value of maritime spatial planning*

Coastal areas are one of the most productive zones on the globe, which brings us a wide range of (human) activities and services, subsequently leading to an increase of tourism and transportation connections. However, the intensive use of marine and coastal resources pairing with the concentration of population means an increased pressure on the marine environment (European Commission, 2018<sup>a</sup>). In Europe, this is no different, because 23 out of 28 European Union (EU) countries borders on a coastline and therefore are required to take sea planning into consideration. Next to that, almost 50% of Europe’s population have their domestic environment in EU’s maritime regions, which cannot be ignored in the knowledge of climate change and an increasing sea level. Finally, the European sea surface which is under EU jurisdiction is larger than the total amount of land surface and therefore the EU has at the same time the responsibility for world’s largest marine territory (European Commission, 2018<sup>b</sup>). Hence, the pressure on the crowded sea regions in the EU with a great economic potential, asks for the most optimal management (tool) because of its importance for the local, as well as national and global level. Since the population and businesses in coastal zones rely on the health of these environmental resources, an integrated management tool for the long-term regarding protecting and improving the use of marine resources is needed (Gilliland & Laffoley, 2008; European Commission, 2018<sup>c</sup>).

Maritime spatial planning (MSP) could be regarded as a more practical policy which aims at the execution of the ecosystem based approach (EBA) into the management and preservation of the marine resources. By pursuing plain, all-encompassing and concrete guidelines MSP attempts to implement EBA (Ehler, 2008; Qiu & Jones, 2013). McCann et al. (2014, p. 12) argue that MSP could therefore be seen as “*simply the next stage in the broader movement within coastal and ocean management away from the sector-based approach toward an integrated, place-based, comprehensive management approach*”.

### 1.3 Problem definition and research objective

MSP is in general associated with the improvement of the relation between human impact and the ecosystem. Consequently, in MSP literature the focus lies upon the benefits and need for a sustainable EBA in sea- and ocean use management. Naturally, it is important to recognize and be aware of the need for a well-constructed approach to improve and maintain the current (sustainable) way forwards. However, besides the sustainable approach and correlated benefits, MSP contains often transboundary environmental issues in sea use management (Ehler, 2008; Backer, 2011; Van Tatenhove, 2017). The integration of several sectors is an essential fundament of the overall concept in MSP practice to eventually reduce conflicts among stakeholders and achieve overall economic development and sustainable growth (Backer, 2011; Flannery et al., 2014; European Commission, 2018c). Yet, MSP does not only serve to solve cross-*sectoral* conflicts, but also to mitigate and avoid cross-*bordering* conflicts.

The execution and implementation of MSP can be established on several scales, from coastal zone waters to the marine authority of a country, together with its Exclusive Economic Zone (EEZ), and additionally to transnational regions (Backer, 2011). Nevertheless, the current MSP practice has generally been undertaken on national, regional and/or local level (Gilliland & Laffoley, 2008; Van Tatenhove, 2017) with little transnational joint decision-making, joint planning or often ad hoc (Flannery et al., 2014; Jay et al., 2016; Kyvelou, 2017). *Transnational* MSP is not yet a common planning practice, hence executing MSP on an unfamiliar scale could be challenging because of different priorities and perceptions (Gilliland & Laffoley, 2008; Flannery et al., 2014). The implementation of MSP on transnational level would however be beneficial for multiple reasons, whereas the following are regarded to be the main aspects:

First of all, the implementation of transnational MSP has economic benefits. Planning on transnational level requires long-term planning decisions, hence providing more certainty for potential investments. Furthermore, because of an improved insight in the requirements and perceptions of multiple different stakeholders, the identification of complementary or conflicting areas for development becomes easier. By aligning stakeholders and their individual sectoral objectives in the marine environment, potential resource conflicts could be recognized, addressed and reduced in an early planning phase before investments of large capital have been done (Ehler, 2008). Next to that, the transnational approach could be beneficial for reducing the transaction costs because of shared knowledge and relations (Flannery et al., 2014).

Secondly, obviously transnational cooperation has ecologic benefits. The fluid marine environment of the ocean and sea's overlaps administrative borders: most of the marine resources and – activities do not only occur on national, regional or local level (Ehler, 2008). They are part of a bigger picture, such as the transnational level (e.g. Black Sea, Baltic Sea, Wadden Sea) (Jones et al., 2016). Whenever using a territory based approach for environmental resource management, there is a focus on individual parcels of growth and safeguarding instead of

the marine ecosystem as a whole (Ehler, 2008). Transnational cooperation focuses on the overlapping areas between national plans, hence developing an integrated plan instead of free-standing regional/national planning in overlapping areas (Cameron et al., 2011; Jay et al., 2016). An integrated plan gives the opportunity to create space for biodiversity and nature preservation, where human activities do not overpower the marine environment (Ehler, 2008). Both aspects also experience administrative benefits, since transnational cooperation would most likely increase the transparency, speed and quality of decision-making. Moreover, one of the administrative benefits is the potential enhancement of the accessibility and quality of knowledge and information among national authorities and wider stakeholders in the present and future (Ehler, 2008; Backer, 2011).

In short, transnational MSP facilitates collaboration between neighbouring states and jurisdictions to come to an agreement on sustainable use of the ecological resources and overlapping activities. So, transnational MSP asks for the development of a mutual perspective from regional actors in the assessment, implementation, evaluation and monitoring of spatial planning in shared sea areas (Soininen & Hassan, 2015).

Since the evolution and execution of transnational MSP has to occur inside the institutional background of regional seas, these plans are dependent of various organisational systems which coexist in a particular area. Unfortunately, within this transboundary institutional domain lays the challenge since European MSP still faces institutional and conceptual fragmentation (Van Tatenhove, 2017). While there has been a fair amount of research on the process and benefits of transboundary MSP (Ehler, 2008; Gilliland & Laffoley, 2008; Kidd, 2012), a limited amount of research on how to actually establish an effective coordinated transnational framework has been conducted (Flannery et al., 2014; Van Tatenhove, 2017). Maritime spatial planning can be regarded as a framework that offers the opportunity to tackle the problem on the subject of current fragmented structures of governance and enables the development of more unified marine governance regimes (Kidd, 2012). Flannery et al. (2014, p.87) already argued that “there is no ideal governance framework for transboundary planning initiatives”, because the issues are part of an irreplaceable context. Nevertheless, this research hopes to provide insight in the role of organisational integration and the institutional and political components which might influence effective transnational MSP.

Organisational integration comprehends three main components: *strategic integration* comprehends the alignment of the content of programmes, policies and plans; *operational integration* concerns the connection between day to day transfer mechanisms; and *stakeholder integration* encompasses the involvement of a wide array of stakeholders’ interests in the process of decision-making, execution, monitoring and evaluation (Kidd, 2012). These three components are related to the institutional design of planning processes and are often associated with the implementation and execution of planning instruments and mechanisms. They illustrate the necessity to incorporate planning responsibilities with the authority and the management capacities (Kidd, 2012). So, to come to an understanding on how this research could improve organisational integration in order to enhance the transnational MSP framework, the main research question of this thesis is stated as the following:

*How can organisational integration be improved to work towards effective transnational cooperation in European maritime spatial planning?*

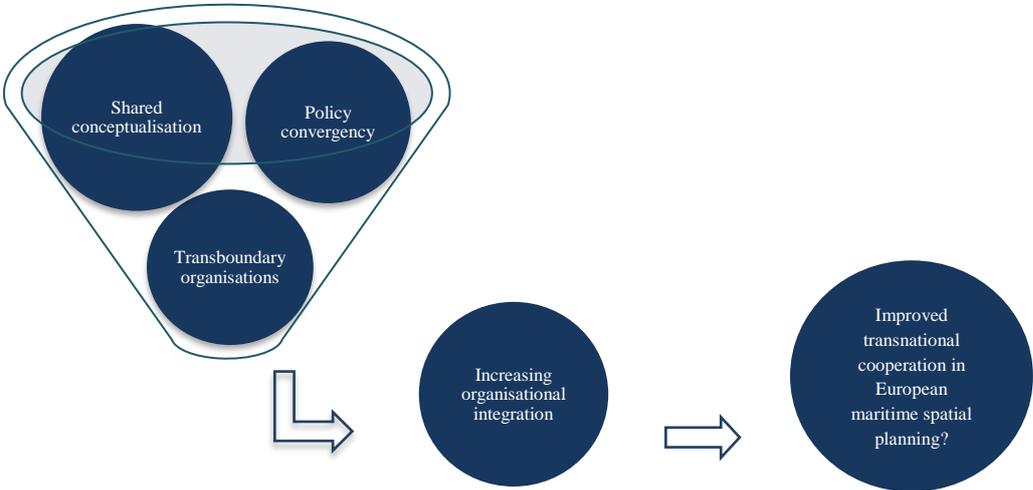
In order to understand the role of organisational integration and how to improve transnational maritime spatial planning, is it essential to provide insight in the key aspects of organisational integration. Therefore, a deeper

analysis of the key components which might have an impact on organisational integration is required. The role of these key components will be explored, where after an insight on how organisational integration might improve transnational MSP could be provided. These research components are allocated within the secondary questions. After conducting literature research (i.e. Kidd, 2012; Qiu & Jones, 2013; Flannery et al., 2014; Jones et al., 2016), three secondary questions have been established:

- *How important is policy convergence among (neighbouring) countries for transnational organisational integration in maritime spatial planning?*
- *How important is shared conceptualisation of maritime spatial planning issues among (neighbouring) countries for transnational organisational integration in maritime spatial planning?*
- *How important are transboundary organisations for transnational organisational integration in maritime spatial planning?*

These three secondary question might gain information on how transnational MSP can be established by the means of organisational integration. The hypothesis in this research is that all three key research components (i.e. policy convergence, shared conceptualisation and transboundary organisations) are necessary for effective transnational cooperation. Whenever one of the three is to be left out or not fully implemented to its capacity, the degree of effective transboundary cooperation will be affected.

Thus, this research will look at the institutional and political components that might contribute to the establishment of transnational cooperation and overall cross-border MSP processes. The research framework (figure 1) visualizes the relation between the main research question, the secondary research questions and the research objective.



**Figure 1: Research framework**  
 Source: Author (2018)

The framework presumes that the three secondary questions, which are regarded to be part of and related to organisational integration, are of influence on transnational cooperation. Whenever these key components work towards their mutual objective (↔), the objective (improved transnational cooperation) is assumed to be successfully established. By the means of answering the secondary questions, this research aims at exploring the challenges and opportunities in the organisational dimension by identifying and evaluating the factors for effective transnational cooperation in European maritime spatial planning.

#### *1.4 Outline of the thesis*

Taken into account the magnitude of this research, an outline on the content can be regarded necessary. The first chapter has already introduced maritime spatial planning and the need for transnational organisational integration. Furthermore the main question and secondary research questions have been established, illustrated by a research framework. Chapter 2 entails the theoretical framework of the research. In this chapter elaborates on planning theories and current institutional challenges in European maritime spatial planning. After the theoretical framework, chapter 3 describes the research methods taken in this research. The justification, strengths and limitations of the research methods, including the research ethics will be accounted for. After the theoretical foundation and methodology are discussed, chapter 4 provides an examination on the findings of the Southwest Baltic Sea case study. Subjects such as stakeholder involvement, the role of context and the study of six transboundary focus-areas will be addressed. Finally, chapter 5 concludes on the findings of the Southwest Baltic Sea, of transnational maritime spatial planning in general and how they relate to the provided planning theories in this research. The second-last chapter, chapter 6, highlight the side-notes that should be taken into consideration with regard to the research, both examined from a researchers – as well as the research content perspective. Finally, the content of this research ends in chapter 7 with recommendations on the improvement of organisational integration in transnational maritime spatial planning.

# 2

## **Connecting European Maritime Spatial Planning to Theoretical Notions**

## 2. Connecting European Maritime Spatial Planning to Theoretical Notions

In the upcoming section the concept of transnational maritime spatial planning will be the subject of a more in-depth analysis. Since MSP contains several components, it would be fundamental to the research to break down these components to come to an understanding of the concept and what it comprehends. Aspects as delimitations of content and descriptions of key approaches which are fundamental for MSP will be brought up. Next to analysing the MSP concept, European institutional design will be accounted for to come to an understanding of the current situation of the MSP mechanism. Finally, the key research components for transnational cooperation will be analysed, concluded by a conceptual model which will illustrate the causal relationship of the research question and the theoretical research components.

### 2.1 *The concept of maritime spatial planning*

#### 2.1.1 *Defining the term*

As already mentioned in the introduction (p.17) MSP is often described from the perspective of an ecosystem based contribution to sustainable development. For example, Douvere (2008) frames MSP as a more practical policy to apply the ecosystem based approach to be able to conserve and manage marine resources. Furthermore, Ehler states that MSP “can be used to identify biologically and ecologically sensitive areas of marine places in time and space (...) and to evaluate the cumulative effects of human activities on marine ecosystems” (2008, p.841). However, the European Commission (2018c) describes MSP as a more overarching objective, such as that “maritime spatial planning works across borders and sectors to ensure human activities at sea take place in an efficient, safe and sustainable way”. These ‘efficient, safe and sustainable’ ways contain of course the inclusion of connecting the various sectors like energy, fisheries, aquaculture, environment and industry. Schaefer & Barale emphasizes the European Commission’s definition by describing the objective of MSP as to “balance sectoral interests, achieve sustainable use of marine resources and optimize the use of marine space” (2011, p. 238). In short, MSP can be seen as a key element in ecosystem based sea use management, but contains various point of views depending on affiliation between the topic the scholar or organisation.

This research will make use of a definition of MSP without a specific perspective, hence pursuing an overall accepted and broad perception. Therefore, in this research, maritime spatial planning will be described according UNESCO’s definition: “Maritime spatial planning is a public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that have been specified through a political process” (UNESCO, 2018a).

#### 2.1.2 *Marine or maritime?*

In literature both *marine* spatial planning (e.g. Ehler, 2008; Kidd, 2012; Flannery; 2014) and *maritime* spatial planning are used (e.g. Backer, 2011; Schaefer & Barale, 2011; Kyvelou, 2017). Subsequently, this might result in possible confusion concerning the used term. Kyvelou (2017) clarifies that initially in both technical and academic documents, the term *marine* spatial planning was internationally used. Yet, the EU started to use *maritime* spatial planning in official documents. This term contains a deliberated choice and emphasizes the cross-

sector approach of the maritime spatial planning in the EU. *Maritime* is regarded to be a broader term since it points to all human activities which can be related to all sea areas, inclusive the protection of the marine environment (Schaefer & Barale, 2011; Kyvelou, 2017). Finally, the European Commission itself comes to the following distinction: *Marine* research focuses on the physical geography aspects such as the interaction between the ocean/seas and their flora and fauna and at the same time it addresses their interaction of the atmosphere and coastal areas. Currently, the focus of marine research lays upon the preservation of marine ecosystems. *Maritime* research however, seeks to improve the exploitation of ocean and sea resources by using innovative solutions and technology. It includes aspects as the design, building and operation of oil platforms, harbours and in general, the activities of humankind on and around ocean and sea resources (European Commission, 2018a). Keeping these descriptions in consideration, this research will use *maritime* spatial planning when it concerns human activity and policy and *marine* spatial planning in case of references to the physical condition of the marine ecosystem.

### 2.1.3 Defining levels of planning practice

Although in literature and among organisations *transnational* and *transboundary* or *cross-border* are often used as synonyms (e.g. Flannery et al., 2014; Van Tatenhove, 2017; European Commission, 2018c) this research intends to make a clear distinction between the various levels of MSP processes:

- *Cross-sectoral MSP*: Strategic and integrated planning in specific (national) marine areas including all activities such as fisheries, energy, industry, infrastructure and environment (Ehler, 2008; Kyvelou, 2017).
- *Transboundary / cross-border MSP*: After conducting literature research (Backer, 2011; Flannery et al., 2014; Van Tatenhove, 2017) this encompasses planning processes and decision-making across borders without specification on which levels this should be executed on. Therefore it could refer to spatial planning on macro, meso as well as micro level between various sovereign states or regions.
- *National MSP*: Planning processes that cover national territory in sea – and ocean space. Often includes both territorial waters and the EEZ (Cameron et al., 2011).
- *Transnational MSP*: According to Cameron et al. (2011) transnational MSP entails a certain amount of various Member States (or external states), bilaterally as well as multilaterally. Soininen & Hassan define transnational MSP as “a process in which at least two states, sharing a boundary on the Territorial Sea on the EEZ, jointly manage a marine area” (2015, p. 11). In this case, strongly integrated or mutual transnational MSP plans are not the main focus, whereas cross-border agreements and cooperation regarding aspects of the national MSP plans are. In this study the focus lays upon conformity in the organisational integration of transnational MSP.

## 2.2 Maritime spatial planning fitting in planning concepts

### 2.2.1 Terrestrial planning

Spatial planning on land is globally regarded as a crucial tool to be able to develop and manage the environment for the public in a more sustainable way (Ehler, 2008; Backer, 2011). Contrary to previous times terrestrial planning is currently not enforced by a small group of planning experts. Instead, the development of plans include

various steps with public involvement to guarantee legitimacy and cross-sectoral harmony. Planning insinuates that the objective of the plan/action is to have an impact on the future. Hence, a long-term, preventive and proactive approach is an essential element of spatial planning (Backer, 2011). So, in the last century, there has been a shift from a traditional individual top-down approach to a more comprehensive and integrated planning approach (Ehler, 2008). Nowadays, this integrated planning process on land is regarded relatively normal, whereas the integration of sectors in sea use management is still considered as progressive (Gilliland & Laffoley, 2008). According to the UNESCO (2017) “planning in the marine environment today resembles terrestrial planning in the 1970s”. Nevertheless, the novelty of the concept of MSP might offer possibilities to include and establish new approaches.

In the last few years, valuable knowledge has been conducted for cross-learning between terrestrial planning and MSP (Kidd, 2012). A few aspects of terrestrial planning might assist and benefit the implementation of the MSP concept. Learning from terrestrial planning, one of the aspects MSP should take into account is the presence of a complex socio-economic system and the continuously changing relations over time and scale. Just as important, is the recognition, awareness and attention for organisational structures which are often sectoral based. Moreover, the current use of consensus building and collaborative planning processes in terrestrial planning will feature as a fundamental element of effective MSP (Kidd, 2012). Although MSP could benefit from and incorporate these spatial characteristics of terrestrial planning, it is important to recognize that MSP encompasses unique (contextual) features which might hinder a transfer.

Despite the cross-learning, spatial planning at sea encompasses unique legal, cultural and environmental characteristics that might provide obstacles to the transfer between both systems:

Features such as the ‘flexibility’ of activities is not common in terrestrial planning. This means that in marine areas one activity does not completely eliminate the presence of other uses (e.g. fisheries and traffic). Moreover, the environmental focal point is also stronger manifested in MSP than in terrestrial planning (Backer, 2011), which might ask for a different angle of planning than normally is done. Especially the relation between human activities and the sea raise the issue of the transboundary element of regional and national ecosystems. The international agenda on MSP seems to be clearer than terrestrial planning due to the character and history of broad patterns, which appears to be a general element of sea planning (Jay 2010, cited by Backer 2011, p. 281).

Aside from the differences in the bio-physical environment, there is also a difference in institutional context. The property rights and their different arrangements in maritime and terrestrial planning restricts possible steps in policy and practice transfer (Kidd & Ellis, 2012). This complex structure of property rights and ownership forms partly the institutional design in terrestrial planning. Yet, Hillier (2003) and Campbell & Marshall (2000) argue that the involved stakeholders and strategies in terrestrial planning is in high contrast to the use of development rights in maritime spatial planning. Namely, in the maritime environment, development rights are normally rested with nation states and overseen by (inter)national law. Also the sense of place in marine environment is often less intense and developed, except stakeholders like fisheries. This however, does not mean that, although the emotional attachment is often far less existent, the way is clear for exploitation. Thus, if marine resources are aimed to be used sustainable and without uncontrolled conflicts, approaches have to be established to balance and integrate the environmental, social and economic demand in opposition to environmental protection (Gilliland & Laffoley, 2008; Kidd & Ellis, 2012).

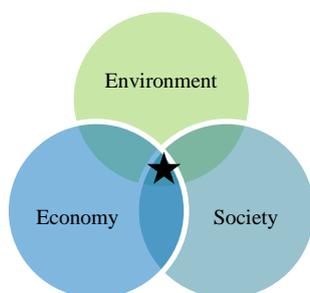
### 2.2.2 Ecosystem based approach

As MSP has its origin in the concern for the deterioration of the marine environment, it was important to give value to the environmental considerations in the decision-making procedure. The EBA aims at developing objectives across the environmental, social and economic dimension of natural resource management. Moreover, EBA searches for a certain balance between sustainable human activity and preservation, while keeping the original structure and performance of ecosystems revitalized (Gilliland & Laffoley, 2008; Qiu & Jones, 2013; Schoeman et al., 2014; Van Tatenhove, 2017) and this can be considered as a key concept within MSP. Thus, the EBA is able to give perspective to the new economic demands in the context of a sustainable environment.

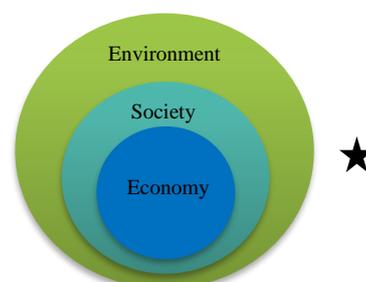
However, there is some discussion on how sustainable this ecosystem based approach should be and how to achieve this sustainable approach. In literature, sustainability can be distinguished into two kinds of sustainability: the so called ‘soft’ and ‘hard’ sustainability (Qiu & Jones, 2013; Kyvelou, 2017). In short, due to the presence of different perspectives on what kind of EBA should be implemented (hard or soft) and to what extent, the conceptual fragmentation among countries increases, which will not benefit transboundary cooperation in maritime spatial planning processes.

*Hard* sustainability encompasses the principle that the natural resources are not replaceable by human capital and that the vital ecosystems should not be threatened by human utilization/activities. So, among the three different dimensions within sustainability – social, economic and environmental – the latter is regarded to be the root for societal prosperity (Qiu & Jones, 2013). By promoting this EBA the focus lays upon the importance of achieving *Good Environmental Status* (GES) in marine waters by 2020 (Jones et al., 2016). GES implies that the different utilizations of the marine resources are used in a sustainable way, to guarantee their continuity for future generations (European Commission, 2017). However, while the economic potential of the sea has grown in the past decades, the well-being of the environment was not the sole goal, especially in industrialised sea areas (Frazão Santos et al., 2014). On the other hand, *soft* sustainability supports the idea that deterioration of the natural structure of the ecosystem could be compensated through economic expansion. Here, the economic part is regarded to be the base for societal prosperity (Qiu & Jones, 2013). This integrated use of MSP is promoting ‘blue growth’ in maritime segments (Jones et al., 2016).

#### Interconnected and interdependent benefits



**Figure 2: Soft sustainability**  
Source: Doppelt (2008). Modified by author (2018)



**Figure 3: Hard sustainability**  
Source: Doppelt (2008). Modified by author (2018)

Hard sustainability takes into consideration that the total amount of natural and human capital grow in time, but the natural resources are not allowed to be declined. Figure 3 illustrates this by placing sustainability (= ★ ) outside the three dimensions, hence showing that hard sustainability does not imply compensation in order to acquire sustainability. Soft sustainability though, allows compensation between the increase of human capital at the expense of natural resources (figure 2), by putting sustainability in the middle of the three dimensions. Thus, in this case the ‘tipping point’ is of significance, because it shows the point after which the natural capital is exploited to its maximum capability, whereupon the ecosystems threatens to collapse (Frazão Santos et al., 2014).

Nevertheless, the political processes which are involved in MSP makes sure that the sea becomes allocated in due course to meet economic, social and ecological objectives. The way in which sustainability is constructed in such political processes contains important angles for the consequences in type of processes (Qiu & Jones, 2013).

### 2.2.3 *Integrated Coastal Zone Management*

The development of Integrated Coastal Zone Management (ICZM) is particular influenced and promoted by the 1992 Rio Earth Summit through *Agenda 21* and the *Convention on Biological Diversity*, and the *Plan of Implementation of the 2002 World Summit on Sustainable Development* (Kidd, 2012). ICZM aims for a coordinated use of various policies which influence the coastal zones and activities (Frazão Santos, 2014). The integration of specific sectors like environmental preservation, aquaculture, fisheries, agriculture, industry energy, tourism, infrastructure or shipping characterizes ICZM, in contrast to the traditional and sectoral approach in coastal and ocean management (Kidd, 2012). As ICZM strategies and MSP plans are closely linked because of marine/coastal activities and their overall intentions, proper coordination is essential (Frazão Santos, 2014). Recognition of the necessity to integrate planning between land and sea is explicitly reflected in the European Marine Directive and European Union Integrated Maritime Policy developments. Nonetheless, currently the relation between human activities and sea use is inadequately developed if multiple regions and increased integration in MSP decision-making is required (Kidd, 2012). Hence, the European Commission adopted a Directive which launched a framework for effective MSP, simultaneously with the implementation of ICZM (European Union, 2014). Concepts as MSP, EBA and sustainability are linked in this MSP Directive (Frazão Santos, 2014).

Thus, clearly multiple independent but simultaneously interconnected spatial planning concepts can be retrieved in maritime spatial planning. The background of the concepts *terrestrial planning*, *ecosystem based planning approaches* and *integrated coastal zone management* is the foundation for maritime spatial planning and provides useful insight for present and future effective MSP. Although these concepts are important to the concept of maritime spatial planning, institutional challenges in European MSP remain. Institutional challenges in European maritime spatial planning and the role of organisational integration will be discussed in the next chapter.

## 2.3 Institutional challenges in European maritime spatial planning

In order to improve the MSP coordination and cooperation, one of the main challenges has to be taken into account: the heterogeneity of the maritime and jurisdictional boundaries. The variety in governance processes and the competitive nature among sectoral and national interest plays a significant part in potential conflicts and misinterpretation. Additionally, the overlap in European and international regulations intensifies the already difficult situation. Since the main and secondary research question(s) focus on organisational integration in European maritime spatial planning, it is essential to elaborate on the current (and previous) path on MSP in the EU. Without the knowledge of EU's MSP governance framework there is no understanding of the challenges MSP faces or what the opportunities could be in organisational integration.

### 2.3.1 Governance framework of European maritime spatial planning

The policy framework for MSP is a relatively new, but emerging one. To come to a mutual accepted and integrated approach in MSP in Europe, the European Commission explores the effect of new policy instruments (Qiu & Jones, 2013). In the past ten years, maritime policy initiatives have continuously highlighted the need for an EBA to achieve sustainable use of the marine environment (figure 4). For instance, the regulation of fisheries through the *Common Fisheries Policy* (CFP) was one of the first steps to implement the protection of marine environment in EU legislation just like the *Water Framework Directive* (WFD). The WFD aims at controlling the input of chemicals and nutrients into the water (European Commission, 2016a). Although both tools are essential for the balance in marine waters, their input is from one particular sector causing a sectoral and fragmented approach.



Figure 73: Timeline of major European policy initiatives addressing marine spatial planning. Source: Frazão Santos et al. (2014)

In 2006, EU's *Green Paper* encouraged to find stability between ecological and socio-economic dimensions in sustainable development within the EU Maritime Policy, hence considering a new and integrated approach in marine management: the concept of *maritime spatial planning*. In 2007, the *Integrated Maritime Policy* (IMP) identified MSP as a crucial planning instrument for integrated policy-making for optimal sustainable marine development as well as allowing growth in maritime sectors (Frazão Santos et al., 2014). The IMP is the result of a European Task Force to address the issues emerging from a fragmented management of Europe's marine waters. IMP has the aim to attain the full economic potential of the sea, while simultaneously keeping the marine

environment in balance. This policy was the first to include all sectors that have impact on the oceans (European Commission, 2016a). Subsequently, to ensure the protection of the environment in particular, the *Marine Strategy Framework Directive* (MSFD) was in July 2008 adopted as an IMP instrument. Under the IMP, the MSFD offered an all-encompassing and integrated approach to safeguard all European coast and marine waters (European Commission, 2016a; Jones et al., 2016). In 2010 the MSP *Achievements and Future Developments* expressed the need and importance of a MSP framework on a higher EU level to increase the sustainable growth in maritime sectors (Frazao Santos et al., 2014). To sum up, in the last decade the EBA concept emerged as a necessary tool for sustainable environmental development in the MSP framework.

