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A Policy Perspective on the Performance of Marine Spatial Planning

Guiding or following offshore wind energy development in the Netherlands?

Source: PDNS (2009)

Rozanne Charlotte Spijkerboer

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A Policy Perspective on the Performance of Marine Spatial Planning -

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Rozanne Charlotte Spijkerboer

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Faculty of Spatial Sciences

University of Groningen

The Netherlands

Supervised by: Dr. Christian Zuidema

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Rozanne Spijkerboer

ABSTRACT

In contrast to the previous ad hoc and sectoral decision-making at sea, marine spatial planning (MSP) is presented as a tool to realize a more systematic and integrated approach to govern sea uses, in which different interests are balanced among each other and with regards to the environment, to achieve more efficient spatial allocations of uses at sea (Douvere, 2010; Ehler. 2014). One of the primary drivers for the development of multi-objective MSP in western European countries, is the development of offshore wind energy (Douvere, 2008; Ehler, 2014; Jay, 2010b). Therefore, it can be expected that MSP plays a large role in guiding the allocation of offshore wind development. However, the Netherlands seems to be lagging behind with regards to the realization of offshore wind energy targets. Moreover, some authors have identified an implementation gap in MSP and are doubting the ability of MSP to guide large sectors such as offshore wind energy (Kidd & Shaw, 2014; Qui & Jones, 2013). This raises questions to what extent MSP can be this systematic and integrated approach for the governance of the sea.

Therefore, this thesis will examine to what extent and how Dutch MSPs perform in guiding offshore wind energy development in the North Sea. Contrary to the common perception in literature of MSP as a 'tool' for sea-use management, in this thesis, MSP is positioned as the planning system for the sea. Through this conceptualization, MSP can be examined from a policy perspective, in which institutions and institutional design are placed at the heart of the planning system. In line with this policy perspective, this thesis will not only look at conformance of the outcomes of MSPs to set objectives (as is currently the case in MSP literature), but instead explore how MSP is used in decision-making about offshore wind energy (performance).

A mixed-method approach is applied based on policy document analysis and interviews. Directed coding based on literature on plan performance and institutional design is used to analyze the main message of the Dutch MSPs, as well as how this message is subsequently used (or not) in decision-making regarding offshore wind energy. Interviews with government representatives and an independent expert were held to reflect on the results of the policy analysis. Six main characteristics of MSP (area-based, integrated, strategic, ecosystem-based, participative, and adaptive), identified through an extensive literature review, formed the framework for the analysis. First it was assessed to what extent Dutch MSPs reflected these characteristics, and second it was examined to what extent these characteristics in Dutch MSPs performed with regards to guiding decision-making on offshore wind energy.

The results demonstrate that there is only limited performance of MSP with regards to offshore wind energy in the Netherlands. The MSPs do seem to perform in appointing wind energy areas, which is based on a very broad consideration of interests aimed mainly at avoiding or minimizing conflicts. Only within these appointed areas, permits for wind energy will be issued. However, the MSPs barely performs on the level of the appointment of wind parks. Contrary, sectoral legislation has been enacted in the form of the Offshore Wind Energy Act, which removes decision-making regarding the location of offshore wind parks from the MSPs and introduces the instruments of the plot-decision and a separate wind permit. The rationale behind the development of this sectoral legislation appears to be a focus on cost-efficiency which results in an emphasis on risk reduction by attempting to reduce short-term uncertainty. As a result, the government applies a top-down, technical rational approach to appoint the locations of offshore wind parks through plot-decisions, based primarily on the consideration of cost-efficient and fast realization of targets set by the policy network around renewable energy (RNE). In general, therefore, MSP seems to be following rather than guiding offshore wind energy development.

The politically sensitive nature of decision making about offshore wind energy with a lack of consensus regarding targets, and the high amount of subsidy required for development, appear to have created a system in which area-based, integrated, strategic, participative and adaptive approaches are discouraged in favor of a sectoral, top-down approach by the government, aimed at minimization of costs and risks.