Despite the intentions to ensure the protection of the marine environment, two conflicting European MSP approaches could be identified: the IMP and the MSFD. The MSFD is the environmental pillar of the IMP and focuses on hard sustainability in the EBA to achieve *Good Environmental Status* by 2020 (Backer, 2011; Qiu & Jones, 2013; Jones et al., 2016). MSFD tries *to work together* with various sectoral activities. In this case, MSP is often used as a preventive strategy for the conservation of the marine environment (Kyvelou, 2017). The MSFD faces various implementation obstacles, subsequently the Member States and European Commission try to address these issues through a Common Implementation Strategy (European Commission, 2016a).

Yet, IMP creates a framework in which MSP is implemented as cross-sectoral management for future investment possibilities (Backer, 2011), also referred to as blue growth. This approach aims at soft sustainability, i.e. MSP is likely implemented as a system to balance the needs of the various sectors in the marine environment. Hence, the conservation of nature environment is also often regarded as part of the sectoral use in marine space instead of the main concern (Kyvelou, 2017). To deliver IMP as intended by the EU, successful implementation of the MSFD is essential. Coherence between the two approaches entails multiple implementation challenges and one of the reasons for the strain between IMP and MSFD could be related to the Commission services.

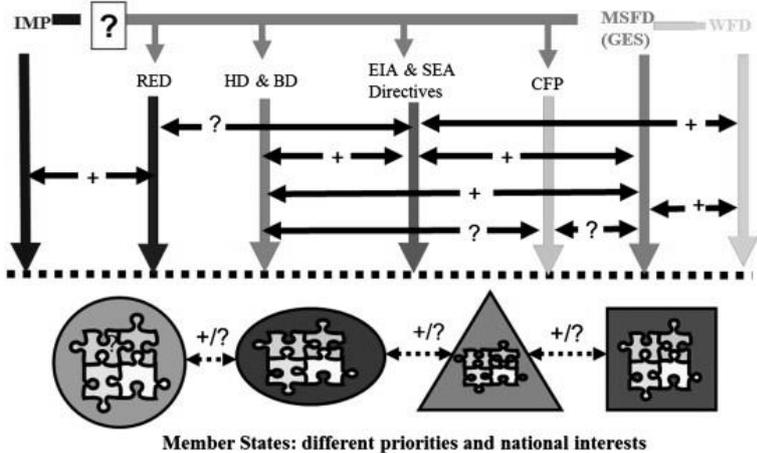


Figure 99: The policy landscape for MSP in the EU. Showing both synergies (+) and potential tensions (?) between the different policy drivers and Member States.  
 Source: Qiu & Jones (2013)

Both approaches fall under different Commission services: The *Directorate General Environment* of the European Commission is responsible for MSFD implementation, whereas the *Directorate General of Maritime Affairs and Fisheries* is responsible for the implementation of IMP and the fisheries policies (Qiu & Jones, 2013). The divergent MSP initiatives of the Directorates could elucidate the confusion about the direction of the MSP strategy

in Europe (figure 5)<sup>1</sup>. Since the Directorates seek advice from diverse advisory bodies, it is likely that transnational joint-decision making and the information flow suffers from this organisational divergence (Kyvelou, 2017).

The emphasis on maintaining GES and enabling blue growth in MSP at the same time is a returning aspect in EU's policy plans. Although EBA is regarded as an essential tool to guarantee sustainable development in marine environment and GES has to be achieved by 2020, most of the national plans in the EU (e.g. Belgium, Norway, Germany and Portugal) (Kyvelou, 2017) or even EU initiatives seem to be focusing on blue growth (Frazão Santos et al., 2014; Schubert, 2018 in Salomon & Markus, 2018). Competing large maritime sectors (e.g. oil, gas and energy sectors) are likely to approach the limited maritime space by the IMP framework, due to the blue growth approach which would be more beneficial for them. Additionally, the large maritime sectors prefer IMP's sectoral conflict management of current and future maritime use instead of implementing complete MSFD objectives since that would often affect the large sectors in a negative way (Frazão Santos et al., 2014). On the contrary, Davies & Pratt (2014) argue that Strategic Environmental Assessment (SEA) and MSFD drive primarily strategic sectoral planning, especially to place environmental goals from MSFD in SEA. Either way, important national strategic objectives are frequently MSP processes which are driven by a specific main sectoral objective instead of a cross-sectoral integrated plan. Naturally, other sectoral objectives are taken into account, but the main strategic sectoral objective is commonly considered the priority of processes. Concessions and trade-offs were adjusted to guarantee the achievement of the main objective (Jones et al., 2016). The success of MSP seems to be depending on the achievement of these 'national' sectoral objectives. Furthermore, there is the possibility that conflicts remain unsolved because of the focus on the national sectoral objectives. The cause of these lasting conflicts among stakeholders lays within the compromises and negative impacts in the sectoral interest, like displacement of fishing zones and the increasing space for energy projects (Jones et al., 2016). Marine plans often call for SEA Directives, hence countries are required to consult and inform neighbouring countries which might be influenced. Therefore, engagement of the industry, national governments, stakeholder groups and the public in an early phase of the planning process would be beneficial to the realization of the objectives (Gilliland & Laffoley, 2008).

In the aim to overcome the differences between IMP and MSFD in shared seas, a legislation framework was provided by the European Parliament and the Council for MSP in Europe in July, 2014. Currently, each EU country has the right to plan its own maritime activities, but in shared sea-areas local, regional and national planning aim at a well-matched cross-border policy, by the means of a set of minimum common criteria (European Union, 2014; Van Tatenhove, 2017). The right of Member States to plan their own national maritime activities is part of territorial governance, which aims at bottom-up governance approaches and takes the different levels and different contexts into account. Consequently, territorial governance can be considered a holistic approach. It is a frequently used instrument by decision – and policy makers in order to support place based spatial planning work (Schmitt & Van Well, 2016). The reason for this, might be that territorial governance focuses on collaboration and cooperation among governmental and non-governmental stakeholders. Understandably, the European Commission considers territorial governance an important component in order to establish an effective Cohesion Policy (Böhme et al., 2015). Although the idea of territorial governance is in essence a good one, it might restrain the intention to achieve an effective European MSP policy. Since national authorities are responsible for their own pace of the implementation and execution of MSP objectives (e.g. more wind energy, increasing maritime transport or nature

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<sup>1</sup>RED: Renewable Energy Directive; HD & BD: Habitats Directive and Birds Directive.

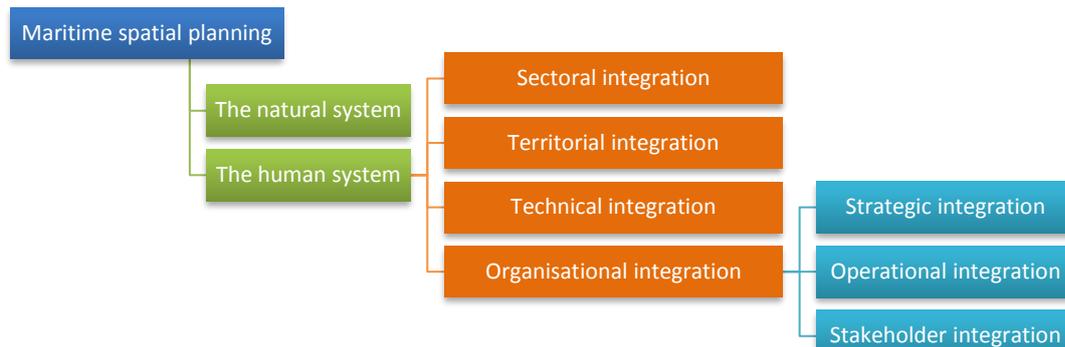
preservation), it is likely that not all Member States are in the same MSP planning phase. On a transnational level where borders overlap and MSP in particular is required, the differences in planning approaches and planning phases might bring limitations to effective transnational cooperation in MSP. Another issue is that the larger part of the leading players in the different MSP sectors, cannot be found on the same geographical – and governance scale. For example, the *Environment* sector is a complex sector which requires involvement of all governance levels (Kull et al., 2017). In contrast, the *Fisheries* and *Energy* sector is regulated from an EU-level, whereas *Shipping* acts according global regulations and – actors, like the International Maritime Organisation (IMO). With regard to a geographical overlap in sectoral governance structures (global conventions, national regulations and EU Directives): these might both conflict and co-exist depending on the scale of impact on one another (Kull et al., 2017). In such cases, MSP could provide coordination, but requires consideration and understanding of the overlapping regulations and dissimilarities of the governance levels (e.g. changing shipping routes on IMO level and Marine Protected Area's (MPA) on national level) (Kull et al., 2017). In order to be effective in MSP processes, stakeholders have to consider various institutional and geographical scales.

In short, illustrating the fragmentation in EU's MSP governance framework enhances the understanding of the institutional challenges. A few main challenges in the development of a more holistic and comprehensive transnational MSP policy in Europe could be identified: 1) the likely incompatible approaches in MSP (figure 5); 2) achieving national sectoral objectives and 3) the overall lack of organisational coordination and integration of managing the marine environment (Jones et al., 2016; Kyvelou, 2017). Regarding the latter, the concept of *organisational integration* (see conceptual model) will be discussed in the next subsections.

### 2.3.2 *Organisational integration in maritime spatial planning*

As stated in chapter 2.3.1 and argued by Jones et al. (2016) and Van Tatenhove (2017) transnational MSP clearly experiences institutional and conceptual fragmentation. Hence, leading to a gap between the intention of MSP plans and the envisioned result (Kidd, 2012). The degree of fragmentation can often be related to the amount of organisational (des) integration of strategies, mechanisms and stakeholders. Since transnational MSP has its focus on the cross-border agreements and cooperation in the overlapping areas between national MSP plans (Cameron et al., 2011), the specific dimension of organisational integration (figure 6) will be part of further research. Institutional fragmentation is considered a system of scattered responsibilities and a mix of rules, guidelines and institutions at the scale of regional seas (Raakjaer et al., 2014). Since the European institutional framework is not yet in harmony, no particular authority can be hold accountable for the issues related to terrestrial events affecting the marine environment or maritime actions. Various rule systems of multiple organisations cause this tension and hinder the establishment of a cohesive governance framework. The assemblage of these dissimilar regulations and rules on a regional scale, are called *clusters*. Clusters could be described as the accumulation of efforts to rearrange governance of the regional seas (DiMento & Hickmann, 2012), which are sometimes coordinated and sometimes less coordinated (Young, 1998). These clusters are a compilation of regimes complexes and international environmental institutions (DiMento & Hickman, 2012). These regime complexes are an assemblage of non-hierarchical and to some extent overlapping governments (Raustiala & Victor, 2004). Hence, they contain legal irregularities and the institutional density is growing (Young, 1998). Thus, one of the trademarks of a cluster is

that they are institutional ambiguous (Van Leeuwen et al., 2012), due to overlap, non-hierarchical structure and inconsistency of regulations (Young, 1998).



**Figure 119: Framework of the categories in maritime spatial planning**

*Source: Kidd (2012); modified by author (2018)*

Adding to the complex regulatory situation, planning/jurisdictional boundaries do often not align with the ecosystem boundaries. Different ecosystems exist within these planning boundaries and moreover, the planning areas may or may not correspond with the national, regional or local levels which are responsible for the implementation plans and jurisdiction (Ehler, 2008; Jay et al., 2016). Understanding the relation between ecosystems and planning scales is important in order to classify areas which may converge or diverge (Gilliland & Laffoley, 2008). Given that institutional settings lack universal regulations or standards in the regional seas, there is an opportunity for actors to discuss and adjust the existing institutional system (Van Leeuwen et al., 2012).

Since the improvement and execution of transnational MSP has to occur inside the institutional background of regional seas (Van Tatenhove, 2017), it would be fitting to take relevant planning theories regarding institutional design into consideration. As already argued in chapter 2.3.1, currently the strategic integration and operational integration for transnational MSP are not executed to their maximum capability, mainly due to a lack of harmony in MSP mechanisms, strategy initiatives and programs. In order to tackle this incongruity in MSP, a planning theory that focuses on communication and participation in order to come to uniformity in goals, data and planning tools seems appropriate. Hence, the collaborative planning theory (Healey, 1997) might be a fitting planning approach to increase the transnational communication and consensus-building practices. This theory focuses on communication to assist various interest in the process to understand each other (Healey, 1997; Woltjer, 2000). It aims at including a broad range of stakeholders to increase deliberations and negotiations, which are regarded to be the fundament of plan making (Woltjer, 2000). Yet, participation is a vital element in the planning theory, since without active participation of concerned interests, there is no planning. Interaction among the most significant stakeholders is required to identify each other's obstacles and to establish a mutual constructed issue (De Roo & Porter, 2007). In short, a collaborative planning approach would be appropriate for improving the organisational integration of European Maritime spatial planning. The reason here fore is that a shared strategy on how to act on the problem and constructing a common action-plan might create more harmony in transnational cooperation.

If organisational integration in transnational MSP can be enhanced, great improvement in the efficiency of planning processes can be established. Processes like an increased development in the quality and transparency of decision-making and improved regulation on collecting, storage and recovery of information are just a few examples which will benefit from transnational organisational cooperation and integration (Ehler, 2008). Nevertheless, the collaborative planning approach is only useful if various actors are mutually dependent and more

or less of equal value, but with divergent conflicting interests (Healey, 1997; Woltjer, 2000; De Roo & Porter, 2007), which seems to be the case in the institutional design of European MSP. Gilliland & Laffoley (2008) argue that planning systems which deal with conflicts successfully, include elements such as clear targets, well defined legislation, strong guidance and ideology, distinct driving priorities and above all: strong stakeholder involvement.

Chapter 2.3.1 that stakeholder alignment is important for both operational and strategic integration. Hence, elaboration on stakeholder involvement is significant since it is part of a subdivision in organisational integration (see conceptual model).

Stakeholder engagement is regarded to be a fundamental element of MSP (Gilliland & Laffoley, 2008). Subsequently, the way stakeholders will be engaged is essential, such as receiving accurate information to be fully part of the planning process (Gilliland & Laffoley, 2008). Stakeholder integration needs the integration of various stakeholder perspectives during the overall processes of MSP planning, implementation and monitoring (Kidd, 2012). Stakeholder involvement is ought to be part of the development of the entire MSP framework and process, instead of anticipating on an already established plan (Gilliland & Laffoley, 2008). On the long-term, stakeholder involvement in an early planning stage acquires trust and ownership and is vital to success (Ehler, 2008).

Cross-sectoral stakeholder integration is often hard to gain because it aims for an integrated policy plan between various public policy domains in MSP in the sea area, such as the fisheries, industry, energy, environment and aquaculture. Next to that, agreements across the public, private and voluntary branches are needed too, which is called inter-agency integration (Kidd, 2012). All these stakeholder have their own objectives, which do not always co-operate. To determine conflicts in the early stages of the process, participation and dialogue of front-leading stakeholders is preferred (Gilliland & Laffoley, 2008). This often means an increase in time and costs before the actually implementation of plans (Ehler, 2008), because of increased administrative inertia. Although identifying the main stakeholders is often pretty clear-cut, creating understanding of maritime issues and setting up a democratic and efficient framework might be more difficult. Furthermore, other sectoral/regional stakeholders (i.e. fisherman with access right) or technical experts (i.e. marine managers, policy makers and terrestrial planners) could be harder to identify and to stimulate, because of their distance to the MSP framework and conflicting objectives. On the other hand it might be valuable since various disciplines deliver various perspectives, which will benefit the process of implementing comprehensive MSP – plans (Gilliland & Laffoley, 2008).

The most suitable approach for stakeholder involvement depends on the context. The management approach and measures as well as the commonly accepted objectives are eventually a choice of the stakeholders. Yet, Ehler (2008) argues that participation of stakeholders alone will not suffice; empowerment of stakeholders is vital for effective contribution during the MSP process. However, Gilliland & Laffoley (2008) stress that although stakeholder integration is beneficial and needed in the planning process, eventually a main authority will be accountable for the planning decisions, which needs to be clarified with the stakeholders to direct their expectations. Thus, early stakeholder engagement is vital to tackle potential sectoral conflicts and empowerment is crucial for achieving active participation of stakeholders, which might benefit eventual MSP processes.

As can be concluded, organisational integration is a complicated aspect of the transnational MSP framework which asks for improvement since quite often the perceptions, priorities, interests and execution of the stakeholders do not seem to correspond with each other. To come to an understanding on how organisational integration can be improved, three theoretical research components have been distinguished and described: *policy convergence*, *shared conceptualisation* and the role of *transnational organisations*.

## 2.4 The search for effective transnational maritime spatial planning

In the previous subchapters, relevant background concepts of maritime spatial planning are discussed, such as terrestrial planning, the EBA and ICZM. Also, the institutional challenges in European MSP are analysed and reviewed, concluding by the role and current situation of organisational integration in transnational MSP. Yet, in order to answer the main question, three key research concepts, based upon the secondary research questions, require discussion: namely *policy convergence*, *shared conceptualisation* and *transboundary organisations*. These three concepts and the used theories will form the theoretical foundation throughout this research, to come to an understanding on how to improve organisational integration in a transnational MSP framework.

### 2.4.1 Policy convergence

The first theoretical research component involves policy convergence, which can be described as the development of policies to grow more similar in relation to the processes, structures and executions and are often related to the effect of globalization (Drezner, 2001). Wiering & Verwijmeren (2012) argue that similarity in policy discourses and structures among bordering countries might increase the possibility of a successful transboundary planning process. Various factors, processes or concepts for policy convergence are discussed in literature, but Knill argues that generally the factors could be categorized in two groups:

- 1) causal mechanisms which activate transnational policy changes;
- 2) facilitating factors which have an effect on the success of these mechanisms.

Furthermore, five main causal mechanisms are identified in literature: imposition, international harmonization, transnational communication, independent problem solving and regulatory competition (Dolowitz & Marsh, 1996; Drezner, 2001; Holzinger & Knill, 2005; Flannery et al., 2014). It is assumed that policy convergence will occur if the causal mechanisms lead to the required responses (table 1).

Mechanism	Stimulus	Response
Imposition	Political demand or pressure	Submission
International harmonization	Legal obligation through international law	Compliance
Regulatory competition	Competitive pressure	Mutual adjustment
Transnational communication	→	→
<ul style="list-style-type: none"> <li>• Lesson drawing</li> <li>• Transnational problem solving</li> <li>• Emulation</li> <li>• International policy promotion</li> </ul>	<ul style="list-style-type: none"> <li>• Problem pressure</li> <li>• Parallel problem pressure</li> <li>• Desire for conformity</li> <li>• Legitimacy pressure</li> </ul>	<ul style="list-style-type: none"> <li>• Transfer of model found elsewhere</li> <li>• Adoption of common developed model</li> <li>• Copying of widely used model</li> <li>• Adoption of recognized model</li> </ul>
Independent problem solving	Parallel problem pressure	Independent similar response

**Table 1: Mechanisms of policy convergence**

Source: Holzinger & Knill (2005)

First, *imposition* comprehends the compelling of countries or international organisation to other countries to implement particular policies by making use of the unequal economic or political power. Second, *harmonization* among cross-border policies through (supra)international law occurs when under international organisation, states make a deliberate choice to conform with international regulations on which they agreed in multilateral negotiations (Drezner, 2001; Knill, 2005). Third, *regulatory competition* has its origin in the increasing economic

integration. It challenges bordering jurisdictions, such as being the greenest or the most laissez-faire. Jurisdictions compete to extend competitive advantage (Drezner, 2001; Holzinger & Knill, 2005; Flannery et al., 2014) and it drives countries to joint regulation of policies (Knill, 2005). Fourth, *transnational communication* comprehends several mechanisms (table 1), which all mainly rest on the exchange of information and communication (Holzinger & Knill, 2005). Although, transnational communication exists primarily because of information management and assessment, sharing communication is also important to the other key mechanisms. More than that, Kidd (2012) argues that to be able to come to agreements in transnational MSP and spatial planning in general, spatial data and information is essential, since incomplete or poor data ensures the limitation in the scope of planning (Gilliland & Laffoley, 2008). On the other hand, Knill (2005) states that regarding the other mechanisms communication and information are essentially background conditions, instead of the central factor for policy convergence. Lastly, *independent problem-solving* can trigger transnational convergence due to similar but autonomous reactions of various countries to comparable issues (e.g. environmental contamination or healthy ageing) (Knill, 2005).

Even though one or more of these policy convergence mechanisms are established and adoption of policy concepts or innovations seems to be successful, it does not mean that regulations will automatically increase. There is a possibility that states adopt less challenging set of laws or follow related guidelines in different countries (Holzinger & Knill, 2005). Entering that discussion, according to Knill (2005) two facilitating factors could be distinguished that might influence effective transnational policy convergence:

The first factor addresses the resemblance in characteristics of the involved countries. As already argued, creating policy convergence is better achievable and implemented when countries are more similar in institutional design. Cultural resemblance is an important factor for the search for transnational policy convergence, because spatial planning is deeply embedded in a “country’s history, geography, cultural traditions, political orientation, prevailing ideology, state of economic and urban development, constitutional government structure or legal constitutional framework” (Böhme, 2002, p. 40).

The second factor looks at characteristics of policies, in other words: the type of policy is regarded to be the factor that could affect possible policy convergence. The prospect is that policies with the presence of highly scattered conflicts among internal actor alliances will spread. Subsequently leading to a smaller degree of convergence than policies with moderately less scattered organisational impacts (Tews, 2002 in Knill, 2005). Furthermore, according to Hall (1993) various policy dimensions (policy instruments, policy paradigms and policy settings) could influence policy convergence. Yet, these policy dimensions are not all equally suitable for increasing policy convergence. For instance, policy paradigms are hard to implement on the short term, since it is difficult to change imbedded ideas, perspectives and processes, due to the (organisational) culture of domestic actors. Yet, policy setting and – instruments can be modified since ideational transformation is not required in contrast to policy paradigms. In short, policy convergence appears to be more feasible in policy instruments and policy settings than in policy paradigms.

In short, the extent of convergence between cross-border legislation and the policy plans is a significant element of effective transnational planning (Flannery et al., 2014). Five causal mechanisms and two facilitating factors are identified to come to policy convergence. Although aiming for policy convergence contributes to effective transnational cooperation, it is just one aspect of the framework. As Holzinger & Knill (2005) and Flannery et al.

(2014) argue that a part of transnational collaboration and policy convergence, is a shared perspective of conceptualisation of planning issues.

#### 2.4.2 *Shared conceptualisation*

As suggested, the next and second-last key research component of this research involves shared conceptualisation:

The possibility to adopt similarities in policies is related to the match of transnational concepts in planning and the national policy pathways. Effective transnational cooperation will decline if the price for adopting policies is too high: if the establishment of more compatible policies calls for extensive adjustments in institutional arrangements, incomplete or rejected policy transfers are highly plausible (Holzinger & Knill, 2005). Still, despite this rejection of cross-border policy transfers, if actors acknowledge that there is a potential to achieve national/regional objectives by working collectively to reach mutual goals, transnational cooperation becomes surely enough more attractive and powerful (Flannery et al., 2014). Thus, in this case improved transnational cooperation is not based on policy convergence, but based on working with shared conceptualisations in planning.

Nonetheless, despite the importance of shared perspectives in maritime planning practice, Healey (2011) and Flannery et al. (2014) stress the importance of keeping the context in mind. Today's planning concepts are regarded to be part of a context, which involves complexity and contingency (Healey, 2011). Understanding the importance of context is a significant element whenever institutional integration and cooperation is the common objective. Lessons and experiences in the past learned that planning mechanisms and instruments cannot just be selected and copy-paste somewhere different, with specific histories and geographies. The different perspectives on planning today, as well as in the past, and the position of stakeholders in planning are functioning as key elements concerning cross-border planning (Backer, 2011). With regard to the differences in maritime planning notions, Van Tatenhove (2017) highlights the importance of conceptual fragmentation in MSP practice. Conceptual fragmentation actually comprehends the variety in approaches and concepts of MSP and the disparity of the implementation and execution of MSP in diverse institutional backgrounds. Currently, MSP faces differences regarding the use of e.g. blue growth, GES, the legal status of plans i.e. regulatory or executive (Kyvelou, 2017) and the degree of stakeholder involvement. These (maritime) planning theories and their concepts are formed by the actors involved in planning practice and they shape the concepts to their focus of attention based on the context and their pursued goals in planning practice (Holzinger & Knill, 2005).

So, divergence in conceptual perspectives and how to act on it puts pressure on the multiple bordering jurisdictions (Frazão Santos, 2014). A few main aspects to improve transnational cooperation will be described: shared experiences; similarity in concepts; mutual objectives; focus on small number of joint strategic plans.

One of the aspects that could benefit the development of transnational MSP projects is the extent of earlier experiences in transboundary cooperation and their development of common trust and understanding. The potential to identify mutual problems in early planning phases and previously experienced collaboration in order to come to valuable solutions could form the foundation for durable cross-border planning (Flannery et al., 2014). According to Flannery et al. (2014) fact-finding, joint learning and the study of exchanged information are the most effective transboundary initiatives in MSP. In more detail, the development and establishment of mutual objectives and action plans for shared issues are essential to success (Hildebrand et al., 2002). The plans and objectives will function as the fundament for cooperative actions and result in the recovery of cross-border problems (Castells,

2009). Additionally, Uitto & Duda (2002) stated that getting contributing countries to centre on one or two main problems, the development of joint strategic plans turned out to be constructive. Moreover, it was even more favourable than aiming for a broad joint operation, since a joint strategic plan between transboundary jurisdictions causes momentum, political participation and input into the required cross-border MSP plans. To summarize, agreements on the planning concepts and –objectives, what they entail and previous experiences in joint-decision making contribute to the decrease of obstructions, increase the capacity of the actors and strengthens the assurance in cross-border relations among countries in maritime spatial planning.

#### 2.4.3 *Transboundary organisations*

The third and final theoretical research component entails the role of transboundary organisations:

The framework for overall management and facilitation of water resources beyond national boundaries is often provided by transboundary organisations. Effective cross-border functioning of organisations needs a stable foundation, political support and dedication of project partners. Based on experience, transboundary cooperation proved to be more difficult in major national infrastructure projects. A large project might affect mutual transboundary sea basins or water resources. These transboundary ‘water’ organisations function as one of the best platforms for cross-border conciliation and collaboration (Global Water Partnership, 2017).

Nonetheless, chapter 2.3.1 highlights the institutional and organisational fragmentation in the current MSP framework, which stresses the multi-level governance of sectoral maritime actions. These institutional arrangements take time and are expensive regarding finances and resources (Global Water Partnership, 2017). However, a strong transboundary network is able to decrease transaction costs and facilitates transboundary working (Flannery et al., 2014). Furthermore, national planning policies that concern water management have to assist cross-border coordination of agencies. National policies might even require adjustments in order to correspond with other (transboundary) parties (Global Water Partnership, 2017). These transboundary parties are often dominant actors in MSP governance, most likely actors such as the EU, IMO, fishery organisations and advisory bodies, but also nation-states (Van Tatenhove, 2017). According to Castells (2009) sovereign nation-states can be transformed into network states, subsequently obtaining joint autonomy and accountability in various situations and on different scales of government. Nevertheless, the emergence of these network states are facilitated with the help of organisations: political decision-making at sea and MSP processes occur in an interactive system of multi-level governance: local, regional, national and transnational government organisations are involved. These organisations and conforming institutions could be both formal and informal alliances, including supranational institutions (Flannery et al., 2014; Global Water Partnership, 2017), like OSPAR. OSPAR for instance, aims at the protection of the North-East Atlantic marine environment through the cooperation of the EU and 15 state governments <sup>2</sup> (OSPAR, 2015). Moreover, these organisations often have previously crossed paths, hence establishing trust, improved working relationships and gaining cross-border experiences (Flannery et al., 2014). Thus, these consultations with e.g. representatives of NGO’s, civil society – and fishery organisations are an important aspect in order to improve the collaboration and cooperation in transboundary MSP.