Key Words *Marine spatial planning, offshore wind energy, policy perspective, plan performance, institutional design*

ACRONYMS AND TRANSLATIONS

BHD	Bird- and Habitat Directives
EIA	Environmental Impact Assessment
EL&I	Ministry of Economic Affairs, Agriculture, and Innovation [Ministerie van Economische Zaken, Landbouw en Innovatie]
EEZ	Exclusive Economic Zone
EZ	Ministry of Economic Affairs [Ministerie van Economische Zaken]
I&M	Ministry of Infrastructure and the Environment [Ministerie van Infrastructuur en Milieu]
IMP	Integrated Management Plan North Sea [Integraal Beheersplan Noordzee]
LNV	Ministry of Agriculture, Nature and Food Quality [Ministerie van Landbouw, Natuur en Voedselkwaliteit]
MEP	Environmental Quality of Electricity Production [Milieukwaliteit Electriciteits Productie]
MSFD	Marine Strategy Framework Directive
MSP	Marine Spatial Planning
NWP	National Water Plan [Nationaal Waterplan]
PDNS	Policy Document on the North Sea [Beleidsnota Noordzee]
RWS	Directorate-General for Public Works and Water Management [Rijkswaterstaat]
SPPD	Spatial Planning Policy Document
SvWoZ	Structuurvisie wind op zee [White Paper offshore wind energy]
V&W	Ministry of Transport, Public Works and Water Management [Ministerie van Verkeer en Waterstaat]
VROM	Ministry of Housing, Spatial Planning and the Environment [Ministerie van volkshuisvesting, Ruimtelijke Ordening en Milieu]
Wbr	Public Works Act [Wet beheer rijkswaterstaatwerken]
WFD	Water Framework Directive
Wro	Spatial Planning Act [Wet ruimtelijke ordening]

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CHAPTER 1 – INTRODUCTION

1.1 Offshore wind energy and marine spatial planning

Fossil fuels are a limited and finite source of energy in a world where energy consumption is growing (Shields & Payne, 2014). Simultaneously, geopolitical tensions in the middle-east as well as along the border of Ukraine and Russia have reignited concerns about the security of supply for oil and gas (IEA, 2014). Therefore, many countries are adopting policies that regulate and encourage investments in renewable energy (Shields & Payne, 2014). Moreover, in 2009, the European Union adopted the Renewable Energy Directive (2009/28/EC) which set binding targets for renewable energy for individual Member States through National Renewable Energy Plans. Offshore wind energy is expected to supply a significant percentage of these targets in coastal member states. The marine environment offers a number of advantages compared to onshore wind energy, including higher wind speeds, more predictable wind availability, larger areas that are available for sizable wind energy projects and the potential for larger turbines (Kannen et al, 2013). Moreover, it is expected that technological innovations will advance wind energy development to areas further offshore and into more high-energy environment, as well as increase the commercial viability of other ocean energy technologies (Shields & Payne, 2014). The advancement of wind energy offshore requires new forms of governance, policies and regulations that will guide their spatial allocation in relation to other sea uses (Kannen et al, 2013).

Previous ad hoc, arbitrary and sectoral decision-making limits transparency and does not take into account the relation between different sea-uses and the cumulative effect on the environment (Douvere, 2010; Drankier, 2012; Ehler & Douvere, 2009; Jay, 2010a; Kannen et al, 2013; Kidd & Ellis, 2012). Therefore, Marine Spatial Planning (MSP) is currently promoted and adopted at both the national and supranational level as the principal approach to govern these different marine and coastal uses in an integrated manner (Douvere, 2010; Jay, 2010a; Kannen et al, 2013). The idea behind MSP is that it guides the temporal and spatial distribution of human activities, through a continuous, iterative and future-oriented process which allows for pro-active decision-making in the face of uncertainty (Douvere, 2010). A crucial enabling factor for the rise of multi-objective MSP was the 1982 United Nations Convention for the Law of the Sea (UNCLOS) which came into effect in 1994. UNCLOS established the division of rights and duties offshore and was ratified by all EU Member States as well as the European Community (Drankier, 2012). According to UNCLOS, the marine territory of a coastal state consists of the territorial sea which can be established up to 12 nautical miles from the baseline, and the exclusive economic zone (EEZ) which can be extended up to a limit of 200 nautical miles offshore. The coastal state has *full sovereignty* over the territorial sea. Moreover, due to UNCLOS the coastal state now has *sovereign rights for the economic exploration and exploitation of natural resources* in the EEZ, including the right to produce energy from water, current and the wind (Art. 56 UNCLOS). The sovereign rights of a coastal state for exploration and exploitation of the EEZ have created a legal basis for economic development and environmental protection further offshore (Drankier, 2012).

Multi-objective MSP originated in heavily used marine areas, particularly the North Sea, as a result of the conflicts arising from competing claims for sea space. This increased competition for sea space is caused by both the expansion of traditional and new uses (in particular development of offshore wind energy) and the cumulative impacts of this 'ocean sprawl' on the underlying ecosystem (Douvere 2008; Douvere 2010; Ehler 2014; Directive 2014/89/EU). In western European countries (including the Netherlands), the targets for offshore wind energy have been the main reason for developing multi-objective MSP (Douvere, 2008; 2010; Ehler, 2014; EC, 2013b; Jay, 2010b). The European Wind Energy Association (EWEA) perceives marine spatial planning (MSP) as a key concept to ensure further development of the offshore wind energy sector, because MSP can contribute to improving stability and clarity for investors and help to reduce costs by integrating wind energy with other offshore uses and the environment (EWEA, 2012).

MSP is presented as a systematic and integrated approach to govern the sea (Douvere, 2008; Ehler, 2010; Jay, 2010b). According to Jay (2010b), "the practice and principles of spatial planning can make an important contribution to the proper consideration of proposals for offshore wind arrays […]

especially […] when a strategic planning process is put in place for marine areas, in which offshore wind is treated as part of the overall configuration of marine interests" (p. 493). Since the Netherlands was one of the first countries that started developing multi-objective MSP – in particular in light of offshore wind energy ambitions (Douvere 2008; Jay, 2010b) – one might expect that offshore wind energy is at an advanced stage in the Netherlands. However, the Netherlands seem to be lagging behind compared to most other countries bordering the North Sea with regards to offshore wind energy (EWEA, 2015), with hitherto only three operational wind farms (Ministries of I&M & EL&I, 2014b). Therefore the question arises to what extent MSP actually is performing with regards to guiding the development of offshore wind energy in the Netherlands? To elaborate the problem further, it is important to first give a short overview of the division of responsibilities in the Dutch North Sea, and the history of both MSP and offshore wind energy development in the Netherlands.

1.2 Offshore wind energy and marine spatial planning in the Netherlands

Further than one kilometer offshore, the State is the competent authority for North Sea policy. The Ministry of Infrastructure and the Environment (I&M) is responsible for the development and coordination of integrated policy with regards to water, including North Sea policy. Furthermore, the Ministry of I&M is responsible for the infrastructure for shipping in the Dutch North Sea. The executive organization for the Ministry of I&M, Rijkswaterstaat [the Directorate-General for Public Works and Water Management, department Sea and Delta], is the coordinating manager for North Sea policy and the first contact point for companies, citizens and governments for issues regarding the North Sea. The Ministry of Economic Affairs, Agriculture and Innovation (EL&I), is the competent authority for the energy sector (both fossil and renewable energy), nature, and fisheries, often in line with EU regulation on these issues. Therefore, the Ministries of I&M and EL&I usually cooperate when designing policy for the North Sea (Noordzeeloket, 2015).

The Dutch government has published several documents that provide spatial policy for the Dutch North Sea and are therefore qualified as the Dutch MSPs. The first integrated spatial policy framework for the Dutch North Sea was published in 2004 in the form of the *Spatial Planning Policy Document*, which introduced an integrated assessment framework that was further explained in the *Integrated Management Plan for the North Sea 2015* (published in 2005). This policy introduced the integrated assessment framework which applies to all marine activities that are subject to authorization, thereby supplementing the traditional permit system that regulated activities at sea. The integrated assessment framework consists of five steps that feed in to decision-making (about additional requirements) for the permit (Noordzeeloket, 2014). Subsequently, numerous changes and revisions were issued for policy and regulation regarding the North Sea, including the publication of the *National Water Plan 2009-2015* and accompanying *Policy Document for the North Sea 2009-2015*, which replaced the Spatial Planning Policy Document. These changes in policy subsequently required a revision of the *Integrated Management Plan for the North Sea* in 2011. The *National Water Plan* was partly revised in the form of the *White Paper on Offshore Wind Energy* in 2014. The most recent publications are the drafts for the second *National Water Plan 2016-2021* and accompanying *Policy Document for the North Sea* 2016-2021 (published December 2014), which are expected to come into effect December 2015. Instead of a separate management plan for the integrated assessment framework, the most recent version of the *Policy Document for the North 2016-2021* sea also includes this framework.