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<sup>2</sup> 15 governments: Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, The Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom, Luxembourg & Switzerland (last two due to the location regarding the River Rhine) (OSPAR, 2015)

Since the efficiency of transnational maritime spatial plans partly depends and is influenced by transboundary organisations (Van Tatenhove, 2017), the nature of existing cross-border institutions contributes to the transboundary partnership as well (Kidd & McGowan, 2013). These governance institutions may however affect one another’s efficiency whenever they operate in a joint geographical area (Flannery et al., 2014). Therefore, the relationship between various cross-border organisations and their formal and informal agreements and understandings are essential. Hence, a tool that might provide support to the development of transnational organisations would increase the role in an integrated planning process of maritime spatial planning.

According to Kidd & McGowan (2013) a ladder of transnational partnerships (table 2) is able to describe the various categories of transboundary partnerships and identify their ranking on the ladder regarding the development of mutual understanding and jointly valuable relations. This ladder could aid to the visualization of the various approaches of transnational organisations, while identifying the most preferred forms of partnerships in a specific situation. Furthermore, it might add to the evaluation of existing cross-border organisational procedures and identify desired adjustments and development.

**Formal**



Ladder	Function of partnership	Objectives
Combined constitution	Changing the political order	Joint legal agreements; handing over of power for shared transnational partnership working
Combined organisation	Changing the institutional order	Establish mutual supported formal transnational institutional arrangements (e.g. research institutes; joint planning teams)
Agreed joint rules	Shared rule systems	Establish common procedures or protocols (e.g. agreed protocols for exchange data collection)
Administration sharing	Creating collaborative advantage	Nature of collaboration entails short-term actions ; might entail long-term relationships
Information sharing	Building trust, understanding and capacity	Work independently, support by small resource; joint exercises (e.g. facilitation of workshops, stakeholder mapping)

**Informal**

**Table 2: A ladder of transnational partnership in order to support maritime spatial planning.**  
*Source: Kidd & McGowan (2013); modified by author (2018).*

This ladder offers the possibility to categorize different stakeholder motivations within and between organisations and identifies the balancing position of stakeholder interests. Nevertheless, the ladder seems to advocate a movement to higher levels of power, because it is believed that the degree of stakeholder commitment towards the top will be higher, as far as the time resources and handing over power (Kidd & McGowan, 2013). In this case, the establishment of an advisory body might contribute to decision-making and increase the range of stakeholder involvement (Global Water Partnership, 2017). This redistribution of power could be perceived as a needless, expensive and time consuming development of a higher level of collaboration, which limits the unrestricted undertakings of individual stakeholder’s groups. Yet, the ladder-tool could turn the criticism into a benefit and expose strains that hinders the partnerships, especially in multifaceted international situations such as in marine spatial planning practices and promote discussion concerning the strains in order to find a way forward (Kidd & McGowan, 2013). It turns out that once the cross-border agreements and organisations are instituted, they are rather strong since they frequently encompass a controlling and mediating role in conflicting situations (Global

Water Partnership, 2017). Additionally, existing organisations do not guarantee to be beneficial alone, limitations to the action plan could occur too because of divergent stakes and lack of efficiency (Backer, 2011). Next to that, Healey (2011) argues that persons might be attached to specific organisation with a strong domestic background and reliability, which forms the behaviour of members. However, actors are frequently part of multiple loyalties and identities, therefore cross-cutting their perspectives in situations and problems. Hence, the understanding of the effect of other organisations is significant, since the implementation of transnational MSP will influence and be influenced by these organisations and their institutions (Flannery et al., 2014).

Since the theories of the three key research components (*policy convergence*, *shared conceptualisation* and *transboundary organisations*) are now discussed too, all theoretical (background) concepts being treated will be illustrated in a conceptual model.

2.5 Conceptual model

This conceptual model is a visual representation of a system, based on qualitative assumptions of the theoretical concepts in this research and their interrelationships. A conceptual model could be used to help to understand the topic which the model embodies (BusinessDictionary, 2018): the conceptual model in this research (figure 7) shows among others the theoretical concepts of the foundation of MSP and organisational integration, as discussed in (sub)chapters 2.2 and 2.3.2. Additionally, as already argued, current MSP practices faces institutional and conceptual difficulties, which requires organisational integration to improve transnational cooperation in MSP.

Based on the theories discussed in 2.4, this conceptual model will be used as a tool to do research to come to an understanding on how important *policy convergence*, *shared conceptualisation* and *transboundary organisations* are for improving organisational integration. The role of these three components and their theories will be the foundation of this research. The hypothesis of this research is that *policy convergence*, *shared conceptualisation* as well as *transboundary organisations* are all important for effective transnational cooperation in European MSP.

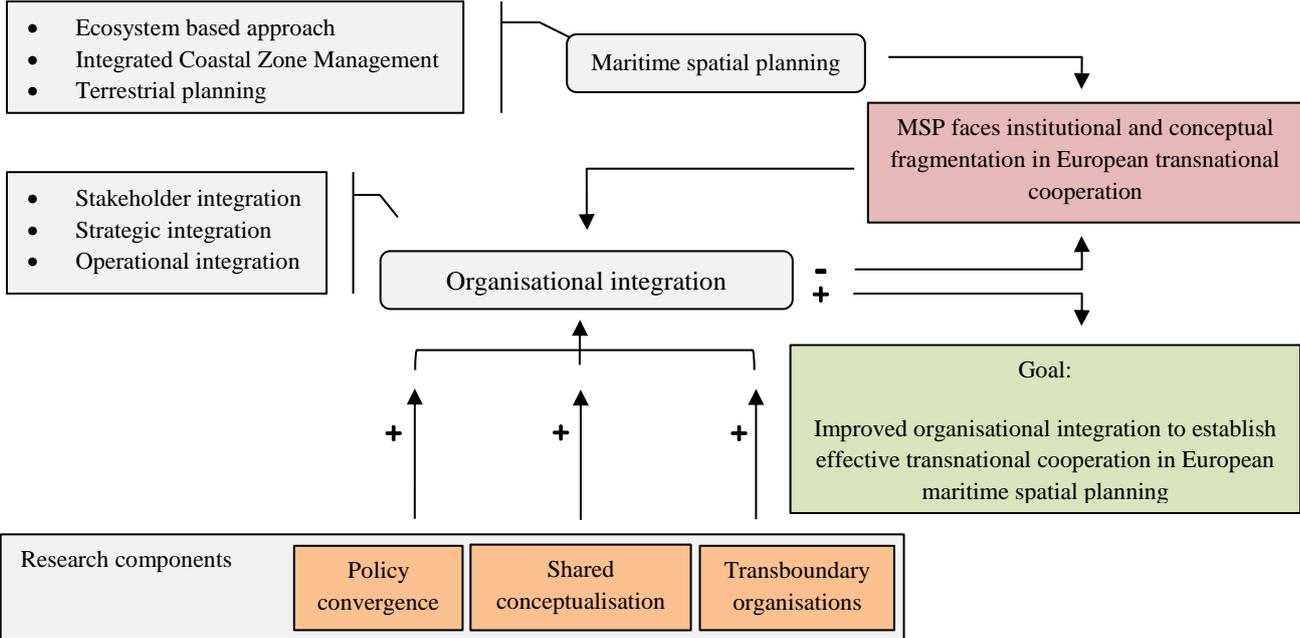


Figure 7: Conceptual model  
Source: Author (2018)

# 3

## **Methodology**

### 3. Methodology

Research can be described as an activity that entails the discovery of things in a systematic approach, and therefore enhances the knowledge. Research methods are considered to be the techniques for the research, in which the collection, sorting and analysis of the data/ information is a central element (Walliman, 2011). Subsequently, methodology encompasses the broad philosophical fundament and argumentation of the chosen research method and how it should proceed (Kirsch & Sullivan, 1992). Since there are multiple types of research designs (e.g. comparative, experimental and evaluation), the research design relies on the nature of the research problem and – questions and how they can be met (Walliman, 2011). The main research question in this thesis is the following:

*How can organisational integration be improved to work towards effective transnational cooperation in European maritime spatial planning?*

This study will consider the institutional and political components that are involved in organisational integration, hence providing a potential effective transnational European MSP approach. To come to this understanding the following secondary research questions have been established:

- 1) *How important is policy convergence among (neighbouring) countries for transnational organisational integration in maritime spatial planning?*
- 2) *How important is shared conceptualisation of maritime spatial planning issues among (neighbouring) countries for transnational organisational integration in maritime spatial planning?*
- 3) *How important are transboundary organisations for transnational organisational integration in maritime spatial planning?*

Because of the form of the research questions, the research design is shaped by multiple research methods. In order to address the main question and secondary questions, the best and most appropriate ways are selected and a description and argumentation of the research methods will follow in the next sections.

#### 3.1 *Justification of the research methods*

##### 3.1.1 *Qualitative data*

Since the research questions address a research topic which asks for a research of the underlying motivations, reasons and problem, a *qualitative* research approach would be the most suitable method. That is because qualitative research is mainly exploratory and tries to clarify the *how* and *why* of a certain event, behaviour and operates in a specific context. Qualitative data is generally put into words because events are only sufficiently interpreted when they remain in context and is therefore hard to measure in numbers (Walliman, 2011). In contrast to qualitative research, quantitative research is often conducted whenever a problem is quantifiable and collected data can be presented into utilizable statistics, hence be measurable (Walliman, 2011). As already stated, this research topic is structured by questions that ask an understanding of a situation which cannot be taken out of context, hence the choice for a qualitative research method is made. Although this research will mainly use qualitative data, research about human beings is often a combination of qualitative *and* quantitative data, since the

quantitative data might function to support the qualitative analysis. Since the research topic covers a broad research scope (i.e. transnational cooperation on European level) and time and money are constraints to do research on this level, a case-study research would be the most appropriate research method.

### 3.1.2 Case study research

According to Yin (1994) case studies could be used for an explorative, descriptive, explanatory and illustrative research. A case study entails a research where a single event, organisation or program is intensively studied and described. Case study research is a research type in which phenomenon in their 'natural' environment are studied (Swanborn, 1996). It happens that case studies often relate to an explorative research and are in particular appropriate for answering the how and why questions, since these questions are hard to formulate and to test by the means of statistical analysis. Subsequently, a case study research is regarded to be the most valuable and suiting method (Van Bueren, 1999), since qualitative research will address the how and why questions. The complexity between the processes and relations and how they turn out is the central focal point of a case study research method (Van Bueren, 1999). Case study research is a form of *intensive* research, referring to the in-depth research of a single or few phenomenon(s), in contrast to an *extensive* research method which often relates to a more broad research where a relation is examined between multiple research variables (Van Bueren, 1999). The research questions contain how and why questions, but the quit abstract research topic (European organisational integration) also requires a more descriptive and in-depth approach to explore and illustrate how organisations and governments operate in reality.

Next to that, Stake (1995) argues that case study research encompasses three categories:

1) Intrinsic case study: the researcher aims at understanding a particular case and is frequently suitable for evaluation research. Even though the focus on the singularity of a case might form some kind of generalization, the research intend to generalize *within* the case instead *from* the case.

2) Instrumental case study: the focus lays upon the exploration of a case as an instance, to be able to break down the issue(s) and to say something in general about it. In contrast to the intrinsic case study, the instrumental case study tries to generalize *from* the case. Both the intrinsic and instrumental case study would be fit for an evaluation research, because of the possibility to assign value to a certain set of experiences and activities.

3) Collective case study: Involves multiple cases to acquire some sort of representation. Although the aim is to obtain representative research sites, case study researches could face difficulties in the process of sampling, because of the access to sources. Case study focuses on the depth and limitations to access will not be regarded as representative.

This research aims at understanding the issues causing the lack of organisational integration in European maritime spatial planning to improve the overall institutional design within this planning practice. This means that the intent of the research is to break down the issues in a single case and to generalize from the case study. So, this thesis will make use of an *instrumental case study*. Hence, a case study that covers European maritime spatial planning on a transnational level is required. On that account a selection procedure to find the right case study is undertaken:

First, the European Commission has put together all nine European maritime spatial planning case studies, i.e. MSP in the Atlantic, Adriatic Ionian Sea, Celtic Sea, Black Sea, North Atlantic Region, Eastern- and Western Mediterranean, North Sea and Baltic Sea (European Commission, 2018c).

Secondly, it would be better to evaluate a case study that is an EU-funded project which is established to improve collaboration and the management of maritime space and since 2015 supports the execution of MSP legislation (European Commission, 2018c). This is a selection component since the research questions focuses on the improvement of organisational design in European MSP policy. Six different case studies remained, namely the Baltic Sea, the Black Sea, Celtic Seas, North Atlantic Region, North Sea and Eastern and Western Mediterranean.

Thirdly, a case study with in-depth analysis of MSP action plans and prospects was needed, instead of a plan which is still in progress, since it would be hard to find data regarding an unfinished MSP plan. This eliminated case studies which were established later than 2017, remaining The Baltic Sea, Black Sea and Celtic Sea.

Fourthly, since the case study would be an in-depth analysis of the situation and context it would be beneficial to the research if sufficient data is available, accessible and understandable, causing the exclusion of the Black Sea. Additionally, the key topic of this study is *cross-border* collaboration, hence essential to the case study. Therefore, the Celtic Sea is excluded and the choice for a Baltic Sea case study was made.

To conduct research on the Baltic Sea finding the correct MSP plan was essential. Regarding the Baltic Sea the following plans are distinguished (European Commission, 2018c):

- Plan Bothnia: Preparatory action on maritime spatial planning in the Baltic Sea (2010 – 2012). Completed: pilot plan, map service.
- BaltSeaPlan: Baltic Sea region programme *Introducing Maritime Spatial Planning in the Baltic Sea* (2009–2012). Completed: recommendations, pilot Maritime Spatial Plans, web-advanced MSP tool.
- Baltic SCOPE: Cross-border solutions in Baltic maritime spatial plans (2015 – 2017). Completed: topic papers, joint maps and online tool.

The choice for the latter is based upon the comprehensive information the MSP plan contains, since it has a foundation of multiple years in working around maritime spatial planning. Nonetheless, it is fundamental to acknowledge that previous plans (Plan Bothnia and BaltSeaPlan) do *not* focus or include the current focus of the EU cross-border collaboration and integration. Hence, project Baltic SCOPE is a first. The final selection element would be within the Baltic SCOPE project itself, since the project is divided in two case studies: Southwest Baltic Sea and the Central Baltic Sea, to accommodate a better fit of MSP plans regarding the involved national authorities. This research will focus on the Southwest Baltic Sea since the accessibility of English documentation, the presence of stakeholder conflicts and already established MSP plans in the region, which is less present in the Central Baltic Sea case study. This choice might add to the research difficulty to find answers for the main and secondary research questions. However, due to the stronger presence of conflicting interests, the Southwest Baltic Sea case study could function as the best representation of future obstacles and opportunities in transnational cooperation in maritime spatial planning.

The required data that provides information in order to answer the main research question and secondary research questions is hard to obtain from first hand. Since the research subject encompasses a huge area and a lot of involved stakeholders, it is nearly impossible to conduct a primary research within the given research period and financial possibilities for a master's thesis. Yet, the required secondary data is already available which makes it possible to execute the research despite the constraints in time, finances, research area and stakeholder participation.

### 3.1.3 Secondary data research

Data can be distinguished in two main types: primary data and secondary data. Whereas primary data entails observations, experiences and recordings from first hand, secondary data are written sources that are interpreting and recording primary data (Walliman, 2011). Secondary data encompasses information that previously has been collected for a different purpose, but is available for others to develop new scientific or methodological understandings (White, 2010; Irwin, 2013). The use of secondary data for research objectives, is an appropriate method whenever a large population, an extensive area or a comparison between places is in place (White, 2010).

With regard to the main research question: the component *extensive area* can be linked to the *transnational European* scale in the research question. Furthermore, to discover the challenges and opportunities in organisational integration, it is important to come to an understanding of how different governments or organisations operate on European level. Hence, the component of *comparison between places* can be linked to the European organisational integration.

In short, by using secondary data this thesis aims at coming to an understanding of the key elements to an effective transnational organisational integration in European maritime spatial planning. However, secondary data comes in many versions hence some specification of the used sub-methods is required. Policy documents, memos, literature and observation annotations, they all are types of qualitative data. The analysis of documents entails acquiring data from present documents, without the need for questioning, interviewing or observing people. Document analysis is able to disclose a lot about the people, organisations or social background in which they appeared (Bowen, 2009). Since policy documents gave insight in the perceptions and experiences of the involved stakeholders, quantitative data are able to emphasize these findings (Walliman, 2011). This thesis will mainly focus on documents analysis given that this will cover the main and secondary research questions at best. Nevertheless, statistics could be used to support or disprove the findings.

Second, the sources of secondary data could be *internal* as well as *external*; this research will aim at the external data sources. Internal data sources are often used when doing research within an organisation (like an internship), because of the reuse of previously acquired internal data, such as financial data, transport data and sales data sources (McQuarrie, 2006; Oxford Research Group Ltd, 2018). External sources of data are external to a research institution or organisation and are collected by a third party. They often include government data; national and international institutions; scientific journals; commercial research organisations and trade, business, and professional associations (McQuarrie, 2006; Oxford Research Group Ltd., 2018). Since this thesis is an independent research with no active involvement of any organisations or institutions besides the University of Groningen, this thesis will use external secondary data sources.

Third, the nature of secondary data often consists of *research data*, e.g. interviews; experimental studies; survey and questionnaires (Tedds, 2012), *routinely collected data*, e.g. demographic and health surveys; maps and metrological statistic (Hemkens et al., 2016), or *case data*, e.g., manuals and guidelines; media reports and public opinion polls; planning and evaluation documents; time-lines and periodic reports; policies and legal documents (Stake, 1995). This thesis will mainly focus on the case data.

Factors concerning this research, such as the extensive area (Europe), the comparison between places (national policies on transnational scale), provided theories (policy convergence, shared conceptualisation and transboundary organisations) to gain insight in the complexity of the research objective (improved organisational

integration) and the background (European institutional design of MSP), indicate that the use of a single case study based on secondary data is the best fitting research method. To underpin this combination, Stake (1995) and Yin (1994) state that document analysis as a research method, is especially relevant for qualitative case studies.

To summarize, the research methods for this research comprehends qualitative, external and case-based secondary data analysis and an in-depth, single, instrumental case study research. The combination of these two research methods will lay the foundation for the exploration and illustration of the challenges and opportunities in the current organisational integration of European maritime spatial planning.

In order to identify these challenges and opportunities in organisational integration, insight is required on which elements in *policy convergence*, *shared conceptualisation* and *transboundary organisations* are important. Consequently, these elements have to be evaluated in order to provide insight on how important the three key research components (see conceptual model, p. 38) are for organisational integration. This evaluating research approach is supported by Stake (1995), who argues that an instrumental case study fits an evaluation research, because of the possibility to assign value to a certain set of experiences and activities. To answer the main and secondary question(s) it seems to be fitting to assign value to the theoretical concepts provided by the secondary questions. Consequently, this research will use a Likert-type scale to assign value to the role of the three key research components: *policy convergence*, *shared conceptualisation* and *transboundary organisations*.

3.1.4 Likert-type scale

According to Likert (1932) the Likert scale measures the attitudes, opinions and beliefs in an ordinal way. The scale is commonly used in questionnaires to measure the experiences and attitudes of human beings. Although this case study assessment does not contain primary data in the form of a questionnaire, a certain type of Likert scale might provide insight of the value given by human beings on current organisational integration in European MSP. This Likert- type scale will be used to indicate the need and importance of the secondary research questions for effective transnational European maritime spatial planning, based on the collected secondary data. In this case, the value which will be given to the indicators of *policy convergence*, *shared conceptualisation* and *transboundary organisations*, is based on the best possible objective interpretation of the researcher. An overview of indicators is established, based on the discussed theories in chapter 2.4. Finally, the indicators of the three key research components are classified based on a five-point Likert- type scale (tables 3, 4 & 5). Yet, it unlikely that all three key research components (see conceptual model, p. 38) are involved in the same degree.

Since cultural resemblance recurs in both policy convergence (2.4.1) and shared conceptualisations (2.4.2), and it is strongly related to context, just like shared conceptualisation, the decision is made to assign the indicator *cultural resemblance among countries* to shared conceptualisation.

Policy convergence

Imposition	International harmonization	Regulatory competition	Transnational communication	Independent problem solving	Degree of conflicts in domestic policies
++	++	++	++	++	++
+	+	+	+	+	+
+/-	+/-	+/-	+/-	+/-	+/-
-	-	-	-	-	-
--	--	--	--	--	--

Table 3: Indicators of policy convergence  
Source: Author (2018)

## Shared conceptualisation

Establishment of mutual objectives	Previously cross-border experiences	Focus on small number of joint strategic plans	Similarity in planning concepts	Cultural resemblance among countries
++	++	++	++	++
+	+	+	+	+
+/-	+/-	+/-	+/-	+/-
-	-	-	-	-
--	--	--	--	--

**Table 4: Indicators of shared conceptualisation**

Source: Author (2018)

## Transboundary organisations

Information sharing	Administration sharing	Agreed joint rules	Combined organisation	Combined constitution	Organisational identity
++	++	++	++	++	++
+	+	+	+	+	+
+/-	+/-	+/-	+/-	+/-	+/-
-	-	-	-	-	-
--	--	--	--	--	--

**Table 5: Indicators of the influence of transboundary organisations**

Source: Author (2018)

The symbols correlate with an indication of the degree of presence of the indicators, namely:

++	= Very important	-	= Of little importance
+	= Important	--	= Unimportant
+/-	= Moderately important		

## 3.2 Strengths and limitations of the research methods

### 3.2.1 Qualitative secondary data

Whenever the choice is made for a research method, it is essential for the quality and value of the conducted research to be aware of the strengths and limitations of the research methods. As argued in chapter 3.1.3 secondary data research is one of the research methods which was suitable for this research topic. One of the strengths of secondary data is that it is already available and the thesis just needs a selection of appropriate data and analysis of the data (McQuarrie, 2006; Tripathy, 2013). Next to the time saving aspect, the required data is often quite accessible because nowadays the internet provides a relatively easy access to databases and policy documents; the chosen case study region, the Baltic Sea involves multiple countries which are fairly open in information and data sharing. Lastly, conducting research based on secondary data provides the possibility to base the thesis on a broad scope of previously collected and objective data. In addition, the data is very often professionally collected (instead of amateur questionnaires), and can therefore be considered to be more representative (McQuarrie, 2006).

However, it is important to consider that secondary data also has its limitations. For example, because of the use of secondary data, hence being collected for (likely) different research purposes (McQuarrie, 2006; Tripathy, 2013), it could be inappropriate for this specific thesis research purpose. Subsequently, it could be considered an obstacle for finding answers for this research question. In addition, because others required data for their research purposes, it is possible that there is a lack of sufficient information on diverse research features, like

the context in which the research is conducted (Irwin, 2013). Next to that, secondary data could come in another format than preferred, such as obtaining dry statistics versus preferred policy documents or vice versa. Finally, because of using data which is collected by others, it could be short of legitimacy or reliability and therefore cannot be regarded as the absolute truth (McQuarrie, 2006). To counteract this, a broad perspective and a significant variety of secondary resources will be used to identify the most important case-study perspectives.

### 3.2.2 Case study research

Beneficial to a case study research above the other research methods or designs is the possibility to do an in-depth and detailed analysis (Veenis, 2001). Furthermore, as Stake (1995) already argued, an instrumental case study is able to generalize *from* the single case study which will help to test and formulate (new) theories.

Naturally, case study research contains elements of caution too. The investigated case studies are limited in their sort of generalizations. Whether the research contains one of multiple case studies, both will face statements which cover theoretical generalizations instead of statistic generalizations (Yin, 1994; Van Bueren, 1999). According Van Bueren (1999), statistic generalization (cases = n) equals the research results to non-researched case studies. Theoretical generalizations focuses on the generalization of research results and their underpinning theoretical suggestions, which can be tested, designed or refined based on the case study research. In theoretical case study analysis it is wrong to make assumptions concerning non-investigated cases (Rosenthal & 't Hart, 1994; Veenis, 2001). In this case, theoretical generalization takes place in the form of theory refinement (Rosenthal & 't Hart, 1994). So, theoretical generalizations *could* apply to non-investigated cases, however the researcher is not able to draw assumptions based on the executed case study

### 3.2.3 Likert scale

Likert (1932) argues that the Likert scale faces advantages as well as disadvantages. Beneficial to the Likert-type scales is that they are often quit easy to construct and a universal survey method for data collection. Furthermore, the scales are most of the time straightforward and not difficult to read for the participant. Even better, the participant is allowed to react in a degree of agreement instead of forced to give a yes or no answer. Nevertheless, the Likert-type scales do face challenges too, such as a central tendency bias in which the participant is reluctant to agree on the extreme categories. Additionally, executed Likert-type scales are hard to reproduce since it frequently covers a personal expression of a respondent within a certain period of time (Sullivan & Artino, 2013). Whenever the scale includes individuals, the participant might please the experimenter to agree on statement they normally answer differently. This thesis however does not include a survey and individual responses are therefore not relevant to the case. One challenge that the researcher in this thesis might face though, is that the used Likert scale for this case study contains five options of choice (chapter 3.1.4). The Likert scale is regarded to be linear, which means that the space between each point is the same, but the scale is not necessary equal. This means that the assumption that the differences between responses is equidistant cannot be made, despite the numbers assigned to those responses are (Sullivan & Artino, 2013).

### 3.3 *Research ethics*

Research is only valuable if the research is conducted in an honest way (Walliman, 2011). It is important to recognize the presence of ethical issues and challenges in all research methods, especially when they include human subjects (Tripathy, 2013). Walliman (2011) even argues that although there might be no human participant in your research, still the integrity of your research can be questioned, regarding the collection, analysing and interpretation of data. In addition, the types of research methods and analysis of the data is influenced by the theoretical approaches used in the literature framework. Hence, these methods are part of a personal perspective and can therefore already be considered ethical biased (Walliman, 2011).

According to Tripathy (2013) the main concern in using secondary data regards the privacy of individuals. The amount of identifying information in secondary data fluctuates, which means that sometimes it is possible to identify the source or individual based on the available data. In this case, the researcher is required to explain why this identifying information is obligatory to the research and how the privacy can remain confidential. This thesis however, does not contain individual data of human subjects, since most of the data used are part of EU policy documents. These policy documents contain data in a general way, such as the description of activities of international organisations and administrative boards. Although a research can be executed on who is part of the organisations or boards, particular individual data will be very hard to identify since no specific names are attached to statements. Nonetheless, Tripathy (2013) and Walliman (2011) argue that whenever further utilization and analysis of data obtained by the internet is implied, authorization is required or the original data must be recognized (e.g. declare the sources in your research). Lastly, since secondary data is often acquired in a context with a different research purpose than yours (chapter 3.2), it is the responsibility of the researcher to be aware of this and to handle the obtained data appropriately for further analysis.

Regarding the case study research, few factors which are of influence on the design and execution of a case study are: the choice between structuring versus context and a single – versus multiple case study. Naturally, these choices correlate to the research question. However, when a choice is made for a multiple case study the tendency for structuring and generalizing case studies might cause forgetting the context of the case studies. Although this research entails a single case study, it still requires to be aware of the context. It is important to keep in mind to be aware of the particular case study characteristics, such as planning history, culture, and financial sources. Secondly, the risk of case study research is the selection, interpretation and representation of facts, which can be formed to the preferred outcome of the researcher ('t Hart, 1985; Van Bueren, 1999). As a scientific research method, case study research is not undisputed, because of the ambiguity of the research results, in contrast to the hard evidence delivered by quantitative and extensive research methods. This affects the trustworthiness and legitimacy of the statements made based on case studies. Yet, since the focus will be on policy documents which are often written by professionals, it amplifies the objectivity and legitimacy, although it should be proceed with caution.

It is argued that Likert-type scale reflects the experiences, attitude and characteristics of individuals collected by questionnaires. The research methods concerning the Likert-type scale used in this thesis strongly involves the degree of objectivity of the researcher instead of the values given by external participants. In short, the overall succession of the research methods strongly depends on the integrity, objectivity and capability of the researcher since all the research methods rely on secondary qualitative data.

### 3.4 Data collection

This research is based on secondary data, of which the collection should be well accounted for. This subchapter will provide a data collection of data used in the analysis of the case study, including where and when it was collected. This research aimed at gaining a broad perspective and insight of the data regarding the Southwest Baltic Sea case study. Hence, policy documents and websites of the involved national authorities were included in the data, as well as intergovernmental organisations such as the Helsinki Commission (HELCOM) and Visions and Strategies Around the Baltic Sea (VASAB). Additionally, independent organisations, partners or research institutes like the WWF and IMO, which are not in immediate relation with the Baltic Sea MSP practice were taken into account in order to acquire a broad and objective perspective.

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# 4

## **Research Findings**

## 4. Research Findings

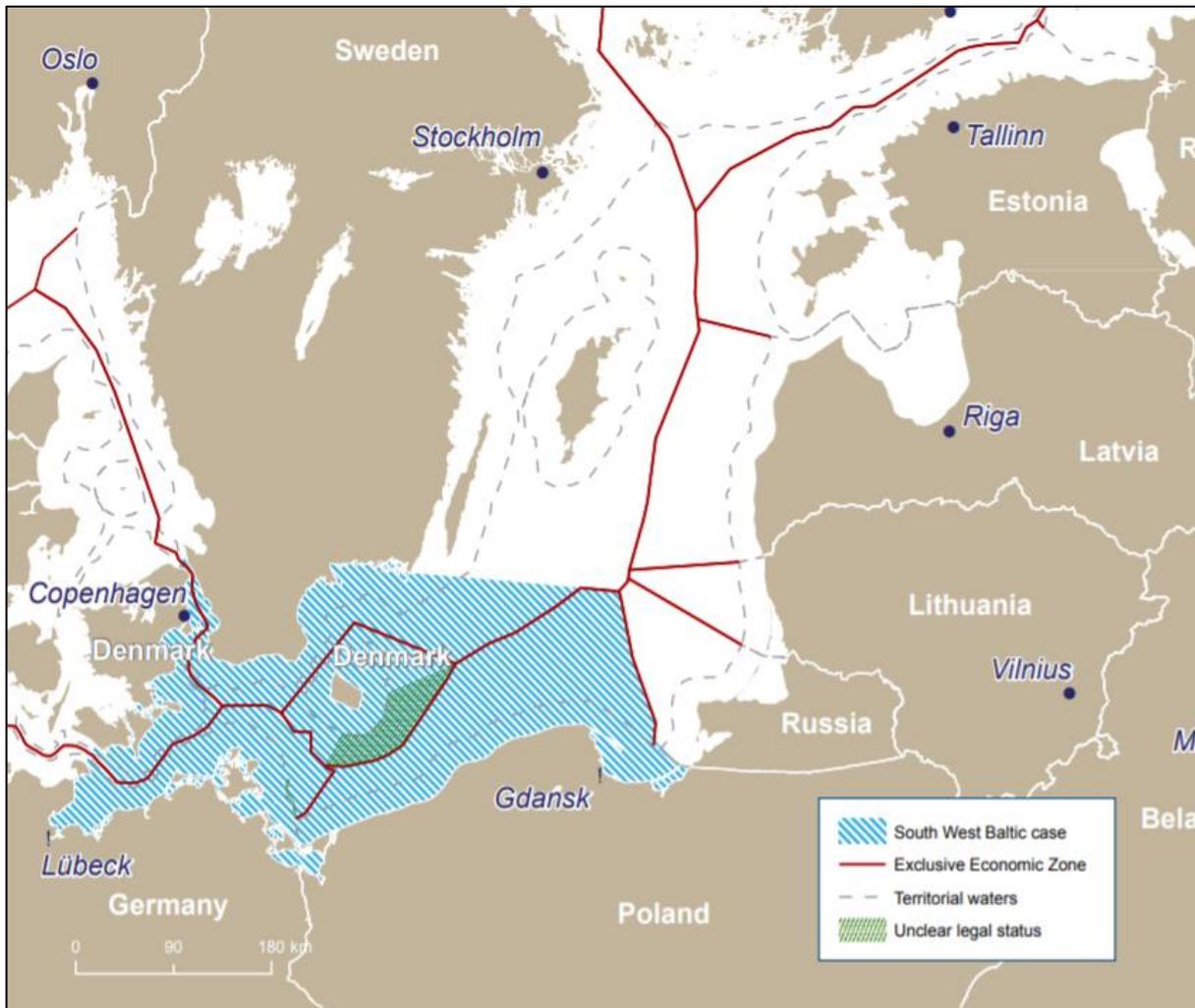
After conducting research in order to come to an understanding on how to improve organisational integration in cross-border/transnational cooperation in Southwest Baltic Sea MSP, an elaboration on the most important findings from the Southwest Baltic Sea case study will follow. First, a short introduction regarding the Baltic Sea and Southwest Baltic Sea (SWBS) in particular is required to get an insight of the context of the case study. Second, the used methods in the SWBS-case are accounted for since the used methods often lay the foundation for effective transnational cooperation (e.g. early stakeholder involvement). Third, the context and culture of planning differences among countries will be discussed. Fourth, an inventory of stakeholders and their engagement is required to be able to discuss the stakeholder involvement process in the SWBS case study. After covering the basis for a potential transnational cooperation, six transboundary focus-areas in the SWBS will be part of an assessment. This report will provide in the approaches the stakeholders took while aiming for cross-border cooperation. The focus-areas contain a brief description of the situation, where after a few findings are discussed. The main question asked in these area assessments is: *What key research component (i.e. policy convergence, shared conceptualisation, transboundary organisations) is required to implement the proposed solutions?* Lastly, some additional remarks stemming from the previous sub-chapters will be described. Based on the findings in this chapter, an overview of the score regarding the importance of the key research components could be constructed.

### 4.1 Introduction to the Southwest Baltic Sea area

The improvement of cross-border collaboration and cooperation of the Southwest Baltic Sea is a multifaceted planning process which will be exemplified in the next sub-chapters to come to an understanding of the impact of policy convergence, shared conceptualisation and transboundary organisations. Since this research has its focus on a specific case study, an introduction regarding the Baltic SCOPE project and more specific the Southwest Baltic Case study Area would be appropriate. First of all, the Baltic SCOPE project was a two years project (March 2015- March 2017) and a response on the EU Directive on MSP as well as the increasing challenges concerning the coordination of maritime activities and the sectoral interests to achieve sustainability of maritime resources (VASAB, 2018). Sustainability in the Baltic Sea is quit important since it is categorized as a Particular Sensitive Sea Area (PSSA). A PSSA requires special safeguarding since they proved to be of importance for ecological, socio-economic or scientific motives, while simultaneously being vulnerable for destruction by international maritime activities (IMO, 2018a). Hence, MSP would benefit the maintenance of the Baltic SPAA area. Although the Baltic SCOPE project has its basis in the previous MSP projects in the Baltic Sea area, it is the first project in which national planning authorities are brought together to discuss transboundary MSP matters (Baltic SCOPE, 2017; Nordregio, 2017a). Furthermore, the Baltic SCOPE project had its foundation in the cooperation and relations between the national planning authorities and wider participants to overcome transboundary issues, instead of being a research project directed by consultancy corporations or research organisations (Giacometti et al., 2017).

More specifically, the SWBS can be seen as a central area for MSP activities since it covers the EEZ as well as the territorial waters of Poland, Germany, Sweden and Denmark (figure 8) (Marine Regions, 2018). Besides the

EEZ and territorial waters, the Southwest Baltic case study comprehends also the internal waters like the Stettiger Haff/ Szczecin Lagoon, which is an important strategic access route to Szczecin and Świnoujście ports. In these internal waters, Germany and Poland have divided jurisdiction (Giacometti et al., 2017; Kull et al., 2017). Due to the multiple boundaries, this SWBS case study comprehends a complicated sea area with the involvement of all perspectives: geographic, environmental, economic, social and political (Giacometti et al., 2017). For example, shipping traffic in the Baltic Sea is a significant modality that takes place, particularly in the small straits of the western part of the SWBS region (figure 8) (SHEBA, 2016).



**Figure 8: Southwest Baltic Sea case study area.**  
 Source: Nordregio (2015a) & European MSP Platform (2018a)

Furthermore, the distance between the landmasses of involved countries is actually quite short, which means that the neighbouring countries border each other in EEZ and territorial waters (Marine Regions, 2018). Moreover, the most important harbours and cities can be found at the Southwest Baltic coast, hence the population of these areas is counted to be millions (Turlajs et al., 2016). Next to that, due to multiple sector uses in the Southwest Baltic (e.g. offshore energy production, mining of sand and gravel, infrastructure, shipping and fishing) this is an area of conflicts and competition. The competition and conflicts between sectors are with each other as with environmental preservation inside and outside the MPA's (Giacometti et al., 2017).

Besides these current and emerging *cross-sectoral* conflicts, there are also *cross-border* disagreements which need to be resolved. Since the SWBS case study has to work with a situation in which both existing plans

and emerging ones are present, the distribution of space for single utilization or interest is above all complicated (HELCOM, 2018). Transboundary and transnational MSP has to take into account the coherence of existing plans of e.g. German EEZ and territorial plans implemented by e.g. Land Mecklenburg-Western Pomerania (Giacometti et al., 2017). Apart from the transboundary and sectoral differences in (future) sea plans, economic conditions in the Southwest Baltic are also rather diverse. The GDP per capita is normally higher in bigger urban region, whereas rural regions are used to have a lower GDP per capita (Turlajs et al., 2016). In this case, cities like Copenhagen and Malmö differ in GDP per capita from places like, Gdynia, Szczecin and Gdańsk. Actually, this pattern is not only found in urban areas, but also in rural places (higher GDP in Denmark, western Germany and Sweden versus lower GDP in Poland and eastern Germany) (Turlajs et al., 2016). These differences in and between the Southwest Baltic countries form the basis for mutual challenges, not only with regard to the economic differences but also in demographics, unemployment and economic development and growth.

On the other hand, the transboundary dissimilarities do also provide the chance for increased and improved collaboration in maritime spatial planning, because of cross-border learning processes on how to tackle them. The gathering of the SWBS planning authorities and other engaged participants allows the identification and addressing of cross-border issues to the attention of the corresponding authority. It is however important to understand that the Baltic SCOPE project (hence, also the SWBS case study) is not supposed to develop a general transnational maritime spatial plan that is established by joint decision-making (Giacometti et al., 2017). Instead, the aim is that Baltic SCOPE offers the possibility to establish a platform for the involved and responsible planning authorities. This platform provides an exchange in information and knowledge to create an all-encompassing insight of present and potential activities in the Baltic Sea. Subsequently, the platform could be the foundation for collaboration and cooperation on important (transboundary) problems (VASAB, 2015), like lack of information, planning mechanisms or procedures used by partnering countries. The increase of integration, and in particular organisational integration, might improve the coherence and integration of (trans) national MSP and in the end, enhanced solutions for the (Southwest) Baltic Sea region.

#### *4.2 Southwest Baltic Sea case study: Methods and approaches*

The search for the challenges and opportunities in transnational cooperation starts with an insight of the used methods and approaches in the SWBS-project. The set-up of the projects often lays the foundation for the efficiency and results of the overall project. Thus, the used approaches and methods of stakeholders and national planning authorities during the SWBS-project are essential to the research.

Between March 2015 and March 2017 multiple gatherings between planners from the bordering national authorities took place with the intention to increase transnational collaboration in MSP (s.Pro, 2017; VASAB; 2018). Based on previously executed Baltic Sea plans (e.g. Plan Bothnia; BaltSeaPlan), the main sectors that required coherence in transnational MSP were identified, namely *fishing, energy, shipping and environment* (European MSP Platform, 2018a/2018b; Nordregio, 2015a; VASAB, 2018). A group of planning experts identified transboundary focus-areas where the development of sectors might collide and therefore affect bordering countries. The focus on smaller areas was specifically chosen, as planners tried to provide concrete examples that might offer assistance in moving the cross-border dialogue forward to facilitate transnational MSP (Nordregio, 2015b). Since the SWBS-project had the intention to identify transboundary issues and come to concrete resolutions, the applied

methods tended to be flexible and are developed during the collaboration and planning process (Nordregio, 2015b). A step-wise approach in the SWBS case study is used, in order to exchange information and inform stakeholders by using the following planning tools:

- Use of topic papers: these topic papers contain the most recent developments and trends of each key sector (shipping, fishing, energy and environment). These papers were created to increase awareness and understanding of the spatial requirements of each sector, including synergies and conflict areas. Prior to the stakeholder workshops/conferences the topic papers were distributed in order to receive feedback and input, so they would provide a solid foundation in guiding discussions during the conferences (Giacometti et al., 2017; European MSP Platform, 2018a/2018b).
- Stakeholder engagement: national stakeholders were actively involved by each country. First, a national meeting had to inform and update the stakeholders with regard to possible transboundary MSP issues and activities. Later on, a stakeholder conference offered the opportunity to main stakeholders to create insight in MSP processes and sectoral interests of other countries and stakeholders (European MSP Platform, 2018a).
- Matrix of interest: the matrix was designed to illustrate the national sectoral interests in the transboundary focus-areas for both present and future situations. Hence, a clear overview could be provided to show the differences in main concerns and potential conflicts between countries (see appendixes ii, iii & iv) (Giacometti et al., 2017; European MSP Platform, 2018a).
- Bi-lateral and tri-lateral meetings: working in a smaller group of stakeholders/project partners with relevant planners tended to be more efficient for establishing solutions in the focus-areas. These meetings provided opportunities to address current and potential sectoral plans and national knowledge and regulations among others. Two kinds of meetings can be distinguished:
  - 1) Practical approach: based on the topic papers and matrix of interest, transboundary focus-areas were identified, so concrete issues could be addressed during these meetings.
  - 2) Bilateral dialogue: Some areas proved to be more politically sensitive or difficult to categorize in a matrix. Political dialogue was necessary and ministries/bodies that influence MSP were asked to engage and participate in the future until concrete initiatives were provided (Baltic SCOPE, 2017; Nordregio, 2017b).

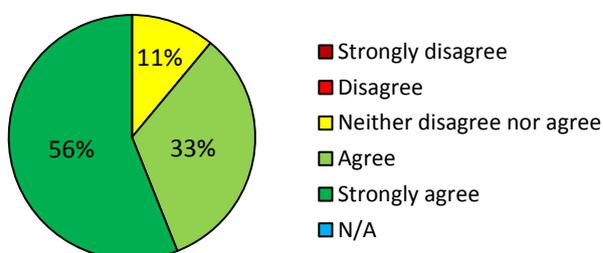


Figure 9: (Dis) agreement of stakeholders regarding the focus on sub-areas and working in bi- and trilateral meetings to establish solutions in the SWBS case study. Source: Kull et al. (2017)

Figure 9 shows the perspective of stakeholders and their (dis)agreement on the approach of bi- and trilateral meetings to overcome the cross-border and cross-sectoral MSP problems in the SWBS- area. As illustrated by

figure 9, almost 90 % of the stakeholders perceived the approach taken in the SWBS case study in order to develop solutions for their problem-areas as positive.

- Meetings between partners/planners: during the Baltic SCOPE process, these meeting were planned on a regular basis. Hence a forum for interaction and discussions established, where knowledge and information was shared to come to transboundary solutions. This encompasses partner meetings (SYKE, Nordregio and HELCOM), stakeholder conferences, the bi- and trilateral meetings and MSP Forums (Swedish Agency for Marine and Water Management - swAM, 2015a; European MSP Platform, 2018a).

#### 4.3 Stakeholder collaboration and participation

The SWBS project called for a gathering of the main stakeholders since coherence and cooperation of transnational MSP was – and still is – the goal. Multiple stakeholder were identified, which can be distinguished in various categories: national planning authorities, intergovernmental organisations and research institutes. Furthermore, besides the formal organisations a variety of agencies and authorities offered assistance to the SWBS case, within the Baltic SCOPE project. An overview of the main stakeholders and participants has been identified, which are illustrated in table 6. The lead project partner of the Baltic SCOPE project is the Swedish Agency of Marine and Waters Management (swAM,, 2015a; VASAB, 2018).

Country	Planning Authority
Denmark	Danish Maritime Authority, preceded by the Danish Nature Agency
Poland	Maritime Office in Szczecin
Germany	Federal Maritime and Hydrographic Agency
Sweden	Swedish Agency for Marine and Water Management (swAM)
Participants	
Intergovernmental organisations	Visions and Strategies Around the Baltic Sea (VASAB) Baltic Marine Environment Protection Commission – Helsinki Commission (HELCOM)
Research institute	Nordregio ; Finnish Environment Institute (SYKE)
Supporting agencies	Danish Agrifish Agency / Danish Coastal Authority / Danish Energy Agency / Danish Environmental Protection Agency / Maritime Institute in Gdansk

**Table 6: Participating authorities in the Southwest Baltic Sea case study.**  
Source: European MSP Platform (2018a) & VASAB (2015). Modified by author (2018).

A fundamental part of the Baltic SCOPE is the involvement of relevant stakeholders in a transboundary dialogue in order to improve the MSP in the Baltic Sea (HELCOM, 2016; European MSP Platform, 2018a). On the national level stakeholder participated in workshops and thematic meeting and on transnational scale through a stakeholder conference (European MSP Platform, 2018a). These stakeholder were often representatives of the planners, sector experts, the public authorities and private companies (especially the energy sector) (Giacometti et al., 2017). At the national level however, the stakeholder involvement process is approached differently, which might be explained by the variety of planning histories, cultures and context in the EU (HELCOM, 2016). Each country invited a variety of stakeholders in diverse engagement activities to ask for their contribution and create dialogue. The SWBS project influence on stakeholder engagement is outlined in the following paragraphs.

Denmark: *First time for stakeholders to contribute actively in (SWBS) MSP processes.*

- Most relevant governmental bodies and agencies were the focus in stakeholder involvement. These Danish supporting agencies (table 5) are linked to the main topics in the SWBS project (Fishing, Energy and Environment) and are required to participate actively.
- During the project period a shift in Danish administrative structure for MSP took place, which resulted in the engagement of both public agencies: from the *Danish Nature Agency* to the *Danish Maritime Authority* (Balti SCOPE, 2016c).

Germany: *Updating stakeholders on current MSP processes and existing SWBS cross-border issues.*

- Stakeholder involvement was executed via telephone interviews. These were held by individual spokespersons whom represented the public authorities, instead of the organisation of stakeholder meetings.
- Previously to the phone calls, the stakeholders received an update on the current and MSP processes in progress, including the emerging Baltic SCOPE transboundary issues. The intention of these interviews was to create understanding and momentum about MSP and the necessity for transboundary cooperation and at the same time receiving their input to create progress in the development of planning solutions (Baltic SCOPE, 2016c; Giacometti et al., 2017).

Poland: *SWBS project advocates and improved existing national stakeholders' engagement process.*

- The 1<sup>st</sup> National Stakeholders' Meeting is committed to enlarge the transnational discussion among Polish MSP authorities. Representatives of sectoral organisations, researchers, governmental bodies and main operators were gathered.
- This meeting aimed at informing stakeholder about transboundary MSP processes in the SWBS and the identification of the main issues in the Polish key focus-areas. Furthermore, the knowledge on Polish MSP plans in bordering countries was determined. Additionally, information on national plans in progress was provided to the stakeholders (Baltic SCOPE, 2016c; Giacometti et al., 2017).

Sweden: *Applying existing national processes to deliver contribution to SWBS case.*

- A series of thematic group meetings were set up to collect input and provide information from the participating stakeholders
- Governmental authorities were the main participants together with county administrative boards, local and regional councils' spokespersons.
- The focus of the meetings was mainly based on national planning issues. Nevertheless, cross-border problems were addressed if appropriate in the meanwhile offering a sectoral perspective and gain insight in potential synergies and conflicts. The information collected during these meeting were brought up in SWBS meetings as planning evidence.
- Lastly, the findings and maps were also offered to a more wide-ranging public in a broader national stakeholder meeting. This meeting also entailed non-authority stakeholders (Baltic SCOPE, 2016c; SwAM, 2018).

In order to achieve effective collaboration in transnational cooperation, an early involvement of the stakeholder is essential to the planning process and efficiency. The following planning process is carried out by the national planners in the SWBS case study, starting with the identification of potential synergy and conflicting areas and ending up with the search for resolutions and conceptualising recommendations (Giacometti et al., 2017).

At the start of the transnational MSP process, a geographic approach was chosen in the SWBS case: a search for solutions in cooperation and coherence of sectoral interests in smaller transboundary focus-areas. In the first two phases of the project the most significant issues were identified: the identification phase and preparatory phase.

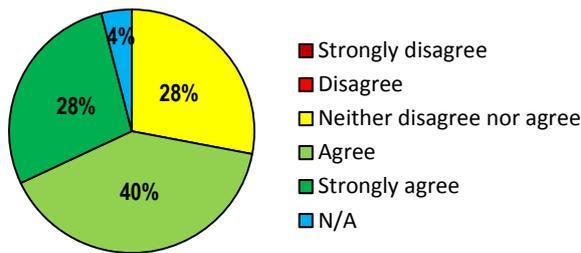
The identification phase had the main goal to engage the key stakeholders into a transboundary and cross-sectoral dialogue (Baltic SCOPE, 2016b).

The preparatory phase provided the partnering authorities insight in each other's institutional, legal and governance frameworks, while giving an update on existing MSP processes (Baltic SCOPE, 2016c; Giacometti et al., 2017). Both phases are characterized by the acknowledgement of the focus- areas which will most likely provide synergies as well as conflicts in the SWBS region, among other issues that call for cooperation. The development of the matrix of interests, the topic papers, the bi- and trilateral meetings and a stakeholder conference on 27-28 January 2016 in Malmö aimed at overcoming these issues in the identification- and preparatory phases (Baltic SCOPE, 2016a; Giacometti et al., 2017).

The last two phases of the project encompasses the solution phase and conclusion phase: in order to promote possible synergies and tackle conflicts in the cross-border focus-areas and sectors, national planners aimed at coming up with resolutions and recommendations. By providing dialogue, open discussions, the bilateral and trilateral gatherings and independent/single tasks assigned to particular project partners, national planners attempted to come to solutions (Giacometti et al., 2017).

#### 4.4 *The inevitable role of context and culture in the Southwest Baltic Sea*

Although every sea basin is embedded in its own context, sea basins often have several issues in common. Subsequently, the SWBS-case study might provide a benchmark on how to handle these issues in the future (Nordregio, 2017c; European MSP Platform, 2018a). Project partners came across structural obstacles in order to obtain coherent transboundary MSP, such as different governance structures of sovereign nations (Nordregio, 2017c). They have their own planning systems, interests and administrative systems (appendix i). The governance systems in MSP differ vertically (level of accountability: national, regional or local), but also horizontally: MSP is in some countries a division unit of a ministry, yet in other countries MSP is considered a sub-unit of an agency (e.g. Germany's *Federal Maritime and Hydrographic Agency and swAM*) (Kull et al., 2017). Another example, the local governments in Sweden are accountable for planning in territorial waters (swAM, 2015b), but in Denmark the national state is responsible for MSP (Danish Maritime Authority, 2017). Not only the governance structures increase organisational integration, different phases of national processes challenge collaboration too (figure 10). Even more, the different point of views in transboundary discussions are often a result of being in different phases in the MSP process (Kull et al., 2017; Nordregio, 2017b). In addition, the differences in legal status of plans (binding versus guiding) and different timeframes of planning processes between countries are adding to the complexity of transnational cooperation.



**Figure 10: Opinions of project partners regarding the question if being at different stages of national MSP processes did challenge collaboration.**

Source: Kull et al. (2017)

Next to that, the differences in planning perspectives among partnering countries affects the stakeholder engagement and how they are mobilized (Giacometti et al., 2015). With regards to the differences in national MSP processes, the level of interest among stakeholders varies, resulting in an unequally divided stakeholder motivation. For instance, when the other SWBS countries had already set up stakeholder events and activities, the mobilization of Denmark was not even completed because Denmark was at an earlier stage than the partnering countries (Baltic SCOPE, 2016c). Additionally, language barriers is a significant aspect with regard to stakeholder engagement and their mobilization (Baltic SCOPE, 2016b/2016c; Kull et al., 2017). Language barriers resulted in the difficulty to explain national planning structures/systems in a foreign language (in this case, English) and misinterpretation, since sometimes discussions got lost in translation. Furthermore, terminology got translated differently or is regarded to be something else in a different country. Besides the more technical terminology, it is also important to come to a mutual understanding of the term MSP, why it is so important and how MSP will affect their own sectors and transboundary cooperation (Baltic SCOPE, 2016b/2016c). A difference in planning perspective can be illustrated by a SWBS conference where a Swedish fisheries expert made a remark that fisheries are dependent of the location of fish species, and that planners cannot draw lines and place fish in a certain zone (Giacometti et al., 2017). This implies that the role of today's spatial planning is not commonly understood. In order to tackle these stakeholder perceptions intense discussions are necessary. Also, the capacity of institutions, time frames, finances and other resources are factors that contribute to the motivation and engagement of stakeholders. Nevertheless, these are also quit often dependent of the possibilities the national state provides.

Furthermore, planners had a hard time to work objectively on the transboundary problems, because of their own national interests and priorities. Not all planners were used to approach the planning issues from a holistic perspective, consequently undermining other sectoral needs (Baltic SCOPE, 2016b/2016c). Hence, the construction of a transboundary perspective among sectors in a shared sea basin was challenging. This acknowledgement of lack of cross-sectoral knowledge resulted in the gathering of existing spatial data and information. Nevertheless, despite the fact that national planners might offer concrete solutions through collaboration and create mutual cross-border and sectoral understanding, they do not have the authorization to resolve MSP issues which required a higher level of political involvement (Giacometti et al., 2017).

#### 4.5 Assessment of Southwest Baltic transboundary focus-areas

This sub-chapter provides an in-depth analysis of the transboundary focus-areas within the Southwest Baltic case study. These focus-areas need collaboration and cooperation between member states of the EU and are important from a cross-border perspective, namely *the Pomeranian Bay, Adlergrund, Kriegers Flak, Southern Middle Bank, Öresund* and the *Grey Zone* (figure 11) (European MSP Platform, 2018a). These focus-areas will be assessed individually, whereas the centre of attention lays upon the main points of cross-border and cross-sectoral discussion and the provided solutions. In order to come to an understanding of the importance of *policy convergence, shared conceptualisation* and *transboundary organisations* in transnational cooperation, an assessment of the presence of these latter three research elements in the focus-areas will be conducted.