The Netherlands has not issued separate legislation for the North Sea. Rather, certain existing Acts have been extended to cover the EEZ, including the Spatial Planning Act, the Water Act, the Mining Act, the Flora- and Fauna Act, the Nature Protection Act, and the Earth Removal Act (Noordzeeloket, 2015). An exception is the Offshore Wind Energy Act, which came into effect 1 July 2015. This Act forms the legislative framework for the designation of suitable locations for offshore wind parks and the issuing of permits for the development and exploitation of these wind parks[1]. Especially with regards to

[1] For the purpose of readability, the Offshore Wind Energy Act is referred to by its name. It's source can be found under EersteKamer (2015)

the environment, EU legislation and international conventions are important (see Maes (2008) and Drankier (2012) for an overview of international legislation relevant for MSP).

Despite the, at first sight, promising developments regarding MSP, Figure 1 illustrates that the Netherlands lags behind compared to most countries bordering the North Sea, with hitherto [November 2015] only three operational offshore wind farms. The exploration for the development of the so called round 1 parks started as early as 1997 (Dekkers, 2007). The planning of these parks was not based on integrated policy but on specific procedures that were developed at the end of the 1990s. These parks (called Egmond aan Zee and Prinses Amalia) became operational in 2007, respectively 2008 (Noordzeeloket, 2014). Contrary to the round 1 parks, the round II and III wind parks were (and are) being developed while MSP is available for the Dutch North Sea. The first round II park, called Luchterduinen, became operational on 22nd of September 2015 (Van Oord, 2015). The other two round II parks, together called Gemini, are currently under construction (Van Oord, 2015). Tenders for round III are expected to be issued in December 2015 (Noordzeeloket, 2015).

This short description demonstrates that offshore wind energy development in the Netherland has progressed slowly. Integrated spatial policy for the North Sea (MSP) was published as early as 2004, thereby influencing round II and III offshore wind developments. The focus in this study will therefore be on the extent to which MSP performed in guiding decision-making regarding the round II and III system for offshore wind energy development.

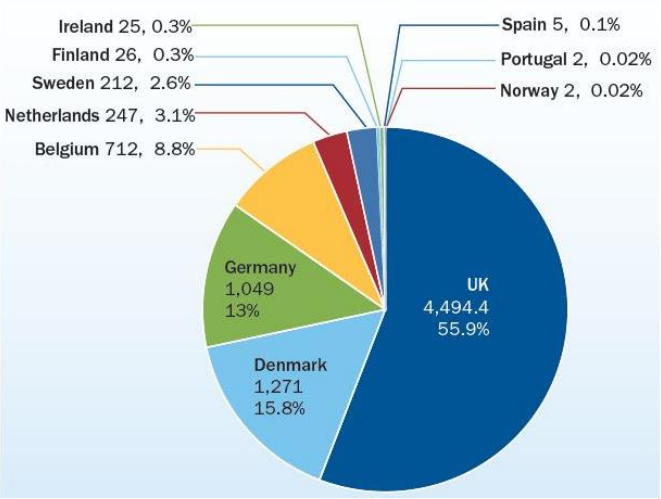


Figure 1 Installed capacity: Cumulative share of offshore wind energy per country in MW (EWEA, 2015). The offshore wind park Luchterduinen which became operational 22 September 2015, with a capacity of 129 MW has not been included in this figure.

1.3 The research problem, approach, objective and questions

According to Winsemius' (1986) policy lifecycle model, the development of new policy usually starts with problem recognition, followed by policy formulation, implementation and enforcement. However, in the Netherlands the implementation phase for offshore wind energy appears to have coincided with policy formulation in the form of MSP. Moreover, there appears to be a strong sectoral focus on energy, and the implementation of offshore wind energy specifically - as illustrated by, for example, the White Paper on Offshore Wind Energy and the Offshore Wind Energy Act - rather than an integrated, multi-sectoral approach. Therefore, it can be questioned to what extent MSP is actually being applied as an integrated, systematic governance approach for the sea in the Netherlands.

It is important to realize, as Jay (2010) explains, that *"MSP may be better portrayed as a marine adoption of planning than as an incursion of terrestrial planning into the seas"* (p.174). MSP originates from epistemic communities related to marine environmental- and resource management. This natural science approach results in a focus on scientific rationalism to understand (environmental) problems, and to achieve a rational allocation of sea space (Jay, 2010a). In line with this broader discourse, implementation of MSP in literature is perceived as a straightforward, technical process with a clear goal and objectives, the progress towards which can be measured using indicators to determine whether outcomes conform to set objectives (see e.g. Douvere & Ehler, 2011). Recently, some authors (see for example Jay, 2010a; Kidd & Ellis, 2012; Kidd & Shaw, 2014) have called for more involvement and reflection from the spatial planning community with MSP. Insights from planning theory can enrich the theoretical basis of MSP and they can provide insights into the social and political aspects of the planning process, thereby contributing to MSP practice (Kidd & Shaw, 2014).