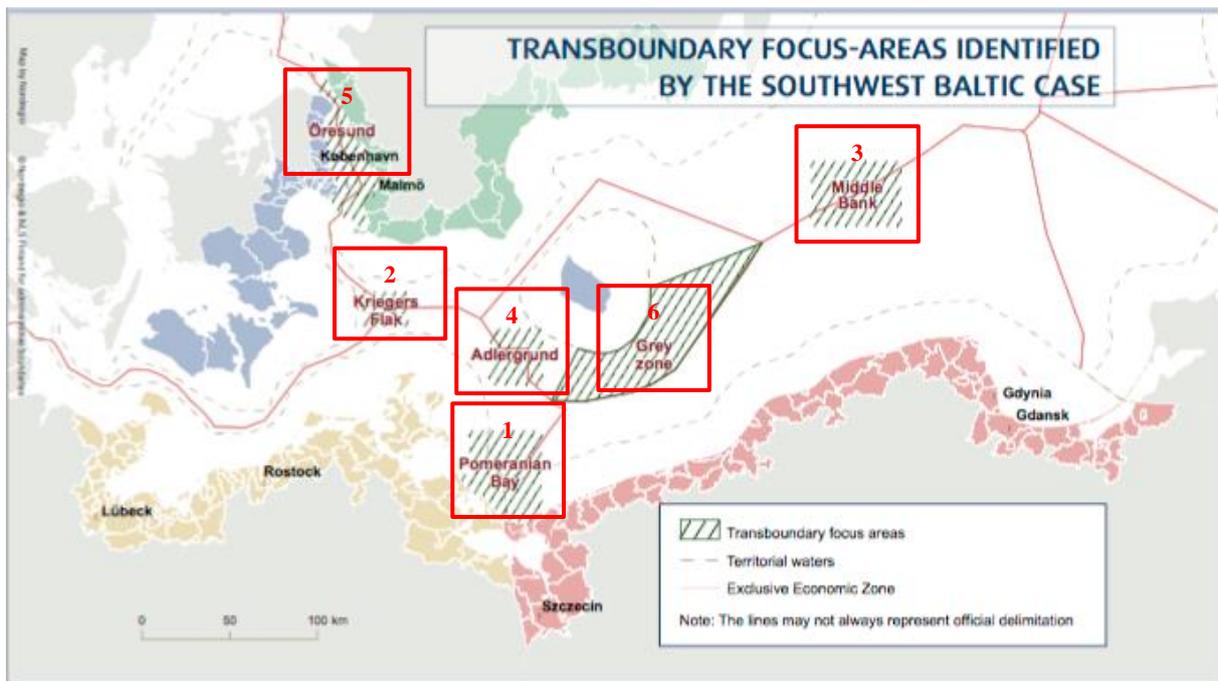


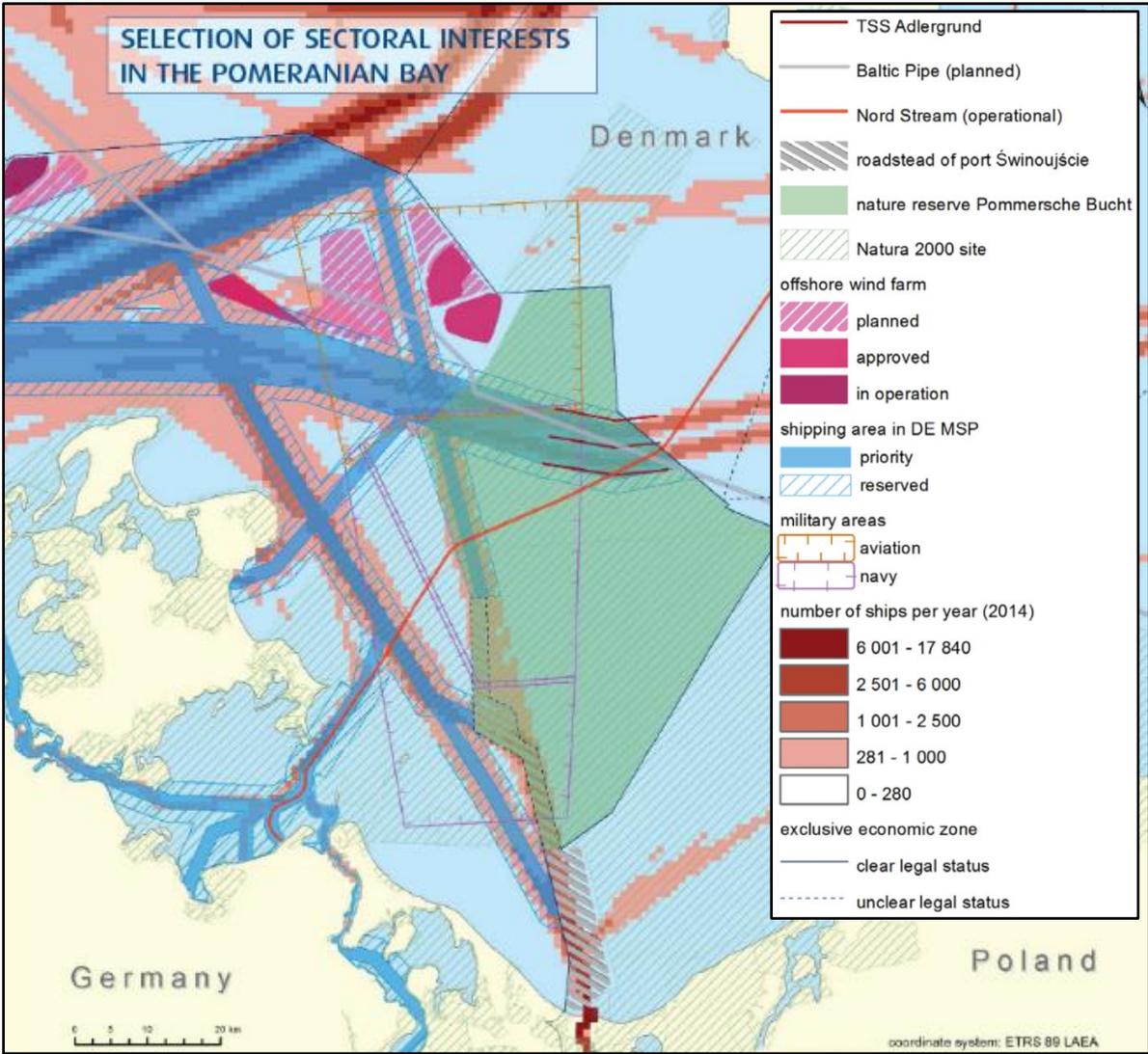
Figure 11: Transboundary focus-areas identified by the Southwest Baltic case study. Source: European MSP Platform (2018a). Modified by author (2018).

##### 4.5.1 The Pomeranian Bay

The various sectors and activities in the Pomeranian Bay were discussed in Berlin, where a bi-lateral meeting between Germany and Poland occurred since it is a sea area shared by the two states (Giacometti et al., 2015; HELCOM, 2018). Multiple transboundary and cross-sectoral difficulties are present:

First of all, Poland and Germany both claim jurisdiction in the northern harbour approach of Szczecin and Świnoujście (Käppeler et al., 2012). These cross-border understandings require further development and discussion. The level of difficulty heightens due to the fact that the Polish are convinced the northern harbour approach is part of their territorial sea, while Germany is certain the area belongs to the German EEZ (Käppeler et al., 2012). Secondly, Natura 2000 covers a large part of the Pomeranian Bay (Figure 12), because of the habitat of marine mammals, feeding and resting grounds of seabirds and the presence of flatfish species (WWF, 2005). In this case, differences in the implementation of Natura 2000 regulations between Germany and Poland have been found which add to the complications of transboundary procedures and projects (Fock, 2010). Thirdly, the sea

ports in the Pomeranian Bay have a large economic and social contribution in the region. Maritime transport is important for the economic development of Germany as well as Poland (Turlajs et al., 2016). The contradicting point of views of environmental protection and economic development lay often the foundation for MSP conflicts, particular in this case: the nature protection area from Germany, *the Pommersche Bucht*, partly covers the Polish approach fairway to Świnoujście and Szczecin (figure 12) (Käppeler et al., 2012; Giacometti, 2017). The regulations for nature protection areas may however contribute to the complexity of dredging operations in order to maintain or improve the northern harbour approach (Bundesamt für Naturschutz, 2015). Next to that, there is some anxiety that concerns the military training and shipping activities, since they are regarded to have different precedence in the use of the area (e.g. temporary closure due to shooting practices) (Käppeler et al., 2012).



**Figure 12: Pomeranian Bay: overview of overlapping sectoral interest.**  
 Source: Maritime Office in Szczecin (2016), in Giacometti et al. (2017). Modified by Author (2018).

In short, all the smaller issues relate to the key issue: the access to the harbours in the Pomeranian Bay. These specific issues mentioned above require consultation on a more suitable regional scale, although the project started discussion on a national and bilateral level between involved ministries from both Germany and Poland (meetings under the umbrella of the Baltic SCOPE project) (Giacometti et al., 2017). Although solutions should be explored on regional level, the political decisions on (trans) national level would benefit the coherence of MSP plan in the

Pomeranian Bay. Appendix ii illustrates a more detailed overview of overlapping interests (conflicts, competing or co-existence) in the Pomeranian Bay. The solutions proposed in appendix ii show the need for policy convergence, shared conceptualisation or transnational organisations to improve (trans) national cooperation. A few of these indicators could be subdivided among these three research components. Take into consideration that the indicators illustrated in the transboundary focus-areas are analysed and not yet evaluated. Hence, the following descriptions only provide suggestions on how issues could be (partly) approached by making use of indicators:

Solution regarding for **policy convergence**:

1. *The prescription of the implementation of certain regulations in future Polish policies to think about Germans proximity of Nature 2000.*

Characteristics of **imposition** and **international harmonization** can be traced back to this decision making, since EU Member States agreed on establishing GES in 2020 and executing the MSP Directive and therefore have to act accordingly. In this case, the environment is a significant aspect which seems to be undermined in the future, hence Poland needs to take cross-border and cross-sectoral issues into consideration in their national maritime plans.

2. *National solutions are required in EIA and national MSP processes.*

Problems occur between Polish Natura 2000 and Polish extraction of raw material when deposits are extracted from nature preservation areas. The call for internal EIA policy adjustments as well as adjustments on project level, relates to the indicator of **independent problem solving**.

3. *Increasing the availability of information regarding military exercises obstructing the ports.*

Transnational communication, in particular **transnational problem solving**, is linked to this decision. The northern harbour approach is in the German military area, subsequently the access to the ports of Świnoujście-Szczecin is impeded during shooting practices. So, there is a parallel problem, which needs a common developed solution. The exchange of information concerning military exercises would be beneficial to come to a solution, such as a possible access to ports in the area during these exercises.

Solutions regarding **shared conceptualisation**:

4. *The call for deliberation and definition in both German and Polish national MSP processes; Defining common gate for grid infrastructure and pipelines between German and Polish submarine, cable and pipeline stakeholders.*

Even though infrastructure and pipelines could co-exist, in order to find a mutual accepted location of this infrastructure, consultation between German and Polish stakeholders is required. To come to an understanding of each other's planning intentions, finding **similarity in planning concepts and establishing mutual objectives** might help. This is also applicable for the required corresponding definitions in national MSP processes. Both indicators might provide alignment in the (interpretation of) objectives among national processes, hence decrease the potential of collision in the process of finding a common entry.

5. *Germany keeps providing entrance to the existing ferry lines from the port of Świnoujście, hence asking collaboration between German and Polish marine transport routes.*

This co-existence is based on agreements made in previous plans, hence **previously shared cross-border experiences** do provide the foundation for the current continuation.

6. *The decision to focus on sub-projects which could be executed on regional scale.*

The issues in the Pomeranian Bay have to be addressed on (trans) national level since the key issue which is the access to the harbours, is the main reason for the smaller issues. Even though the main issue requires discussion and consultation on a higher political level, in the meantime the execution and solving of conflicts would be more effective when focus lays upon **a small number of joint strategic plans**<sup>3</sup>.

Solutions regarding **transboundary organisations**:

7. *The BalticPipe project which concerns multiple countries (Norway, Denmark and Poland) is crossing German Natura 2000, shipping routes and offshore wind farms.*

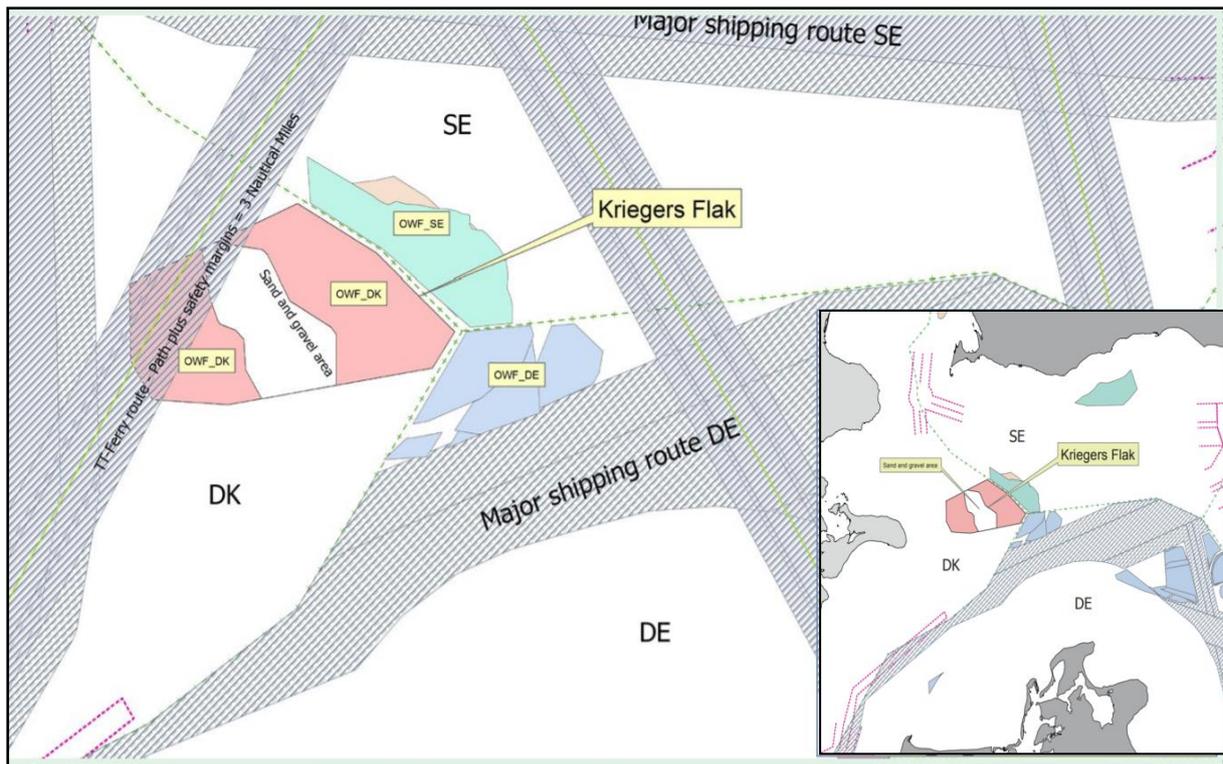
The competing German Natura 2000 and Polish Submarine, cable and pipeline stakeholders requires discussion and solutions transnational level. Furthermore, Germany and Poland need to agree on the definition and positioning of the gate at the German/Polish border. Both levels of decision-making require **agreed joint rules** and understanding and agreement on **similarity in planning concepts (shared conceptualisation)**.

#### 4.5.2 *Kriegers Flak*

In the Southern Baltic Sea, where the EEZ of Sweden, Germany and Denmark come together, is Kriegers Flak located (figure 13). The focus-area is a large submarine bank, which is about 7 km by 18 km. Although Kriegers Flak is planned for a large part already, due to the physical geography, this cross-border area is regarded to be suitable for extensive offshore wind farms (Energinet.dk, 2015a). Besides the interest of the energy sector, there are other sectoral interest like shipping, fishing and the sand extraction from Denmark (Vattenfall Group, 2011; Danish energy Agency, 2017). In contrast to Germany, where fishing and shipping activities are declined due to wind turbines, Denmark allows most of the time the coexistence of fishing and shipping activities within the operational phase of offshore wind farms (Giacometti et al., 2017). Denmark claims in a background paper of their EIA report which concerns a navigational risk assessment, that Kriegers Flak's (wind farms) influence on shipping is quite limited (Energinet.dk, 2015a). The environment in the vicinity of Kriegers Flak is occupied by traffic, which pass at a safe distance from present and potential offshore wind farms. In more detail, a major part of ships passing Kriegers Flak (e.g. Trelleborg – Rostock ferry route) transport oil and various other harmful material (Vattenfall Group & Swedish Energy Agency, 2008). This means that the procedures concerning safety and mitigation are of importance to diminish the potential risks of environmental disasters. To ensure the safety of the wind farms and shipping, an importance planning objective is to maximize the zone for offshore wind farms in the currently planned areas (Giacometti et al., 2017).

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<sup>3</sup> The indicator *focus on small number of strategic plans* does not exist multiple times in one transboundary focus-area assessment. Since it entails a general observation of the overall planning approach, the use of this indicator is not present several times in one case study: project partners focus on a smaller number of strategic plans or they do not. Even though this indicator is one that can be assigned only once to each focus-area, it is significant with regard to the efficiency of cross-border cooperation.



**Figure 261 Kriegers Flak: overlapping interest on the Danish side between offshore wind farms and the TT ferry line Trelleborg – Travemünde.**

Source: Danish Maritime Office (2015) in Giacometti et al., (2017). Modified by author (2018).

Despite the fact that Kriegers Flak is not a large fishing area on a transboundary level, it is nevertheless an important area for Danish fisheries. These fisheries are affected due to the building of offshore wind farms (Leonhard et al., 2013). On the other hand, by restraining the activities in the fishing and shipping sectors for this area it might turn into a location for fish reproduction. This could be beneficial for the fishing sector in the Baltic Sea on the long term (Giacometti et al., 2017). Furthermore, how the sand and gravel extraction in Denmark affects the environment (fishing and Natura 2000) is hard to foresee, but is in comparison to other cross-border areas assumed to be small (Leonhard et al., 2013). Next to that, implementation of explicit licence regulations such as noise limitations, possible negative consequences on the migration of harbour porpoises<sup>4</sup> and (protected) birds caused by the build of off shore wind farms could be mitigated (Leonhard et al., 2013).

According to planners, the most significant challenges in the Kriegers Flak are tied to the need for earlier and more integrated cooperation and deliberation on project level: like the enlargement of grid connections or the location and concentration of wind turbines in the vicinity of the borders (Energinet.dk, 2015b). Another example is the currently planned pipeline which crosses areas with already build or potential wind farms might cause another challenging situation (Dong Energy, 2015). Also, coordination and cooperation is required on the Danish part of Kriegers Flak which is set aside for the sediment extraction. These resources are designated to the Belt Tunnel-construction (a train and car tunnel under the Fehmarn Belt) (Vattenfall Group, 2011). Lastly, the major transnational Swedish shipping line has the potential for relocation (Baltic SCOPE, 2016b). Since a major part of Kriegers Flak is planned and numerous sectoral interests are in play, the choices for solutions is somewhat restricted. Trilateral meetings between Sweden, Denmark and Germany were held to discuss multiple issues of

<sup>4</sup> Porpoises = bruinvissen

Kriegers Flak in more detail. During this meeting in Hamburg, planners from the three planning authorities exchanged information, identified mutual issues and various solutions were established (Giacometti et al., 2017).

Appendix iii illustrates a more detailed overview of the identified overlapping interests and their status (conflict, competing or coexistence) in the Kriegers Flak. Although during the trilateral meeting a number of solutions were presented, a few propositions were given priority which are identified as the indicator **focus on a small number of joint strategic plans – shared conceptualisation**. These propositions have to be taken into consideration by planners operating on Kriegers Flak. Additionally, multiple other solutions are extricated and assigned to various indicators of policy convergence, transboundary organisations and shared conceptualisation:

Solutions with regard to **policy convergence**:

1. *The offshore wind farms of Sweden, Denmark and Germany might disturb the radar signals of their own national used radars.*

Adjusting or replacing the currently existing radar installations with new radio installations should take away the disturbance issue. Replacements could be gap fillers, relay stations or repeaters. In this case **independent problem solving** seems to be fitting, since the adjustments might cause transnational convergence if the various national authorities decide independently from each other to use similar solutions for the mutual issue.

Solutions with regard to **shared conceptualisation**:

2. *Consideration of migration routes when assigning offshore wind farm sites and the establishment of common principles on safeguarding bird habitats.*

HELCOM recommended to find mutual principles to protect the bird habitat, which requires an understanding and **similarity in planning concepts and establishment of mutual objectives** to come to a joint planning approach for the preservation of the bat and crane habitats/migration.

3. *Priority: Collaborative planning might be improved by the development of a mutual visualisation tool to increase understanding of various planning approaches. Additionally, enlarges the knowledge of current and potential future conditions of the Kriegers Flak.*

Since the Swedish, Danish and German national planning authorities work on different wavelengths and have different approaches to the /Kriegers Flak environment, establishing **similarity in planning concepts** seems to be important. **Previous cross-border experiences** will contribute to the national cooperation among the authorities. Furthermore, indicators like transnational communication (policy convergence) and administration sharing (transboundary organisations) will complete the required approach for this prioritized objective.

Solutions with regard to **transboundary organisations**:

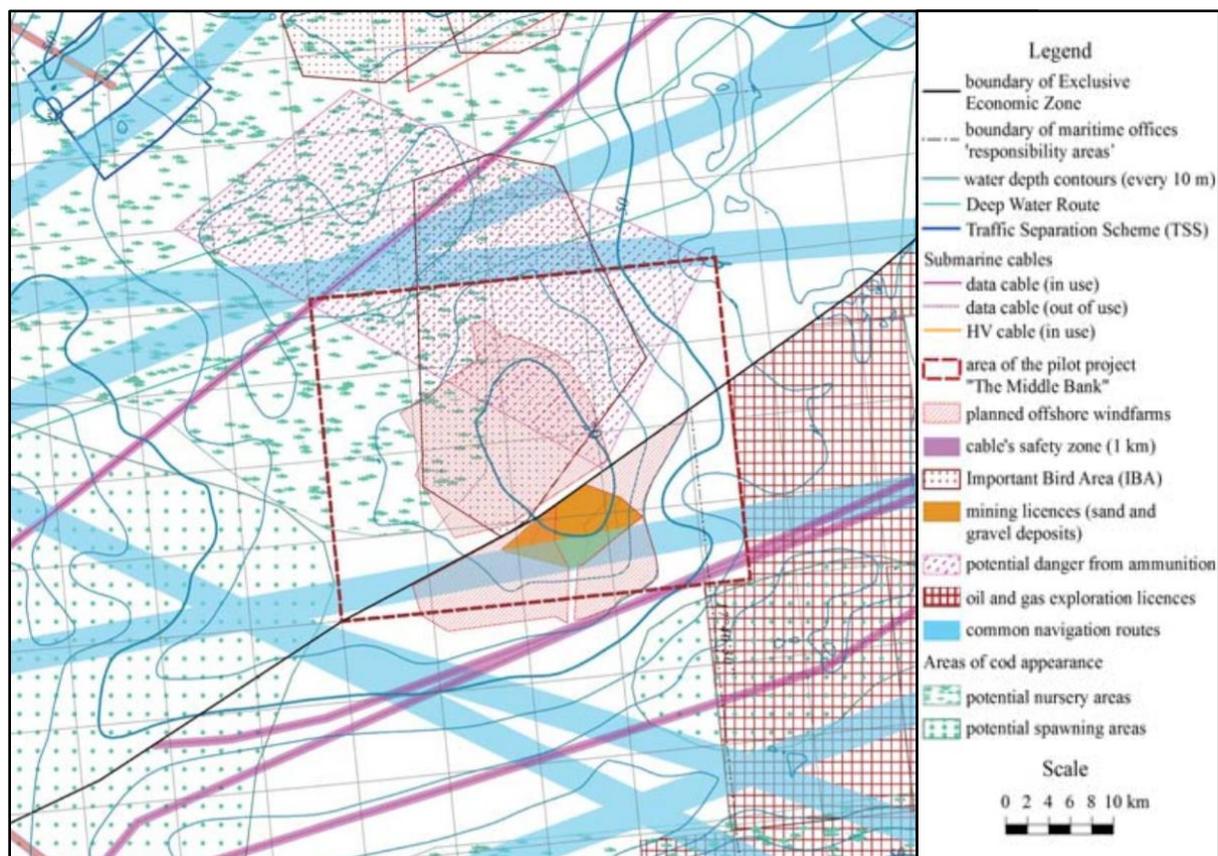
4. *Priority: The rerouting of the ferry lane between Trelleborg (Sweden) and Travemünde (Germany) before the construction phase of the off shore wind farms near Denmark starts.*

In order to reroute the ferry lane, cooperation between Sweden and Denmark is required, to be able to let Denmark set up offshore wind farm sites in the Kriegers Flak area. The main solution for this is related to

**agreed joint rules.** These rules aim for improvement of synergy and efficiency of specific MSP aspects based on the establishment of common protocols and procedures concerning particular areas of activity (Kidd & McGowan, 2013). To succeed the replacement of an important transboundary ferry lane, a shared rule system to improve cross-border collaboration seems to be the most important aspect.

#### 4.5.3 Southern Middle Bank

The Middle Bank is regarded to be the largest shallow area, since it is up to 13 meters deep (Oceana, 2013). Because of the size, the Middle Bank is split into the Northern Middle Bank and the Southern Middle Bank, although the Southern Middle bank is located in a transboundary area between Poland and Sweden (European MSP Platform, 2018c). Since the Southern Middle Bank is situated in the EEZ of Sweden as well as Poland there is the matter of limited jurisdiction and therefore international legislation is applied (Zaucha & Matczak, 2011). Nevertheless, both countries obviously have their own vision regarding the Southern Middle Bank and in particular concerning the use of resources, shipping, nature conservation and the energy production. Especially on the subject of mineral mining and offshore wind energy, national interests play a strong role (Giacometti et al., 2017). Next to that, the area constitutes a significant transnational habitat for migratory birds and harbour porpoises (Oceana, 2013). Furthermore, even though the area is not part of formal environmental protection, on a regional scale initiatives for nature protection measures are set in motion (Zaucha & Matczak, 2011; Oceana, 2013).



**Figure 287 Southern Middle Bank: overview of the overlapping sectoral interests.**  
 Source: Zaucha & Matczak (2011) & Giacometti et al. (2017). Modified by author (2018).

One of Sweden's interest with regard to shipping concerns the ferry lane between Gdynia (Poland) and Karlskrona (Sweden) (Zaucha & Matczak, 2011; Giacometti et al., 2017). Currently the ferry lane is passing Swedish area

which is part of their national interest for offshore wind farms, but the lane also runs through Polish territory where wind farms acquired localisation permits (figure 14) (Baltic SCOPE, 2016<sup>f</sup>). The intention is that this issue will be resolved during the MSP process, although a proposition is made: repositioning the Swedish-Polish ferry lane and the east-west shipping lane towards the southwest.

However, this will then be a major part of an everyday international fishing area (Baltic SCOPE, 2016<sup>e</sup>). Hence, not resulting in a beneficial situation for the currently existing fishing interest in the area. Thus, a solution for this issue might be to reroute the shipping lane to the north side of the Southern Middle Bank, which will end up in deep international waters (Giacometti et al., 2017).

Just like previous transboundary focus-areas, under the umbrella of the Baltic SCOPE project, the key issues regarding the Southern Middle Bank are discussed in more detail. Appendix iv illustrates the conflicting, competing and coexisting interests of stakeholders in the Southern Middle Bank. In order to increase the process of identifying colliding aspects and formulating potential solutions the exchange of sectoral and national information was required. The project partners implemented only a few planning proposals (= identified as indicator **focus on small number of joint planning strategies**), which have to be considered by Swedish and Polish planners during transnational cooperation in the MSP process in the Southern Middle Bank (Giacometti et al., 2017). The positioning of these planning propositions regarding policy convergence, shared conceptualisation and transboundary organisations will be elaborated on in the following paragraphs. Just like the previous focus-areas, this area has to deal with multiple prioritized recommendations, which entail various indicators too:

Solutions with regard to **policy convergence**:

1. *The granting of permits of offshore wind farms should be dependent of whether or not measures regarding the protection of sound sensitive mammals are taken into account during the construction of wind farms.*

The offshore wind farm planning area is important for harbour porpoises and birds, which might be affected during the construction period. This causes a competing situation between offshore wind farm interests (SE/PL) versus nature species conservation (SE/ PL). The approval of permits after taken measures beneficial to the mammals relates to **conflict in domestic policies**, since both national planning authorities have not entirely aligned their internal sectoral interests. In order to succeed however, **agreed joint rules (transboundary organisations)** would be a suitable approach, since common national/sectoral protocols and procedures regarding the measures and obtaining the permits will be necessary.

2. *Whenever Poland and Sweden agree on entering the process of the distribution and development space for offshore wind farms, rerouting shipping lane(s) to the northern part of the Middle Bank needs to be taken into account.*

For example, the international shipping lane from Falsterbo TSS (Sweden) <sup>5</sup> to Klaipeda (Litouwen) crosses the claimed Swedish and Polish Southern Middle Bank offshore wind farm areas. Fitting indicators to come to the execution of this solution would be **transnational communication**, since development of a common

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<sup>5</sup> TSS: Traffic Separation Scheme is a routing measure ruled by the IMO. Aims at separating conflicting traffic flows by establishing traffic-lanes (or clearways) (IMO, 2018b).

stream model could give insight in the possibilities of rerouting. Additionally, **establishing mutual objectives (shared conceptualisation)** contributes to the development of a common visualisation tool.

Solutions with regard to **transboundary organisations:**

3. *Previously to granting permits for sand extraction and offshore wind farms, information has to be shared in order to harmonize the requirements of wind farms among countries.*

A competing situation between the offshore wind farm objectives (SE / PL) and the ram material extraction sectoral stakeholders (SE/ PL) occurs, since sand and gravel extraction in combination with off shore winds farms on the same location is not possible. The exchange of information and the harmonization of transboundary offshore wind farms requirements are necessary before providing permits for sand extraction. **Agree joint rules** entails the harmonisation of protocols and procedures related to a particular area of action. This adds value to transnational cooperation since it improves the efficiency and synergy among MSP sectors.

4. *The countries should take into account the impact their interest for offshore wind farms have on significant fishing areas which are exploited by all countries in the Baltic Sea Region that are situated in the Polish EEZ. **Administration sharing** in order to benefit from cross-border collaboration with HELCOM would help to relocate traffic to the north into the DW route <sup>6</sup>.*

#### 4.5.4 Adlergrund

Southwest of Bornholm, located primarily in German sea and expanding into Danish waters, lays Adlergrund (Iberdrola, 2016). This area of the Baltic Sea contains a big reef, often meaning the presence of shallow water and holds the largest deposits of sand and gravel (Käppeler et al., 2012). The enlargement of offshore wind farms and the vicinity of nature conservation areas are often a strong foundation for conflicting interests (figure 15), hence catalysts for arising conflicts. Adlergrund was identified as an area of interest for both Danish and German wind energy development (Käppeler et al., 2012). Yet, Adlergrund was also selected for nature conservation (Natura 2000), therefore Denmark choose to drop any future plans for the energy sector (Giacometti et al., 2017). On the other hand, Germany already distributed licences for marine infrastructure and wind farms (Iberdrola, 2016). Due to the designation of Natura 2000, the German application for a wind farm in the German EEZ was denied since the wind farm was supposed to be located in a MPA for resting/winter birds (Giacometti et al., 2017). Moreover, the actual approved wind farms in the western part of Adlergrund are required to act according various specific licensing regulations with regard to migrating birds, like shutting down the wind farms during migration periods (Kull et al., 2017). Additionally, the focus-area is of great importance for fisheries, for Danish, German as well as international. Since the concentration of fishing activities is quit high in Adlergrund, the area has the mutual interest of various different types of fisheries (Baltic SCOPE, 2016e). Therefore, the national planning authorities of Germany and Denmark are in the process of the SWBS case study strongly recommended to take into account other countries' interests of fisheries during the implementation of MSP in Adlergrund too (Käppeler et al., 2012; Giacometti et al., 2017). However, countries are not obliged to adjust their national MSP policy to the interests

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<sup>6</sup> DW Routes are established where navigable water for deep draught vessels is limited. The minimum water depth and the authorized maximum draught of each DW Route are indicated on this routing guide (Danish Hydrographic Office, 2018).

mentioned by their bordering countries, since there are no binding requirements (European Union, 2014; Kull et al., 2017). Another conflict might be the shipping route in the area that is currently crossing the future offshore wind farms plans (Global Renewable Shipbrokers, 2018). However, figure 15<sup>7</sup> shows a potential alternative shipping route (→) so they might avoid the site designated to offshore wind farms.

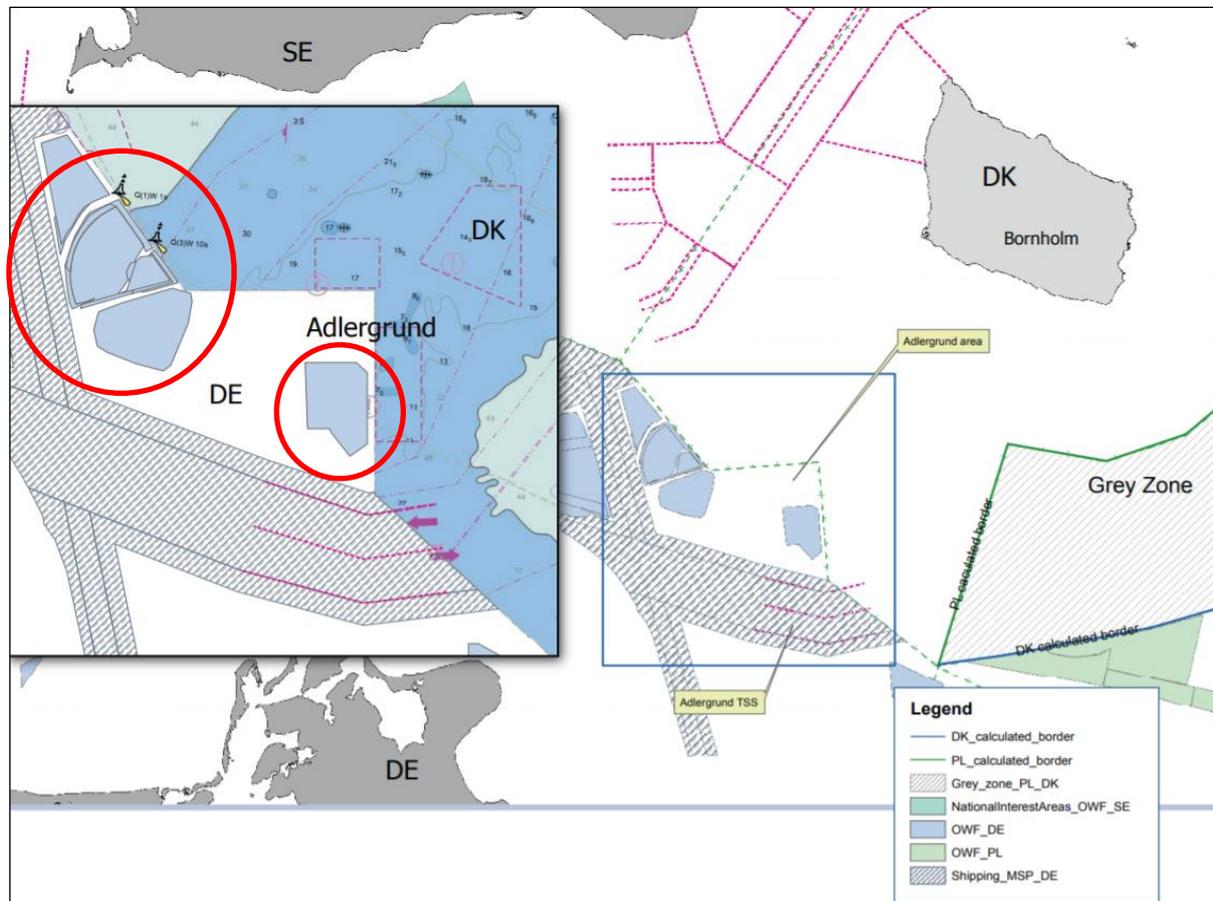


Figure 15: Adlergrund: German interests to build offshore wind farms attached to the Danish border.

Source: Giacometti et al., (2017). Modified by author (2018).

In short, the main discussions in Adlergrund can be traced back to the conflicts which emerge as a result of Germany's interest to place offshore wind farms close to Natura 2000 in Danish waters (marked by **○** in figure 15). In order to come to an understanding of the incompatibility of the main challenges more in-depth discussions were necessary. German and Danish planners teamed up to formulate possible solutions in which information sharing (e.g. spatial data, stakeholder involvement) laid the foundation for the recommendations (Giacometti et al., 2017). The following planning objectives could be identified in the Adlergrund focus-area:

#### Planning suggestions with regard to **transboundary organisations**:

1. *The strong interest of international fisheries should be taken into account by Germany and Denmark in the offshore wind farm planning process.*

The indicator **information sharing** could be applied to this proposition, since both the countries keep working independently, yet joint exercises such as stakeholder mapping and facilitation of workshops might help to identify and taken into account the international interest regarding the fisheries areas.

<sup>7</sup> Figure 16: Abbreviation OWF stands for offshore wind farms.

Planning suggestions with regard to **shared conceptualisation**:

2. Assurance with regard to secure free access to the area of Adlergrund to German, Danish and Polish fishermen. To do so, the routes to their primarily fishing and landing ports need to be taken into consideration. Continuing with the previous planning suggestion, the international fishing routes have to be part of an integrated plan for the Adlergrund. Both Germany and Denmark have to include international fisheries route in their more in-depth consultations, in which **mutual planning objectives** and also the fishermen's objectives have to be established. **The focus on a small number of joint strategic plans** in the Adlergrund area will contribute to prioritizing and execution of the planning recommendations.

In contrast to the Pomeranian Bay, Kriegers Flak, the Southern Middle Bank and Adlergrund, Öresund and the Grey Zone were approached by a different planning process. Both Öresund and the Grey Zone were identified as areas which required more dialogue due to more political sensitive situations, consequently using a less practical approach (= no matrix of interest or bi-/trilateral meetings/ workshops) in order to tackle them. Hence, the issues in Öresund and the Grey Zone were addressed through a bilateral *dialogue*.

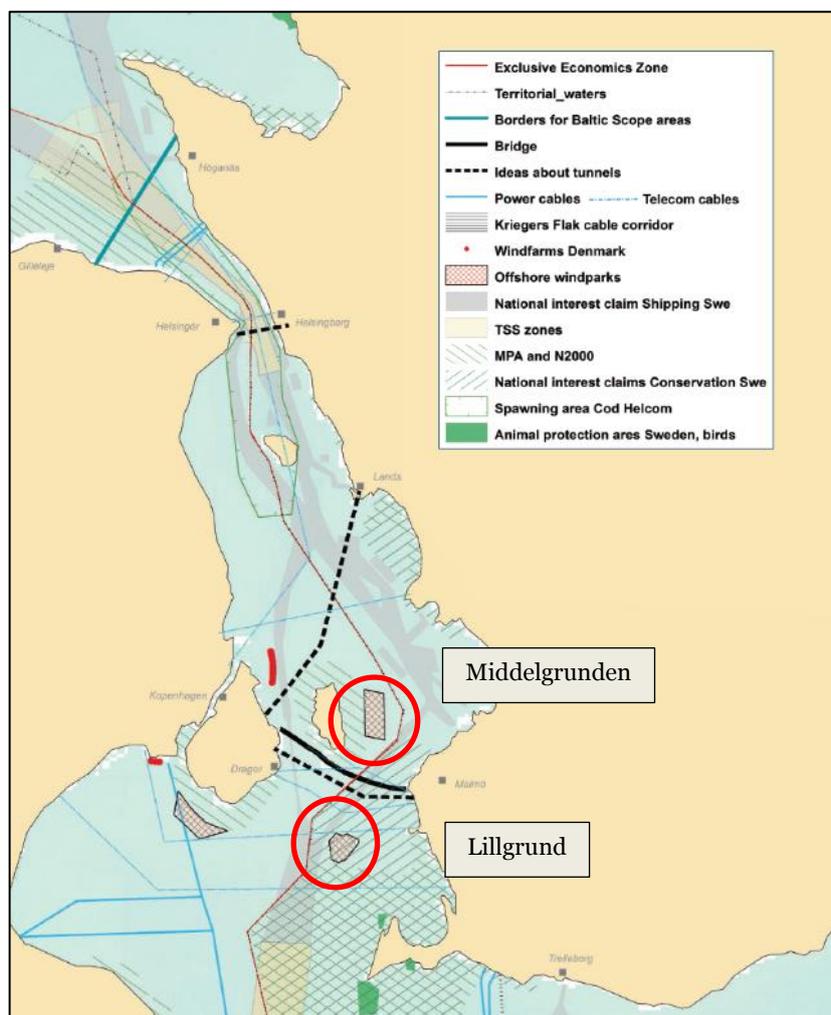
#### 4.5.5 Öresund

Although multiple planning issues are located in Öresund, the case study experienced the present close collaboration between the Scania region (SE) and Swedish municipalities (accountable for MSP in territorial waters) (swAM, 2015b/2015c) and the Danish municipalities and other authorities (Danish Maritime Authority, 2017; Giacometti et al., 2017). Despite the collaboration, issues worth addressing within the Southwest Baltic Sea remained. The Öresund strait separates Denmark (the Zealand Island) and Sweden (Southernmost region Scania) and is one of the three Danish straits connecting the Baltic Sea with the Atlantic Ocean and North Sea (NASA, 2017). Although it is a narrow strait, it is regarded to be one of the busiest channels in the world (Svedäng, 2010). The complex situation of the Öresund is illustrated in figure 16. Copenhagen is connected with the large Swedish city Malmö, through the Öresund Bridge. Helsingborg (Sweden) and Helsingør (Denmark) are connected through the HH Ferry route which is one of the busiest ferry routes in the world (about 70 departures every day from each harbour) (Giacometti et al., 2017).

Additionally, the waterway of Öresund is heavily used by traffic, which often entails large ships such as cruise ships, container ships and chemical and oil tankers for the transportation of goods from the Baltic Sea to other waters (Johansson & Molitor, 2011). So, the geographic characteristics of the Öresund are challenging for international shipping, but also for fisheries, energy and infrastructure, MPA's and leisure activities (especially in summertime) (Svedäng, 2010). The narrow navigational routes in the Öresund and the intensity of the traffic (about 40.000 each year) are challenging and inevitably involve risks. In the past, accidents and groundings caused human deaths, economic losses and destruction of the environment (Johansson & Molitor, 2011). At the moment two offshore wind farms are located on the Swedish and Danish side of the Öresund strait and future developments on both sides are part of discussion. The Danish *Middelgrunden* contains 20 turbines and is positioned in Öresund, about 4 km east of Copenhagen (Diercke, 2018). On the Southside of the Öresund Bridge is a Swedish offshore wind farm located, *Lillgrund*, which counts 48 turbines (Diercke, 2018). The marine space entails also an offshore substation that combines the produced energy as a transformer (Diercke, 2018). Next to that, propositions are made

to construct around 2020 one or two new tunnels between cities in Sweden and Denmark in the narrow strait (Ministry of Transport, 2011; TEC, 2018). Another difficulty in the Öresund strait encompasses the jurisdiction, which is divided over Sweden and Denmark (HELCOM, 2018) therefore involving close joint coordination. Since the area does not entail EEZ, the border lays in territorial waters (Marine Regions, 2018).

The presence of two different legal structures meeting at the border add to the complexity of transnational cooperation: Both the Swedish national state authority and the local municipalities are accountable for the planning in territorial waters (swAM, 2015b/ 2015c), in contrast to the Danish State which is solely responsible for planning in their territorial waters (Danish Maritime Authority, 2017). Hence multi-level governance (local municipality versus state) increases the challenges in cross-border and transnational cooperation. National MSP processes shall have to agree on and taken into consideration the planning of Öresund, and close collaboration and cross-border cooperation will occur over time.



**Figure 16: Öresund: illustration of complex situation, including current issues and future ideas for development.**  
 Source: Swedish Agency for Marine and Water Management (2015), in Giacometti et al. (2017). Modified by author (2018).

On the 2<sup>nd</sup> of September, 2016, a bilateral dialogue between Denmark and Sweden – under the umbrella of the Baltic SCOPE project – took place (Giacometti et al., 2017). During this bilateral dialogue, the necessity to create synergy in national processes arose, yet with a separated timeline regarding the implementation. There is an agreement that the bilateral meetings will continue so that existing conflicts and solutions can be found (Giacometti et al., 2017).

The proposition for this Southwest Baltic Sea case study is the following:

1. *Improved cooperation between Denmark and Sweden in the Pan-strait area is necessary because of the complex situation and future planning processes in the area.*

This proposition could be subdivided into two key research components:

Solution related to **policy convergence**:

**Transnational communication** could provide coherence among both countries by developing a common visualisation tool in order to illustrate the status (conflicting, competing and co-existence) of sectoral interests. This might offer the opportunity to establish synergy in national processes.

Solution related to **shared conceptualisation**:

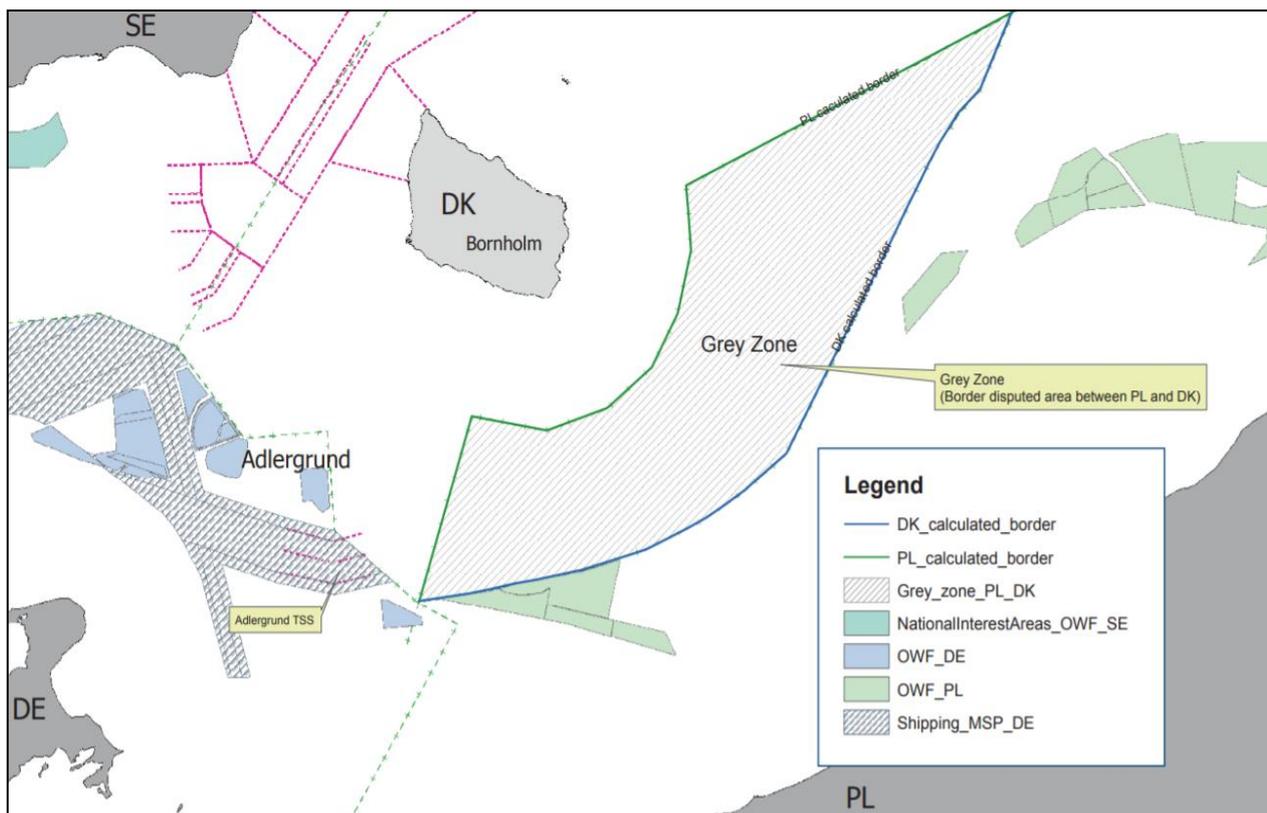
This potential solution is related to **previous cross-border experiences** between Sweden and Denmark. As stated earlier in the Öresund paragraph, planners recognized the close collaboration both countries already established. This offers them the opportunity to improve their alignment of **mutual objectivities**.

#### 4.5.6 Grey Zone

The planning approach used for the Grey Zone was a bilateral dialogue, in contrast to the Pomeranian Bay, Adlergrund, Kriegers Flak and the Southern Middle Bank, where a more practical approach (e.g. matrix of interest and bi-/tri lateral meetings/workshops) was used to discuss requirements in order to establish concrete solutions. The reason for the bilateral dialogue approach is the conflicting border calculation of the Grey Zone, hence being more a political problem than a planning issue (figure 17) (Giacometti et al., 2017). At first, both Denmark and Poland were hesitant to address the grey zone due its unresolved border issues, but the bilateral dialogue turned out to be the first step in cooperation (Kull et al., 2017).

In short, between the Polish coast and the island of Bornholm (Danish) lays the Grey Zone, an area that cannot be assigned to one country in particular since both Denmark and Poland disagree on the border (European MSP Platform, 2018c). Due to the overlapping borders both planning authorities have interest in the area and for future planning this might cause obstruction for integrated maritime spatial plans in the Baltic Sea. This complicates the planning process since planners are not able to approach the focus-area as they normally would.

In this case, offering concrete solutions with regard to the Grey Zone was not yet a possibility since there was no mutual understanding of each other's potential conflicting, competing or coexisting plans for the area. Hence, transboundary dialogue between Denmark and Poland was necessary: Polish planners addressed the issue at their Ministry of Foreign Affairs, where after they invited Denmark to discuss the potential of joint planning solutions in the Grey Zone (Nordregio, 2017b). The invitation resulted in a bilateral meeting on October 19<sup>th</sup>, 2016. Both Polish and Danish planners got together in Gdańsk for the first bilateral meeting in order to address potential joint-planning solutions in the conflicting area, in anticipation of the border solution (Nordregio, 2017b; European MSP Platform, 2018c).



**Figure 340 The Grey Zone: illustrating different border calculations by Germany and Poland**  
 Source: *Giacometti et al. (2017)*

The focus of the meeting was the southern part of Bornholm (DK) since this area is located in the EEZ of both countries (Giacometti et al., 2017; HELCOM, 2018). This discussion established an agreement that Denmark and Poland aspire a similar planning approach. As a result, the records of current and future MSP plans are likely to be similar in Poland as well in Denmark (Nordregio, 2017b). During the bilateral dialogue, both authorities elaborated on their planned timetable of work and the acceptance of planning documents, in which the crucial moments on the plans' components were pointed out for thorough dialogue. Since both countries' Ministries of Foreign Affairs encouraged the bilateral meeting, Danish and Polish MSP authorities agreed on bilateral dialogue in the future planning process (Kull et al., 2017). While participating in bilateral dialogues, Poland was working on their first draft for a maritime Spatial Plan in which they tried to involve stakeholders from an early planning phase (European MSP Platform, 2018c). Poland informed Denmark on their future plans, so Denmark was kept up to date regarding the plans around the Grey Zone (Nordregio, 2017b). Consequently, the follow up of the bilateral dialogue was in March 2017 and committed to the evaluation of the inventory regarding MSP records and potential proposition of spatial and practical resolutions. Denmark set the goal to complete the registration of data and knowledge in the period 2017/2018 (Giacometti et al., 2017).

With regard to the identification of policy convergence, shared conceptualisation and transboundary organisations, the grey zone is much harder to categorize than the previous transboundary focus-areas. Less concrete solutions can be recognized because of the necessary higher political involvement, yet the first steps towards closer collaboration were the bilateral dialogues. These dialogues laid the foundation for future cooperation between Denmark and Poland. Taken these bilateral dialogue into account with regard to policy convergence, shared conceptualisation and transboundary organisations, a few indicators could be identified:

1. Indicator(s) identified in **policy convergence**:

Under 'pressure' of an international project/organisation (Baltic SCOPE/EU) there is a request to address the issues in the Grey Zone and to establish understanding and coherence between both Denmark's and Poland's areas of interest and their related protocols/processes. This relates to **imposition**. Without the Baltic SCOPE project, and the SWBS case study in particular, the Grey Zone would most likely not have been addressed, since their hesitation at first. In this case, imposition contributes to the establishment of closer collaboration and more coherence in the SWBS.

2. Indicator(s) identified in **shared conceptualisation**:

During the bilateral dialogue(s) the purpose of the Grey Zone are discussed, in which the **establishment of mutual objectives** would have been the main objective. Without **shared concepts** and objectives, planning the Grey Zone in close collaboration will be difficult. Hence, these seem to be highly important for improving the transnational cooperation.

3. Indicator(s) identified in **transboundary organisations**:

Since both countries have not yet worked in close collaboration before regarding the Grey Zone, **information sharing** would have been the first step (i.e. bilateral dialogue). This means building trust, participating in joint exercises like stakeholder mapping or facilitating workshops, but work mainly independently since collaboration is in the begin phase of cross-border collaboration. Yet, information sharing is the first step in order to come to transboundary collaboration and cooperation.

#### 4.6 Additional observations

When all indicators identified by the six transboundary focus-areas (i.e. Pomeranian Bay, Kriegers Flak, Adlergrund, Southern Middle Bank, Öresund and Grey Zone) are accounted for, the total accumulation and gradation of indicators for the SWBS project can be established (table 7)<sup>8</sup>.

Policy convergence					
Imposition	International harmonization	Regulatory competition	Transnational communication	Independent problem solving	Degree of conflicts in domestic policies
2 = -	3 = -	0 = - -	12 = + +	2 = -	5 = + / -
Shared conceptualisation					
Establishment of mutual objectives	Previously cross-border experiences	Focus on small number of joint strategic plans		Similarity in planning concepts	Cultural resemblance among countries
16 = + +	3 = -	3 = -		11 = +	0 = - -
Transboundary organisation					
Information sharing	Administration sharing	Agreed joint rules	Combined organisation	Combined constitution	Organisational identity
4 = + / -	10 = +	10 = +	0 = - -	0 = - -	0 = - -

**Table 7: Accumulation and gradation of identified indicators in transboundary focus-areas in Southwest Baltic Sea case study**  
Source: Author (2018)

Taken table 7 into account, policy convergence shows great need of the indicator *transnational communication*. This can be explained by the fact that most of the Southwest Baltic Sea countries were already familiar with maritime spatial planning, although not in effective cross-border cooperation. Hence, the need for transnational communication, which often does not entail the need for information exchange, but the need for developing mutual MSP tools/models. With regard to the other policy convergence indicators, the lack of need for pressure from a higher authority or competition can be interpreted as a positive development, given that most SWBS countries involved already facilitated maritime spatial planning processes without higher political involvement necessary. Additionally, conflicts in domestic policies counteract on integration of own national planning processes.

Regarding shared conceptualisation, the most important indicators are the *establishment of mutual objectives*, followed by the need for *similarity in planning concepts*. The fact that these two indicators stand out from the other three (*previous experience*, *focus on small number joint plans* and *cultural resemblance*) could be explained since all three indicators are likely to overcome if mutual understanding and agreement on the planning process is in place. Yet, these latter three indicators are hard to grade, but the case study continuously hinted the significant relevance of *previous experience*, *focus on small number joint plans* and *cultural resemblance*.

Finally, *administration sharing* and *agreed joint rules* are the most requested solutions with regard to the use of transnational organisations. This indicates that multiple countries have past the begin phase of building trust, and do feel more comfortable to establish closer collaboration, with the intention of benefiting from the collaboration such as sharing protocols, programmes and procedures. This relates to the SWBS case study situation and the objective to aim for a new and semi-developed transnational MSP framework. The absence of the combined organisation and – constitution indicators might be explained by the absence of current need for a higher advisory authority.

To summarize, regarding the three secondary questions: policy convergence among countries does not seem to function as a highly relevant element in order to improve transnational cooperation in maritime spatial

<sup>8</sup> The findings are converted to the Likert-type scale, which is earlier discussed in chapter 3. The number of indicators identified in appendixes ii, iii & iv range between 0 – 16, 16 being the indicator that is most identified. As already stated in chapter 3.1.4 the value of the indicators is based on the best possible objective interpretation of the researcher.

planning. Since dissimilarities or gaps occurring in transnational cooperation seem to be addressed and solved by close(r) collaboration, the influence of shared conceptualisation and transboundary organisations can be regarded as an important key factor to improve organisational integration. Additionally, despite the national differences in planning culture/structure, mutual understanding and agreements on planning approaches and MSP plans are two main indicators in shared conceptualisations that tackle these issues.