Therefore, in contrast to the general perception of MSP in literature, this thesis will apply a policy perspective, in combination with insights from theories regarding plan performance and institutional design. By taking a policy perspective, interaction in policy-making and interpretation is seen as an inherent part of the planning process, thereby offering a framework to include political events, actions and ideas that cannot be explained from a rational scientific point of view (Stone, 1997; Yanow, 1996). In line with this policy perspective, theory on plan performance perceives implementation as a relational process in which the focus should be on whether a plan is used in decision-making; therefore, even when a plan does not conform, it can still perform (Faludi, 2000). However, to provide meaningful insights for policy advice, it is not only important to know whether MSP performs (i.e. influences decision-making regarding offshore wind energy) but also why MSP performs, or does not perform. Theory on institutional design (ID) can provide insights in the 'rules of the game' and the strategies applied by actors to change these rules (Alexander, 2005; Klijn & Koppenjan, 2006).

As described above, this thesis will apply a more relational policy perspective which is sensitive to the 'messy' and 'unpredictable' nature of policy development (Stone, 1997) in which decisions by actors and their interests are focal points. Therefore, on a theoretical level, the objective of this thesis is to provide insights into new approaches to assess MSP processes from a more relational perspective, as requested by e.g. Jay et al (2012), Kidd & Ellis (2012) and Kidd & Shaw (2014). On a practical level, this thesis will contribute by providing insight into the extent to which MSP is actually performing in guiding decision-making in a large sector such as offshore wind energy and thereby, on a broader level, is actually capable of functioning as a systematic governance approach for the planned development of offshore wind energy in relation to other uses in the Dutch North Sea.

The main research question in this thesis is: **To what extent and how does MSP perform in guiding offshore wind energy development in the Netherlands?**
This leads to the following sub-questions:

- What is marine spatial planning and what does it mean to achieve?
- What is the history of marine spatial planning and offshore wind energy in the Netherlands?
- How does Dutch MSP relate to literature and theory on MSP?
- (How) does marine spatial planning influence decision-making on offshore wind energy in the Netherlands?

Although EU regulation is important due to the large number of reports, directives and regulations that concern different aspects of the marine environment, this research will explicitly focus on the Dutch context[2]. Moreover, the electricity network at sea, as well as landing points and the connection to the land-based electricity network are important policy debates that are related to offshore wind energy development and for which separate legislation is being developed. Therefore, these issues will not be discussed beyond aspects that directly influence the location and/or development of offshore wind parks.

The thesis is structured in the following manner: chapter 2 provides a review of relevant literature concerning MSP, how this thesis conceptualizes MSP, and the theoretical approach that is used to study this conceptualization of MSP, as well as how these concepts interrelate in the conceptual model. Chapter 3 subsequently discusses the applied methodology and methods of data analysis. Chapter 4 subsequently presents the results of the thesis, followed by a discussion and reflection in chapter 5. In the conclusion, the research question will be answered and recommendations for further research will be provided.

[2] MSP is called *maritime* spatial planning in the EU context because this term indicates the image of the sea as a use-space. However, since most academic articles use *marine* spatial planning, in this thesis the term *marine spatial planning* will be applied. Publications by the EU that directly promote MSP include the Integrated Maritime Policy (IMP) (EC, 2007), the Marine Strategy Framework Directive (MSFD) (Directive 2008/56/EC), the Roadmap for MSP (EC, 2008), and the MSP framework Directive (Directive 2014/89/EU).

CHAPTER 2 – THEORETICAL FRAMEWORK

This chapter will discuss the concept of MSP. First, the need for MSP and the rise of the concept are explained. Subsequently, a brief description of the key characteristics of MSP as well as the MSP process is provided. Third, the most important debates in MSP literature are elaborated. Subsequently, the basic approach for this thesis will be established by conceptualizing MSP as the planning system for the sea. This conceptualization creates opportunities for assessing MSP from a policy perspective. A conceptual model for the analysis of MSP from a policy perspective is then constructed using insights from theories on plan-performance and institutional design.