As already mentioned, the gradation of contextual indicators, such as organisational identity (e.g. a national planner’s perspective, governance structures), cultural resemblance (e.g. language barriers /terminology) proved to be difficult. Since these indicators often occur in the background of a planning process it is hard to concretely identify them and add a value to them. These observations can be related to the concept of epistemology, since it indicates the knowledge that is observed, like intuitive information provided in the background instead of written data facts (Vasilachis de Gialdino, 2009). As a result of the used planning approaches in the focus-areas, the proposed solutions (appendixes ii, iii & iv) and the contextual indicators, the role of stakeholders requires more elaboration. The transboundary focus-areas show the importance of stakeholders in order to improve cross-border collaboration and cooperation. During the SWBS case study, short-term results were presented on various events by research institute Nordregio (e.g. 7<sup>th</sup> EUSBSR strategy Forum; 2<sup>nd</sup> MSP Forum – Riga 23 November 2016). These results aimed at internal learning processes and offered the opportunity to react on comments and questions of national planners (Giacometti et al., 2017). One of the main results concerning the contribution of stakeholders, entailed the identification of conflicts and synergies in the focus-areas (Kull et al., 2017). Figure 18 shows that the SWBS stakeholders are for the most part content (*fair contribution*) or neutral (*neither strong nor weak contribution*) with the role they and others played in cross-border identification of synergies and conflicts. Although it could be increased towards *strong contribution*, the starting point remains promising.

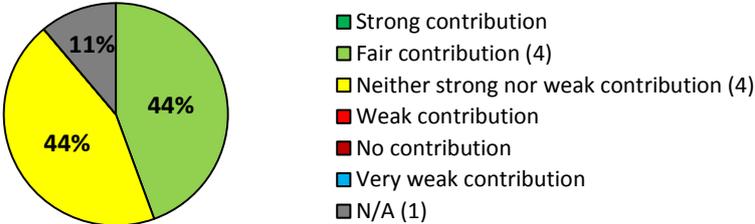


Figure 367: SWBS Stakeholder perceptions regarding their contribution to identify conflicts and synergies between sectors. Source: Kull et al. (2017)

Besides the promising role of stakeholders in identifying synergies and conflicts between (cross-border) sectoral interests, establishing solutions are essential as well (Kull et al., 2017). Figure 19 illustrates the contribution of the SWBS stakeholders regarding their potential to identify solutions in the transboundary focus-areas.

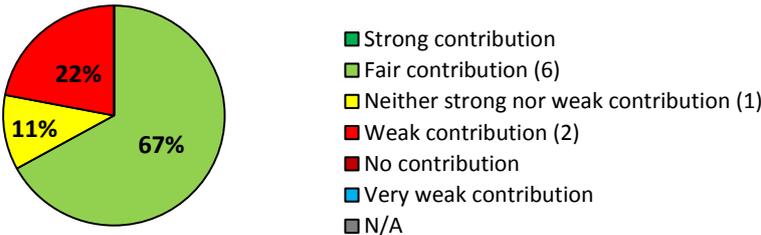
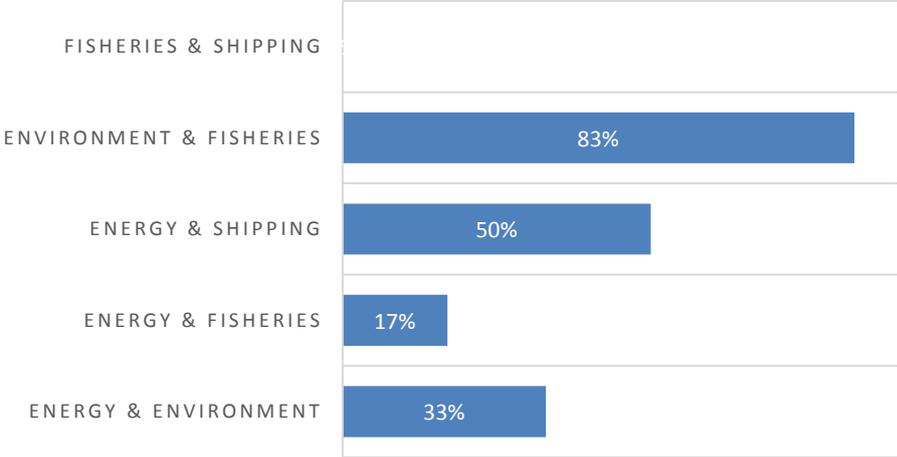


Figure 19: SWBS Stakeholder perceptions regarding their contribution to identify solutions. Source: Kull et al. (2017)

According to figure 19, the stakeholders which were involved in the SWBS case study did come to agreements in most of the situations, since 67 % thought that they had a *fair contribution* with regard to the identification of solutions in the SWBS case study. This could be explained by the fact that the SWBS case is approached by a geographical approach (focus-areas) which might simplify the identification of conflicts and solutions. However, despite the 67 % that indicates a positive experience, 22 % experienced a weak contribution of SWBS stakeholders in order to come to solutions in their transboundary focus-areas. This shows that despite 2/3 of the stakeholders thought solutions were identified to their satisfaction, there is still room for improvement in the future. The strong contribution of solutions can also be traced back in the degree of synergy between two sectors (figure 20). The stakeholders of the SWBS case study experienced strengthening between sectors, which is a positive result of the approaches taken for increasing the transnational cooperation. The cross-sectoral discussions increased sector learning, since they provided the national sectors of a new perspective (Baltic SCOPE, 2016c). The SWBS project provided an opportunity for stakeholders to get acquainted with the content of MSP and the benefits for the management of their sector (Baltic SCOPE, 2016c).



**Figure 20: Increasing synergies between specific sectors.**  
 Source: Kull et al. (2017). Modified by author (2018).

However, the lack of improved synergy between fisheries and shipping should be taken into account for future collaboration. Both the fishing- and shipping sector use ships and ports, therefore mutual interests can be further explored through close collaboration. Moreover, since the SWBS case study did not focus on the land –sea connection, acquiring synergies between these two sectors was not the centre of attention during the project (Baltic SCOPE 2016d/2016e; Giacometti et al., 2017; Kull et al., 2017). As figure 21 shows, certain sectors in the SWBS project have been more involved in planning processes than others. This can be traced back to the (inter)national economic mechanisms, political urgency and the structure of sector management in the Baltic Sea. EU regulation, national legislation and international treaties are hierarchical structured, therefore the relevant stakeholders are too. Although national governments are able to counterbalance the hierarchical sectoral orders by establishing their own national priorities (European Union, 2014; swAM, 2015b), they face restricted capability to influence these international protocols in order to achieve minimal alterations, like diverting a shipping route by the IMO (= under global regulations) which requires a lot of energy and time. Subsequently, an unequal influence of sectors in MSP might be a problem in effective collaboration. For instance, some other sectors (e.g. environmental conservation, sustainable energy, fishing and mining) seem to develop their plans around the already existing well-established

and outlined shipping routes (Baltic SCOPE, 2016d/2016e). In contrast to a potential more desirable ‘meeting – halfway’ approach, so all sectors felt they were taken seriously. Another sector that was not prioritized in the SWBS case study, but recurred during the meetings is the defence sector. Their influence limits the MSP consultation and planning approach, since they are allowed to block initiatives without providing further explanation and most information is confidential (Kull et al., 2017).

To conclude, SWBS planning authorities and project partners experienced lack of time, influence and resources in order to mobilize and inform their sectoral and (inter)national stakeholders.

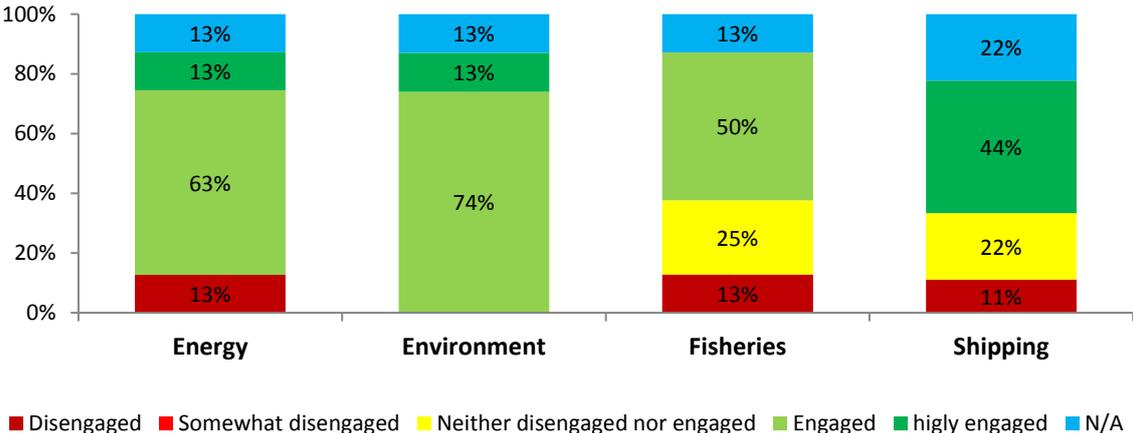


Figure 21: Sectoral engagement perceived by SWBS stakeholders. Source: Kull et al. (2017). Modified by author (2018).

At last the following paragraph addresses findings that regard information aspect in the SWBS before arriving at the conclusion of this research.

Information exchange in the SWBS project proved to be of significant relevance. As stated throughout the research, exchange of information proved to be one of the main requirements in order to come to an understanding of cross-border and cross-sectoral initiatives and planning processes. However, the information exchange turned out to be not without obstacles. This fragmented situation of data became noticeable during the for instance the transboundary meetings, conferences and workshops. Besides the 1) *time consuming* element, 2) *consistency* and 3) *reliability* in data are identified as the three main issues in transnational cooperation regarding information exchange (Kull et al., 2017):

The exchange of information proved to be time-consuming since not all national data is available in one database, but involves multiple ministries/agencies and other private/public companies. Subsequently, due to the time-consuming element, the availability of useful data decreased too. The consistency in data was lacking due to different understandings of foreign data. A variety of data interpretation and the differences in used measurements made cross-border exchange and understanding more complicated than necessary. Due to the inconsistency, the reliability of the data is questionable. Lack of common understanding of data, different inclusions of sectors in databases and un-synchronized cross-border data updates can be considered as factors influencing the reliability of using cross-border/cross-sectoral data/information.

In short, data bases and data sources proved to be rather fragmented among the participants and relevant stakeholders in the Southwest Baltic Sea case study. Consequently, detaining the enhancement of decent sectoral planning evidence, conflicting sectoral interests and the active involvement of all sectors.

# 5

## **Conclusion**

## 5. Conclusion

After conducting research, this conclusion aims at answering the main and secondary research questions, by interpreting the findings of the SWBS case study. The conclusion also tries to identify the overall challenges and opportunities for organisational integration in MSP. The main research question was formulated as the following: *How can organisational integration be improved to work towards effective transnational cooperation in European maritime spatial planning?* In order to answer the main research question, three secondary research questions were formulated and will now be discussed:

*How important is policy convergence among (neighbouring) countries for transnational organisational integration in maritime spatial planning?* Most of the policy convergence factors based upon Knill & Holzinger (2005) are not highly relevant in order to improve transnational cooperation; only transnational communication jumps out. This is in contrast to Knill (2005), but in line with Kidd (2012) who argues the essential role of shared spatial data, models and information to be able to come to agreements. Additionally, conflicts in domestic policies unnecessarily hinder integration of national planning processes, hence not contributing to transnational policy coherence and cooperation. It turns out that absence of the other mechanisms in order to develop more similarity in cross-border policies can be compensated by a high degree of transnational communication. Thus, policy convergence contributes, but is *not important* for organisational integration.

*How important is shared conceptualisation of maritime spatial planning issues among (neighbouring) countries for transnational organisational integration in maritime spatial planning?* Similarity in planning concepts, and especially establishing mutual objectives proved to be highly significant for transnational cooperation. This strengthens the argument of Flannery et al. (2014), who indicates that transnational cooperation becomes more powerful if actors work together towards mutual objectives. Different understanding of concepts and terminology affects stakeholder involvement and organisation: more in-depth discussions proved to increase these differences in cross-border and cross-sectoral conceptualisation. Backer (2011) already stated that the perceptions on planning and the positioning of stakeholders function as the main elements in cross-border planning. Also, the remaining indicators: focusing on small number of joint strategic, previous cross-border experiences and cultural similarities showed continuous relevance in the background of the case study. Hence, shared conceptualisation can be regarded *highly important* for improving transnational organisational integration.

*How important are transboundary organisations for transnational cooperation in maritime spatial planning?* Transboundary organisations are required for increased collaboration (administration sharing) and the establishment of common procedures and protocols (agreed joint rules), followed by building trust, understanding and capacity information sharing (information sharing). This corresponds with the SWBS case study situation regarding the newly and semi-developed transnational MSP processes. The absence of the combined organisation and – constitution indicators illustrate the current lack of willingness to turn over the power to a higher advisory authority, in contrast to the argument provided by Kidd & McGowan (2013) and despite the proved efficiency of a temporarily MSP platform in this thesis' SWBS case study. So, the influence of transboundary organisations proved to be *moderately important* for improving transnational organisational integration, among countries, which are in development phase of their transnational maritime spatial planning process.

Adding to the answering of the secondary questions, additional aspects with regard to organisational integration in transnational maritime spatial planning are addressed:

Another important conclusion is that stakeholder involvement is essential to effective transnational cooperation. The motivation and cross-border interest of stakeholders turns out to be one of the key elements to increased collaboration and coordination in transnational MSP. Diversity in planning cultures, various stages of MSP planning phases and lack of time and resources among national authorities is of negative influence on the degree of motivation, participation and informing of stakeholders. Yet, the variety of planning phases could also be a contribution, due to the exchange of learning experiences. In addition, the knowledge and influence of stakeholders on different administrative levels and the cross-sectoral analysis, proved to be essential to the identification of cross-border synergies and conflicts. Subsequently, early joint-stakeholder development and involvement turned out to benefit the planning process, which is in line with the argumentation and recommendations in the theoretical framework. Another important remark in the SWBS case study is that rather than 'solving' the institutional differences and obstacles among national and sectoral authorities, they tried to accept the differences and dealt with by increased stakeholder involvement. Additionally, they appointed a project leader as the main authority in decision-making and guidance if needed, in line with the recommendations in stakeholder integration. Nonetheless, effective transboundary planning processes rely on the degree of accessible, consistent and reliable data that can be compared. Due to the variety of data types, data analysis and data interpretations, fragmentation in data collection is an obstacle that complicates transnational cooperation and collaboration between countries.

Transnational MSP involves multi-level governance, dealing with a variety of responsibilities, administrative levels and planning phases and processes which all contribute to organisational fragmentation. The geographical and result-oriented approach taken in the Southwest Baltic Sea case study proved to be effective, especially in areas where sectoral planning is strong and strategic planning is already quite developed. This approach managed to align national planning authorities, and dealt with institutional obstacles. Emphasizing on transboundary focus-areas and the use of bi-lateral meetings in particular were effective in order to address cross-border and cross-sectoral issues, by sharing information and identifying synergies, conflicts and solutions. Consequently, stakeholders had to think in a more holistic way, which benefits the environment/eco-system in particular. Regarding political involvement, planners take on different roles and views due to different instructions and perspectives on planning levels. Although planners might provide concrete understanding and planning solutions, higher political involvement is often required in order to support, mediate and accelerate transboundary collaboration and cooperation. Nevertheless, this required political involvement is frequently lacking.

Concluding, organisational integration can be enhanced by increasing stakeholder engagement. As stated in chapter 2.3.2 and the conceptual model, organisational integration entails operational, strategic and stakeholder integration; improving stakeholder engagement enhances operational and strategic integration, since stakeholder engagement simultaneously requires the alignment of programmes, protocols and mechanisms. Although organisational integration is important to transnational cooperation, it has still challenges to overcome:

The main challenges identified in order to improve organisational integration in transnational maritime spatial planning are: 1) Differences in governance structures and various planning stages; 2) Narrow (non-holistic) planning perspective by planners and stakeholders; 3) Currently existing plans in areas decrease range of potential

solutions; 4) More time and resources required; 5) Dissimilarity of conceptualisations and terminology in maritime spatial planning.

The main opportunities identified however, are: 1) acquired knowledge and skills for future projects; 2) individual learning regarding transboundary national planning systems and legal structures; 3) Development of common data sources. 4) The used planning approach, including the tools and methods is transferable; 5) Increasing political involvement for support and conflicting situations.

Lastly, indispensable in transnational cooperation is the consideration of the role of context, which is also emphasized by Healey (2011) and Flannery et al. (2014). Developing a contextual case-based approach, like in the Southwest Baltic Sea, can be regarded the most appropriate planning approach in order to achieve the best fitting planning process for the sea basin in question. A one-size-fits-all approach would not anticipate on the local, regional and national specific sectors, priorities, their planning history, unique context and available planning tools/ mechanisms. In addition to Backer (2011), which underlines that planning mechanisms and instruments can never be transferred into detail, due contextual differences. Hence, although the case study focused on the Southwest Baltic, the experiences in stakeholder involvement, tools (i.e. matrix of interest, bi- and trilateral meetings, topic papers) and methods (result-oriented geographical approach) can in general be transferred to other European sea basins and even provides guidelines for MSP across the world. Here they can be further developed and improve organisational integration in transnational and transboundary MSP planning approaches in the future.

Thus, this research's objective was to provide a more concrete indication and contribution to further research on how the transnational maritime spatial planning framework can be improved, by focusing on the role of organisational integration.

The hypothesis established in the introduction and illustrated by the conceptual model was that all three key research components (i.e. policy convergence, shared conceptualisation and transboundary organisations) are important for organisational integration in transnational cooperation of maritime spatial planning. Based on the findings of the SWBS case study, the answers on the secondary questions and additional conclusions, can be concluded that ***not all three key research components are important for organisational integration in transnational cooperation.*** Although *policy convergence*, *shared conceptualisation* and *transboundary organisations* contribute in different ways to transnational cooperation, they all do vary in importance. Nonetheless, above all, strong stakeholder involvement can be concluded as the main component in the improvement of organisation integration in transnational maritime spatial planning.

Concluding, this research contributes to transnational maritime spatial planning practice and theories by providing concrete challenges and opportunities in organisational integration which could improve the establishment of an effective coordinated transnational framework.

# 6

## **Research Points for Discussion**

## 6. Research Points of Discussion

Since this research entails quite a broad topic, i.e. transnational maritime spatial planning, it would have been impossible to cover all the side steps that could and should be taken into consideration with regard to the reading of this research. Therefore, in order to come to a comprehensive coverage of the thesis, additional remarks to the research will be accounted for, which will contribute to the critical reflection of the thesis.

First of all, in research founded on a case study assessment, based on external and qualitative secondary data, a researcher's perspective should be as objective as possible. Nevertheless, even though there is no personal gain to the outcomes of the study, it is hard to work in an objective way. Since multiple choices during the research have to be made a personal perspective does come into play. For instance, the decision on which methodology will be used in order to conduct the research. Since this thesis conducted research based upon qualitative, external and case based secondary data analysis, information that can be found in secondary *research data* or secondary *routinely collected data* was left out. Hence, potentially affecting the results due to a lack of this (possibly) complementing data. Furthermore, the decision-making regarding the relevance of information, to what extent and the methodology are not based upon external data of respondents, but based upon the researcher's best objective interpretation of used secondary data regarding a case-study. Hence, the final thesis is the representation of a researcher's perspective, which does not automatically mean that the research is also comprehensive and without error despite aiming for this goal.

Regarding the researcher's own expectations and predictions, they turned out to be differently than expected. The hypothesis was that policy convergence, shared conceptualisation and transboundary organisations proved to be the three key elements in order to improve organisational integration in transboundary cooperation. The ranking prediction of the three elements, based on degree of importance, was the following: 1) policy convergence 2) shared conceptualisation and 3) transboundary organisations, policy convergence being the most important. However, this was not in line with the final outcomes. Eventually, shared conceptualisation was regarded to be highly important, transboundary organisations could be considered moderately important and policy convergence was determined to be not important. The lack of policy convergence seems to be compensated by strong stakeholder involvement and the use of a contextual fitting planning approach.

To summarize, the hypothesis and personal expectations established at the beginning of the thesis proved to be not in line with the final results conducted in this research. Besides the question regarding the researcher's objectivity in a research, few aspects relevant to the study and their effect on outcomes have to be considered. The next paragraphs will address aspects that might explain why the hypothesis did not obtain the expected result.

- 1) Case study context: This research included the Southwest Baltic Sea as a case study, consequently drawing multiple conclusions based upon the case study findings. However, this does not mean the planning approach taken in the Southwest Baltic Sea would provide the same results in another region/sea basin due to different contexts. Furthermore, the Southwest Baltic Sea case study is one of two projects (also the Central Baltic case study under the umbrella of the Baltic SCOPE project). Consequently, it is possible that any insights received during the Southwest Baltic Seas case study research, are covered or tackled in the Central Baltic case or overall Baltic SCOPE project.

Additionally, as Stake (1995) argued, an instrumental case study is able to generalize from the single case study in order to test and formulated new theories. However, it is important to consider Rosenthal & Hart's (1994) argumentation that although theoretical generalizations *could be applied to* non-investigated cases, assumptions based on the findings regarding underpinning theories cannot be drawn based on the executed case study. In short, the findings and conclusions made in this research *do not* provide general statements for all similar cases, but they do provide an indication on how these findings and conclusions could be used and turn out in other case studies. So, taken into account the role of a case study and considering the context and data of a particular case study is essential to the research.

- 2) Quality of research and data: A few aspects of discussion regarding research and data quality will be discussed: First, *validity* of data: this research aimed at preventing systematic research errors by providing an objective insight based on the acquired data instead of providing socially desirable answers or adjustments to what would be convenient for the researcher. This closely relates to the *independent* character of research. Achieving the objectivity of the researcher however is more difficult (as is already argued in the second paragraph of this chapter). Thus, by controlling the validity of data this research strongly aimed for its authenticity and veracity.

Second, *reliability* of data: despite the validity of the data, it is hard to rely on data acquired based on a single case study, since it is not possible to make assumptions on underpinning theories for case studies in general (see point 1 of discussion). Hence, the research is not repeatable and does not provide every single time the same results when executing the research.

Third, the *information* of data: throughout this research, and in particular in the case study, the researcher provided the maximum available information which was acquired. Additionally, chapter 3.4 provides a data collection of the data used in the case study, so this research well accounts for the collection of data, including the information of which data was collected when, where and why. Based on this provided data, an external independent person is able to repeat the same research.

- 3) Planning approach: The geographic planning approach – focusing on transboundary focus-areas – aimed at coming to identifying synergies, conflicts and solutions. Although this proved to be a successful planning approach, the identification of synergies, conflicts as well as conflicts can be considered highly theoretical. The planners participating in the meetings and the other stakeholders most of the time came to agreements on how to proceed further, but these planners cannot be accountable for the implementation of the synergies in real life. The actual execution of the propositions mainly depends on the sectors involved and aspects such as technical feasibility, political involvement and – support and financial resources. Hence, the Southwest Baltic Sea case study can provide theoretical solutions, yet this does not mean all of them are equally feasible. Hence the case study can be regarded as a guideline for future maritime spatial planning processes, but not as an implementation plan for similar situations elsewhere.

- 4) Sectoral focus: This thesis focuses on four main sectors in maritime spatial planning, i.e. energy, shipping, environment and fisheries. This choice is made because these turned out to be the most prominent sectors in the Southwest Baltic Sea case study. However, maritime spatial planning does contain six main sectors (i.e. energy, shipping, environment, fisheries, *tourism* and *aquaculture*). Since the latter two were not taken into account during the planning approaches in the Southwest Baltic Sea case study, the results and overall interpretation of this transnational project might not be all-encompassing. Additionally, even though the priority lays upon the first four sectors in this case study, the assumption these for sectors are also prioritized in any other case study cannot be made. This underrepresentation of various sectors most likely affected the outcome with regard to the degree of cross-sectoral integration and interaction.
  
- 5) Stakeholder involvement: A change in responsibility of maritime spatial planning plans occurred between national authorities during the Southwest Baltic Sea planning process. Due to this reorganisation and subsequently new accountabilities, stakeholders and the involved participants/project partners changed. Despite the influence on coordination and collaboration, information concerning the case study and relevant to the researcher might have been lost or not taken into account to the full extent.

Considering the critical remarks discussed above, potential future contribution of the research will be expressed: On the short-term, hopefully these research findings will function as a bench job for other researchers, so they have a starting point and are able to conduct more in-depth research with regard to improving organisational integration in transnational maritime spatial planning. On the long term, these findings might provide a more concrete indication of the challenges and opportunities in the improvement of organisational integration in transnational cooperation regarding maritime spatial planning. It is desirable that this conducted research does not only contribute to improvement in the Baltic Sea but enhance transnational cooperation in worldwide sea basins. Ultimately, these results might contribute to a more sustainable human use of space in seas and oceans.

# 7

## **Recommendations for Future Research**

## 7. Recommendations for Future Research

After conducting research and taken the theoretical framework and case study findings into consideration, a few recommendations could be made in order to benefit the organisational integration in transnational maritime spatial planning. Although these recommendations might not be beneficial and fitting in all maritime spatial planning situations, future transnational maritime spatial planning processes might profit nevertheless.

First of all, policy recommendations will be addressed. Although on multiple recommendations for improving organisational integration in transnational cooperation can be elaborated, the two final recommendations will be exemplified more extensively:

- 1) Increasing cross-border learning: regarding national planning systems, jurisdictional structures and current/future maritime spatial planning plans: being familiar with transboundary planning structures, processes and perspectives will increase future transboundary collaboration and integration.
- 2) Providing a long term platform: Transnational maritime spatial planning has to deal with the presence of different national planning structures, various data sources and data bases and multiple national priorities and sectoral priorities. This heterogeneity is the main reason for the need for transboundary MSP in the first place, since it does not improve alignment in cross-border collaboration, coordination or cooperation. Although the Southwest Baltic Sea case study provided a short-term forum for the duration of the planning project (two years) there are some critical side notes that can be made and should be taken into account for the upcoming MSP process. Taken this proposition into consideration would most likely be beneficial to the overall organisational integration in future cross-border maritime spatial planning:

A two years project turned out to be too short in order to overcome challenges, such as language barriers, exchanging information, the lack in the harmonization of available data and understanding differences in cross-border administrative structures and planning cultures. More commitment and time was requested by the stakeholders, since tackling these challenges in two years even before starting the actual planning process is a highly time-consuming activity. As already argued in chapter 2.3.2 the use of a planning theory that considers communication and participation core elements for uniformity in goals, data and planning tools could be a step forward to organisational organisation: Healey's collaborative planning theory. Yet, collaborative planning requires active participation to identify the various interests, and currently a two year platform is not sufficient since more commitment and time was needed for dealing with obstacles even before the planning process began. Hence the proposition for the implementation of a (more) permanent (transnational) platform, for effective transboundary coordination in maritime spatial planning. The establishment of a more permanent platform, solely available for improving transboundary MSP collaboration, would be contributing on multiple disciplines:

*Transboundary collaboration*: a long-lasting platform for maritime spatial planning, that does not only exists when a project is into play, but is always available to consult. This platform might enhance and even encourage the discussions and integration between national and sectoral stakeholders. After all, real life meetings and learning by doing turned out to be effective to identify synergies, conflicts, solutions, but also improve language barriers and consider other national planning perspectives. Tolls used for this long-lasting platform might be existing forums, national meetings, stakeholder conferences and workshops.

*Enhancement of availability of information and data:* Although the (geo) data will always run behind, since data experience continues updates, bundling the data in one central platform improves the quality, availability and visualization of data and provides planners the opportunities to plan in the best way possible. Furthermore, spatial data should be publically accessible so stakeholders could take cross-border plans into consideration with regard to their own national maritime spatial planning plans.

*Collective data sources:* coherence in data would contribute to effective transnational organisational integration and overall cooperation. Currently maps are often developed on various scales, with different indicators and without including all sectors. Hence, interaction is hard to identify. A permanent platform would be a good facilitator where all data available comes together and provides a comprehensive, consistent and clear perspective of e.g. all sectors or one sectoral representation (e.g. Natura 2000) in a planning area, based upon all obtained data.

Increasing the political involvement: Taken the case study into consideration, the political engagement seems to be quite low, despite the support that is often required for implementation of the maritime spatial planning plans constructed. Even more, Healey (1997) and Woltjer (2000) argue that the inclusion of a broad range of stakeholder is important for deliberation and negotiation. However, the interest of the political stakeholders for projects and the needed contribution appears be hard to gain. Despite not being the main focus group participating in MSP projects, the need for political contribution and involvement can illustrated in the following situations:

- Political role required in delicate (national) conflicting regions, where long-term agreements across borders and potential significant policy alterations concerning sustainable utilization of the sea are into play.
- In order to tackle the issues in cross-border cooperation and sustainable use of the EEZ and territorial waters, politicians would play a major role in the increasing publicity of the MSP processes and the consideration of others in politics.
- Regarding decision making, politicians are often part decision-making, hence frequently regarded as the actual decision makers. Subsequently MSP stakeholders want to include them in the planning process to come to early/earlier agreements to accelerate the planning process. In this case, planners might have the opportunity to guide the politicians on the preferred 'route'.

Hence, collaborative planning needs stronger political involvement in order to increase deliberations and negotiations, which are regarded to be the fundament of plan making. Nonetheless, political involvement is related to the degree of involvement of the state in MSP processes: if the country is actively involved in national processes, politicians will be more engaged in the meetings/discussions and in their overall contribution to the MSP process. Thus, the political involvement is most likely depending on the planning history and the related national planning structures/culture. Nevertheless, presuming the willingness to increase political involvement in MSP processes, a few guidelines will be offered:

**Proposed role of political involvement:**

- Directing the vision in general, not participating in minor issues. Additionally, planners guiding politicians to the best fitting planning direction regarding significant planning situations.
- Prioritizing certain issues in planning, instead of leaving it blank for all stakeholders involved.

### **Proposed activation of political representatives:**

- Presence of political representatives at planner's conferences in order to increase understanding and necessity of planning processes.
- Providing information for concrete solutions/ways to come to the preferred result and the benefits arising from these plans. However, being comprehensive by mentioning the difficulties too.
- By providing concrete visual spatial representations (e.g. maps/ illustration of environmental plans) increasing the political interest and improve/ accelerate their decision-making.
- Prioritization of bottom-up stakeholder engagement, so political involvement should not be too early in the planning process.

During this research one situation in particular stood out and would benefit from further research:

The engagement of the local and regional relevant stakeholders in transboundary MSP turned out to be rather difficult and insufficient. Despite including multiple decision-makers from various levels with different functions and degrees, their role seem to depending on the level of government responsible for MSP: local, regional or national. Planning authorities and planners seem to have difficulties on how 'lower-levelled' governments should be included in MSP planning processes. This might indicate that a stronger bottom-up structure for stakeholder involvement is required, e.g. more dialogue between multiple governance levels and operating in a transparent decision-making environment. Since, above all, consultants working on a regional level often entail a cross-sectoral point of view and are often responsible for (detailed) regional planning, hence being important stakeholders to effective MSP.

Proceeding on this latter indication, the inclusion of 'lower-levelled' governance authorities is essential to the translation of single citizens, and municipalities. After all, maritime spatial planning might also influence their lives and have impact on their interests. The acknowledgement of the key role regional stakeholders have, might even provide opportunities for civil engagement. Yet, in this case understanding of regional and local planning processes is essential. The current issues on local and regional stakeholder involvement illustrates the need and essence of a more in-depth analysis and research beyond the decision-makers and the sectoral stakeholders. Hence, this raises the question on how to increase and include local and regional stakeholder participation in transnational maritime spatial planning, so all stakeholders are taken into account in the MSP planning process.

Additionally, a final recommendation for further research is focusing on the earlier excluded European case study in this research: the Celtic Sea. This case study met the requirements for this research's case study selection, except for the absence of cross-border cooperation. Consequently, the Celtic Sea case study could be an appropriate case study for the next effort to increase organisational integration in transnational cooperation in European maritime spatial planning.





## Epilogue

After conducting this research and finishing the thesis, I think I can conclude that my learning objectives are achieved. First of all, the aim was to complete an individual research project, which is achieved in my opinion. The completion of this research does not make me a maritime spatial planning expert (yet), but hopefully it shows evidence of mastering an individual selected topic. Another objective of this research was to contribute and go beyond currently existing available research with regard to the improvement of organisational integration in transnational maritime spatial planning. Although the research focuses on the Baltic Sea in Europe, in my experience this research process and the final result does provide insight, recommendations and points of discussion that might work as a bench job for further research.

The challenges I faced during the research mainly relate to writing the institutional challenges in MSP in Europe in the theoretical framework, selecting the scope I would maintain in the ‘findings’ chapter and writing the conclusion. The institutional design of MSP in Europe is so complicated, full of difficult terminology, detailed information and an abundance of sources, that I found it hard to select relevant sources and limit it to general need-to-know information, but would simultaneously provide enough insight in the potential origin of conflicts in transnational maritime spatial planning. While writing down the findings, I continuously had to make decisions on information if it would be relevant or not for the research. It turned out that almost everything was, yet decisions had to be made, which I did to the best of my knowledge. The main obstacle, even though it was not the most time-consuming element, was writing the conclusion. Despite these challenges, they eventually were the most contributing aspects of my personal learning process in writing this thesis.

Looking back at the research, the only thing I would change in my personal process is the so called preparation phase, referring to phases in project management. The struggle on the execution of the thesis, despite having an idea on the subject, provides room for improvement. Earlier interference by asking for assistance would be beneficial to future reports/ studies. With regard to the research, I might aim for the use of other research methods, like interviews or surveys which are complimented with quantitative data. Although I have tried to be as comprehensive and relevant as possible, I still feel like I am missing a more personal and interactive connection to the topic.

Lastly, I would like to thank my scientific supervisor dr. Ferry van Kann again for his support and the energy he put into a topic that was quit unfamiliar to him and me at first. I can only hope that the enrichment of planning perspectives I received was mutual.

Lisa Katuin,

Groningen, July 2018



# 8

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# 9

## **Appendixes**

Appendix i. Scheme of governance structures of Southwest Baltic Sea countries

Country	Level	Instrument	Authority	Document
Denmark	National	National Planning Report	Ministry of Business and Growth	Planning Act
		National Planning Directives		
	Regional	Regional Spatial Development Plan	Regional Council	
	Municipal	Municipal Plan	Municipal Council	
	Local	Local Plan		

Country	Level	Instrument	Authority	Document
Germany	National	Spatial Planning Policy Guidelines; Framework for Action in Spatial Planning	Conference of the Ministers for Spatial Planning	Federal Spatial Planning Act
	Regional	Regional Plan for the Territory of a Land	Responsible Ministry on Länder level	Spatial Planning Acts for the Territory of a Land
	Sub-regional	Sub-regional plan	Differs from state to state (Special associations, middle-tier state bodies, government level)	
	Local	Preparatory Land-use Plan	Municipal Council	Federal Building Code
Legally Binding Land-use Plan				

Country	Level	Instrument	Authority	Document
Sweden	National		Government, Government Agencies	Planning and Building Act, Environmental Code
	Regional	Regional Plan	County Councils	
			County Administrative Board	
	Local	Comprehensive Plan	Municipal Council	
Detailed Development Plan				

Country	Level	Instrument	Authority	Document
Poland	National	National Spatial Management Concept	Council of Ministers, Ministry of Regional Development	Act of Spatial Planning and Management
	Regional	Voivodeship Spatial; Management Plan	Voivodeship Board	
	Local	Local Spatial Management Plan	Commune Council, head of commune	
		Study of the Conditions and Directions of Spatial Management		

Source: Giacometti et al. (2015); swAM (2015); Baltic SCOPE (2016b); Baltic SCOPE (2016c) & Danish Maritime Authority (2018). Modified by author (2018).

Appendix ii. Pomeranian Bay

Overlapping interests	Status	Analysis	Solutions
(DE) Nature protection area "Pommersche Bucht" & (PL) Maritime Transport Routes	CONFLICT	<ul style="list-style-type: none"> <li>- Permanent sandbank at north side of the approach to the ports of Świnoujście and Szczecin: requires dredging for maintaining current approach parameters (14.5 m).</li> <li>- PL has future plans to deepen the seabed to 17 meters on the north side, where no fixed infrastructure is installed yet.</li> <li>- Pommersche Bucht, as nature protection area, might increase administrative burden of executing dredging operations, which are needed for the maintenance and future development of the ports.</li> </ul>	<p>Smooth maritime transport flows are important factor for DE and DK economic development:</p> <ul style="list-style-type: none"> <li>- Working towards pragmatic implementation by project partners; and/or</li> <li>- Adaptation of current and future regulations in order to solve conflicts between shipping, environment and other sea uses.</li> <li>- Maintaining and improving access to ports in area by the project partners.</li> </ul> <p><b>Fitting indicator(s):</b></p> <ul style="list-style-type: none"> <li>• Transboundary organisations: <ul style="list-style-type: none"> <li>- Agreed joint rules</li> </ul> </li> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Transnational communication</li> </ul> </li> </ul>
(PL) Natura 2000 & (PL) Raw Material Extraction	CONFLICT	Problems caused by extraction of deposits within nature preservation zones, could turn into future transnational issues.	<p>Solution could be found in EIA standards and national SEA/ MSP processes and project levels.</p> <p><b>Fitting indicator(s):</b></p> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Conflict in domestic policies</li> </ul> </li> </ul>
(DE) Natura 2000 & (DE) Raw Material Extraction	CONFLICT	Problems caused by extraction of deposits within nature preservation zones, could turn into future transnational issues.	<p>Solution could be found in national SEA/ MSP process + on EIA project level.</p> <p><b>Fitting indicator(s):</b></p> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Independent problem solving</li> </ul> </li> </ul>

Overlapping interest	Status	Conflict analysis	Solution
(DE) Military, Training & (PL) Maritime Transport Routes	COMPETING	Northern harbour approach inside DE military area (NATO); Blocked access to ports of Świnoujście-Szczecin in the period of live fire exercises.	<ul style="list-style-type: none"> <li>- Project partners should improve accessibility to available information on exercises that hinder entry to ports.</li> <li>- On political level: discussion needed for the scope of specific military areas that offer possible access during exercises.</li> </ul> <p><b>Fitting indicators:</b></p> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Transnational communication</li> </ul> </li> <li>• Transboundary organisations: <ul style="list-style-type: none"> <li>- Information sharing</li> </ul> </li> </ul>
(DE) Natura 2000 & (PL) Offshore Wind farms	COMPETING	DE (+PL) Nature 2000 neighbouring potential offshore wind farm areas; Potential problem: ESPOO might conclude distance between windfarms and N2000 is too close	<p>Special regulations could be prescribed in future PL plans to consider German N2000</p> <p><b>Fitting indicator(s):</b></p> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Imposition</li> <li>- International harmonization</li> </ul> </li> </ul>

Overlapping interests	Status	Conflict analysis	Solution
(DE) Natura 2000 & (DE) Fishing Areas	COMPETING	Spatial restrictions for fisheries, but according to available data fishing is not a big issue in the area.	Restrictions depending on decision in management plans; possible solution could be that only certain fishing techniques will be prohibited. <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Policy convergence:</li> <li>- Conflict in domestic policies</li> </ul>
(DE) Natura 2000 & (PL) Submarine, Cables, Pipelines	COMPETING	Planned project Baltic Pipe (strategic project for PL government, received already localisation decision in PL) crossing German N2000 areas, offshore windfarm zones and shipping routes.	- Problem has to be solved at project Baltic Pipe level. - Definition of gate at German/Polish border for transnational coordination. <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Shared conceptualisation:</li> <li>- Similarity planning concepts</li> <li>• Transboundary organisations</li> <li>- Agreed joint rules</li> </ul>

Overlapping interests	Status	Conflict analysis	Solution
(DE) Submarine, Cables, Pipelines & (PL) Submarine, Cables, Pipelines	CO-EXISTENCE	<u>Synergy:</u> define common gate for grid infrastructure and potential pipelines	Consultation and definition in both national MSP processes. <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Policy convergence:</li> <li>- International harmonization</li> <li>• Shared conceptualisation:</li> <li>- Similarity planning concepts</li> <li>- Establish mutual objectives</li> </ul>
(DE) Natura 2000 & (PL) Natura 2000	CO-EXISTENCE	<u>Synergy:</u> Both Polish and German areas are nature protection areas, however they have different approaches to objects of protection and threats/ pressures in standard data forms: e.g. offshore wind energy not included as threat in German standard data form	- Offshore windfarms will very likely be integrated as potential threat in German standard data forms. Hence, contradiction might be solved. - Other divergence in planning approaches need further dialogue. <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Shared conceptualisation</li> <li>- Similarity in planning concepts</li> <li>- Establish mutual objectives</li> </ul>
(DE) Maritime Transport Routes & (PL) Maritime Transport Routes	CO-EXISTENCE	<u>Synergy:</u> German MSP provides continuation of existing ferry lines from port of Świnoujście	<b>Fitting indicator(s)</b> <ul style="list-style-type: none"> <li>• Shared conceptualisation</li> <li>- Previously shared cross-border experiences</li> </ul>

#### Appendix summary of indicators Pomeranian Bay:

Imposition	International harmonization	Regulatory competition	Transnational communication	Independent problem solving	Degree of conflicts in domestic policies
1	2	-	2	1	2
Establishment of mutual objectives	Previously cross-border experiences	Focus on small number of joint strategic plans		Similarity in planning concepts	Cultural resemblance among countries
2	1	1		2	-
Information sharing	Administration sharing	Agreed joint rules	Combined organisation	Combined constitution	Organisational identity
1	2	-	-	-	-

Source: Fock (2010); Käppeler et al. (2012); Bundesamt für Naturschutz (2015); Turlajs et al. (2016); Giacometti et al. (2017); HELCOM (2018). Modified by author (2018).

Overlapping interests	Status	Analysis	Solution
Offshore Wind Farm & (SE, DE, DK) Maritime Transport Routes	CONFLICT	TT ferry line crossing Danish region for offshore wind farm tender, low frequency	<p>- Moving ferry line west if wind farm operator uses entire area;                      - Agreement between De and SE required regarding rerouting ferry line</p> <p><b>Fitting indicator(s)</b></p> <ul style="list-style-type: none"> <li>• Transboundary organisations</li> <li>- Agreed joint rules</li> </ul>
(SE, DE, DK) Nature/ Species/ Conservation Protected Areas & (SE, DE, DK) Offshore Wind Farm	CONFLICT	Pile-driving noise disturbs harbour porpoises leading to possible injuries and disturbance effects	<p><u>Recommendation:</u></p> <ul style="list-style-type: none"> <li>- Agreement on common criteria by planners;</li> <li>- Potential resolutions with regard to licensing procedures, e.g.: gravity foundations instead of monopiles, allowance of pile-driving only in particular seasons, an obligation for noise mitigation measures (like OSPAR inventory for mitigation of emission and underwater environmental impact).</li> </ul> <p><b>Fitting indicator(s):</b></p> <ul style="list-style-type: none"> <li>• Shared conceptualisation:                             <ul style="list-style-type: none"> <li>- Establish mutual objectives</li> </ul> </li> <li>• Transboundary organisations:                             <ul style="list-style-type: none"> <li>- Agreed joint rules</li> </ul> </li> </ul>
(SE, DE, DK) Nature/ Species/ Conservation Protected Areas & (SE, DE, DK) Offshore Wind Farm	CONFLICT	Crane- and bat migration crossing Baltic Sea between SE and DE, might bump with turbines.	<p><u>Recommendation:</u></p> <ul style="list-style-type: none"> <li>- Consideration of migration routes during designation of offshore windfarm zones, including regulations on impact mitigation;</li> <li>- Finding common principle on the implementation of safeguarding bird habitats (= HELCOM recommendation).</li> <li>- Further study needed on migrating birds and behaviour, limited knowledge on bat migration.</li> </ul> <p><b>Fitting indicator(s):</b></p> <ul style="list-style-type: none"> <li>• Shared conceptualisation                             <ul style="list-style-type: none"> <li>- Similarity in planning concepts</li> <li>- Establishment of mutual objectives</li> </ul> </li> <li>• Transboundary organisations:                             <ul style="list-style-type: none"> <li>- Administration sharing</li> </ul> </li> </ul>
(SE, DE, DK) Fishing Areas & (SE, DE, DK) Offshore Wind Farm	CONFLICT	Fishing not allowed in DE wind farms; Bottom trawling not allowed in DK; No prohibition in SE.	<p><u>Suggestion:</u></p> <ul style="list-style-type: none"> <li>- Co-existence: space sharing by using static gear<sup>9</sup> in wind farms, although conflicting with mammals → SE:static gear - only baskets, not nets – for protection (harbour) porpoises; DE:finds coexistence between these activities unrealistic.</li> </ul> <p><u>Alternative (synergy):</u></p> <ul style="list-style-type: none"> <li>- Excluding fisheries from wind farm areas in order to develop new fish habitats.</li> </ul> <p><b>Fitting indicator(s):</b></p> <ul style="list-style-type: none"> <li>• Shared conceptualisation:                             <ul style="list-style-type: none"> <li>- Establish mutual objectives</li> <li>- Similarity in planning concepts</li> </ul> </li> <li>• Transboundary organisations:                             <ul style="list-style-type: none"> <li>- Administration sharing</li> </ul> </li> </ul>

<sup>9</sup> Static gear = passief vistuig

Overlapping interest	Status	Conflict analysis	Solution
(SE, DE, DK) Nature/ Species/ Conservation Protected Areas & (DK) Raw Material Extraction	CONFLICT	Disturbance effects on fish by turbidity / sedimentation.	<p><b>Suggestion:</b> Establish seasonal recommendation for gravel and sand extraction.</p> <p><b>Fitting indicator(s):</b> Shared conceptualisation: - Establish mutual objectives • Transboundary organisations: - Administration sharing</p>
(SE, DE, DK) Offshore Wind Farm & (SE, DE, DK) Radars	CONFLICT	Radar: offshore wind turbines might disturb radar signals	<p>Adjusting/replacing current radar installations with new radio installations (e.g. repeater, gap fillers or relay-station)</p> <p><b>Fitting indicator(s):</b> • Policy convergence: - Independent problem solving</p>
(SE, DE, DK) Submarine Cable Pipeline & (SE, DE, DK) Offshore Wind Farm	CONFLICT	Pipeline BalticPipe: first proposal for new pipeline between Poland and Norway via Denmark is crossing Kriegers Flak area.	<p>Rerouting of pipeline outside wind farm zone, when official application is submitted.</p> <p><b>Fitting indicator(s):</b> • Transboundary organisations: - Administration sharing • Shared conceptualisation: - Establishing mutual objectives</p>
SE, DE, DK Submarine Cable Pipeline & (SE, DE, DK) Military Training	CONFLICT	<u>Potential future conflict:</u> The pipeline BalticPipe crossing submarines area.	<p>Consultation of stakeholders (from military service) necessary to find appropriate cable pipeline area.</p> <p><b>Fitting indicator(s):</b> • Transnational communication: - Administration sharing • Shared conceptualisation: - Establish mutual objectives</p>
SE, DE, DK National Authorities	CONFLICT	Working on different wavelengths among various national authorities with regard to MSP planning intentions and approaches in the Kriegers Flak area.	<p>- Improvement of collaborative planning required. - Development of a mutual visualisation tool to increase understanding of various planning approaches. Additionally, enlarges the knowledge of current and potential future conditions of the Kriegers Flak</p> <p><b>Fitting indicator(s):</b> • Policy convergence: - Transnational communication • Shared conceptualisation - Cross-border experiences - Similarity in planning concepts • Transboundary organisations: - Administration sharing</p>

Overlapping interests	Status	Conflict analysis	Solution
(SE) Offshore Wind Farm & (DK) Raw Material Extraction	COMPETING	Wind Power (National interest Sweden) in combination with good conditions for sand extraction.	<p>Extraction is allowed if the legal agreed distance between site and windmill is taken into consideration.</p> <p><b>Fitting indicator(s):</b> • Shared conceptualisation: - Similarity in planning concepts - Establish mutual objectives • Transboundary organisations: - Agreed joint rules</p>

Overlapping interests	Status	Conflict analysis	Solution
(DE, DK) Submarine Cable Pipeline & (SE, DE, DK) Submarine Cable Pipeline	CO-EXISTENCE	<u>A Combined Grid Solution:</u> Connecting Danish and German wind farms and the connection of onshore grids in both countries; future plans for additional connection of Swedish wind farms not clear	<u>Synergy:</u> -Connection SE wind farms requires extra cable in DE; - Planners recommend a link between all wind farms.; - Discuss German gates in national processes in SE and DK. Issue will be discussed in BalticLINes project.  <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- International harmonization</li> </ul> </li> <li>• Transboundary organisations: <ul style="list-style-type: none"> <li>- Agreed joint rules</li> </ul> </li> </ul>
(SE, DE, DK) Nature/ Species/ Conservation Protected Areas & (SE, DE, DK) Offshore Wind Farms	CO-EXISTENCE	Overlap between nursery area for cod and other species and offshore wind farm areas.	<u>Synergy:</u> Exclusion of fishing in offshore wind farm areas and imitation reefs as new habitat for fish species.  <u>Potential recommendation:</u> During nursery period exclusion of installation = seasonal exclusion.  <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Transnational communication</li> </ul> </li> <li>• Shared conceptualisation: <ul style="list-style-type: none"> <li>- Establish mutual objectives</li> </ul> </li> <li>• Transboundary organisations: <ul style="list-style-type: none"> <li>- Agreed joint rules</li> </ul> </li> </ul>
(DK) Offshore Wind Farm & (DE) Maritime Transport Routes	CO-EXISTENCE	Shipping and ferry route at sufficient distance from offshore wind farms.	Offshore wind farms allowed at distance of 500 m from shipping lane. Different approaches are currently used for the determination of path widths and according to safety distances.  <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Transnational communication</li> </ul> </li> <li>• Transboundary organisations: <ul style="list-style-type: none"> <li>- Agreed joint rules</li> </ul> </li> </ul>

#### Appendix summary of indicators Kriegers Flak:

Imposition	International harmonization	Regulatory competition	Transnational communication	Independent problem solving	Degree of conflicts in domestic policies
-	1	-	3	1	-
Establishment of mutual objectives	Previously cross-border experiences	Focus on small number of joint strategic plans		Similarity in planning concepts	Cultural resemblance among countries
8	1	-		6	-
Information sharing	Administration sharing	Agreed joint rules	Combined organisation	Combined constitution	Organisational identity
	6	6	-	-	-

Source: Swedish Energy Agency (2008); Vattenfall Group (2011); Leonhard et al. (2013); Dong Energy (2015); Energinet.dk (2015a); Baltic SCOPE (2016b); Danish Energy Agency (2017) & Giacometti et al. (2017). Modified by author (2018).

Appendix iv. Southern Middle Bank

Overlapping interests	Status	Conflict analysis	Solution
(PL) Offshore Wind Farm & (SE) Maritime Transport Routes	CONFLICT	Ferry lane from Sweden (SE National interest in EEZ) expands into Polish offshore wind farm area.  No permit yet for offshore wind farms in Poland across Swedish ferry line = unsure future, but might not be a problem in the end.	<u>Raised questions about:</u> -Possibilities replacement of ferry lane; fishing areas;set aside potential new permits regarding offshore wind farm area? Questions need further analysis  <b>Fitting indicator(s):</b> • Policy convergence: - Transnational communication
(SE, PL) Offshore Wind Farm & (other) Maritime Transport Routes	CONFLICT	International shipping lane from Falsterbo to Klaipeda crosses the Southern Middle Bank offshore wind farm areas.	During process of developing and distributing space for offshore wind farms between Sweden and Poland, rerouting the shipping lane to the north of the Southern Middle Bank should be considered.  <b>Fitting indicator(s):</b> • Policy convergence: - Transnational communication • Shared conceptualisation: - Establish mutual objectives
(PL) Raw Material Extraction & (SE) Other	CONFLICT	<u>Possible conflict:</u> - Intentions of extracting oil and gas by Poland - Sweden has made a political decision not to.	- Creating mutual accepted way of illustrating the area. -Inform each other about plans and intentions in the future.  <b>Fitting indicator(s):</b> • Shared conceptualisation: - Similarity in planning concepts • Transnational organisations: - Information sharing
(SE) Offshore Wind Farm & (SE) Maritime Transport Routes	CONFLICT	- Offshore wind farms and shipping cannot occur at the same place. The DW Route is important; also important for the re-routing of Klaipeda route.	Take national interest for wind power in DW Route away.  <b>Fitting indicator(s):</b> • Policy convergence: - Conflict in domestic policies • Shared conceptualisation: - Establish mutual objectives
(PL) Fishing Areas & (PL) Military Training	CONFLICT	South of the Southern Middle Bank, fisheries are hindered by military use.	Dialogue is needed.  <b>Fitting indicator(s):</b> • Shared conceptualisation: - Establish mutual objectives • Transboundary organisations: - Information sharing

Overlapping interests	Status	Conflict analysis	Solution
(SE, PL) Raw Material Extraction & (SE, PL) Offshore Wind Farm	COMPETING	Sand and gravel extraction in the same place as offshore wind farms is not possible.	Information sharing and coherence of countries' offshore wind farm requirements before granting permits for sand extraction.  <b>Fitting indicator(s):</b> • Transboundary organisations - Agreed joint rules

Overlapping interest	Status	Conflict analysis	Solution
(SE, PL) Dumped Munitions	COMPETING	- Potential migration of dumped munitions in Swedish EEZ into Polish waters because of currents. - Potential problem, although might be solved together.	National plans in text, demonstrate in area.  <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Transnational communication</li> </ul> </li> <li>• Shared conceptualisation: <ul style="list-style-type: none"> <li>- Establish mutual objectives</li> </ul> </li> </ul>
(SE, PL) Offshore Wind Farm & (SE, PL) Nature Species Conservation	COMPETING	- Preferred planning area of importance for birds and harbour porpoises; could be affected during the construction period of offshore wind farms.	Approving offshore wind farm permits only when measures regarding the protection of sound sensitive mammals during construction phase are considered and undertaken.  <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Conflict in domestic policies</li> </ul> </li> <li>• Transboundary organisations: <ul style="list-style-type: none"> <li>- Agreed joint rules</li> </ul> </li> </ul>
(SE, International) Fishing Areas & (international) Maritime Transport Routes	COMPETING	Potential rerouting of shipping lane to Klaipeda (south of Southern Middle Bank) might affect fisheries.	Working on relocating traffic to the north, into DW Route. In collaboration with HELCOM Maritime.  <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Transboundary organisations <ul style="list-style-type: none"> <li>- Administration sharing</li> </ul> </li> </ul>

Overlapping interests	Status	Conflict analysis	Solution
(SE, PL) Offshore Wind Farm & (SE, PL) Nature Species Conservation	CO-EXISTENCE	-	Poland can learn the language of restrictions from Swedish permits  <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Transnational communication</li> </ul> </li> </ul>
(SE) Raw Material Extraction & (PL) Raw Material Extraction	CO-EXISTENCE	Oil and gas extraction in Poland and CO2 storage in Sweden.	Need further investigation.  <b>Fitting indicator(s):</b> <ul style="list-style-type: none"> <li>• Policy convergence: <ul style="list-style-type: none"> <li>- Transnational communication</li> </ul> </li> <li>• Shared conceptualisation: <ul style="list-style-type: none"> <li>- Similarity in planning concepts</li> </ul> </li> </ul>

#### Appendix summary of indicators Southern Middle Bank:

Imposition	International harmonization	Regulatory competition	Transnational communication	Independent problem solving	Degree of conflicts in domestic policies
-	-	-	5	-	2
Establishment of mutual objectives	Previously cross-border experiences	Focus on small number of joint strategic plans		Similarity in planning concepts	Cultural resemblance among countries
3	-	-		2	-
Information sharing	Administration sharing	Agreed joint rules	Combined organisation	Combined constitution	Organisational identity
2	1	2	-	-	-

Source: Zaucha & Matczak, 2011); Oceana (2013); Baltic SCOPE (2016e); Baltic SCOPE (2016f); Giacometti et al. (2017) & European Platform (2018c). Modified by author (2018).