2.1 Marine spatial planning: a new approach to govern the sea

Activities at sea have traditionally been regulated on an ad hoc and sectoral basis, often with little regard for the spatial impact of policies and regulations (Douvere, 2008; Halpern et al, 2008). Over the course of the last decades, the number of activities that require space at sea has increased due to, among others, population growth, technological innovations and growing consumer demands. Marine areas have become a feasible alternative to accommodate the increased demand for food, energy and trade (Douvere 2008). Next to increases in traditional uses such as fishing, shipping, and oil and gas extraction, new uses including commitments regarding environmental protection, offshore aquaculture, offshore carbon capture and storage (CCS) and marine renewable energy place additional pressure on marine areas around the world (Douvere, 2008; Douvere & Ehler, 2009; Ehler, 2014; Kannen et al, 2013). These new uses are at various stages of development, but it is expected that continuing technological and policy innovation will increase the commercial viability of these uses and advance development to areas further offshore and into more high-energy environments (Douvere & Ehler, 2007b; Shields & Payne, 2014). The traditional, reactionary approach that is based on reductionist reasoning and aimed at regulating defined activities at sea, is deemed insufficient to deal with these changes and has caused a number of problems (Ehler, 2014; Lloyd et al, 2013), including:

- Conflicts among users of marine space (user-user conflicts) and between users and the environment (user-environment conflicts) due to spatial and temporal overlap of activities. In the case of user-environment conflicts, the cumulative effects of multiple uses on the environment needs to be considered as well (Douvere, 2008; Douvere & Ehler, 2009; Ehler 2014; Halpern et al, 2008; Jay et al, 2012).
- A lack of coordination between different authorities responsible for the management of offshore activities (Douvere, 2008; Young et al, 2007; Portman, 2011).
- Insufficient consideration of land-sea interactions (Douvere, 2008; Lange et al, 2010).
- A lack of investment security for users and developers of marine activities and ocean space (Douvere, 2008; Drankier 2012; Lange et al, 2010; Maes, 2008).

Therefore, new forms of governance, policies and regulations are required that will guide the spatial allocation of these uses in order to achieve more sustainable development patterns (Jay et al, 2012; Kannen et al, 2013). Marine Spatial Planning (MSP) is currently promoted and adopted at both the national and supranational level as the principal approach for the governance, planning and management of different marine and coastal uses in an integrated manner (Collie, 2013; Douvere, 2010; Ehler, 2014; Jay, 2010a; Kannen et al, 2013; Portman, 2011; Scraff et al, 2015).

The first examples of marine spatial planning were primarily aimed at limiting the (cumulative) environmental effects of sea uses and were more protection-oriented (see for example Gilliland, 2004) (Douvere & Ehler, 2007; Kannen, 2013). The great-barrier reef (GBR) zoning ordinance, the Florida Keys National Marine Sanctuary and the Trilateral Wadden Sea Cooperation Area were the prime examples of earlier MSP initiatives, in which an ecosystem-based approach (EBA) was used to analyze the different dimensions of environmental problems in an integrated fashion at the scale of the ecosystem (Douvere & Ehler, 2007; Douvere, 2010; Merrie & Olsson, 2014).

These initial examples provided input for the multi-objective MSP which originated in the 21st century in intensively used areas, particularly in countries around the North Sea (Douvere 2008; Douvere

2010; Ehler 2014; Kannen, 2013). The UNESCO workshop on MSP in 2006 was particularly important in the promotion of multi-objective MSP (Merrie & Olsson, 2014) and led to the definition of MSP as:

> *"a process of analyzing and allocating parts of three-dimensional marine spaces to specific uses, to achieve ecological, economic, and social objectives that are usually specified through the political process" (p.57: Ehler & Douvere, 2006).*

The idea behind MSP is that it guides the temporal and spatial distribution of human activities, through a continuous, iterative and future-oriented process which allows for pro-active decision-making in the face of uncertainty (Backer, 2011; Collie, 2013; Douvere, 2010; Kannen, 2012). The purpose of MSP is to come to a more rational organization of sea space and, thereby, to more sustainable development of the sea (Backer, 2011; Collie et al, 2013; Douvere, 2010; EC, 2013b; Ehler, 2008; 2014; Scarff et al, 2015). According to Douvere & Ehler (2009), the output of an MSP process should be a long-term, general, and policy-oriented document which can be used to guide decision-making in a rational, consistent and transparent manner and provide a larger degree of certainty for investors. Ehler (2014) and Gilliland & Laffoley (2008) provide comprehensive overviews of the various economic, social, environmental, and administrative befits ascribed to MSP.

2.2 The characteristics and process of marine spatial planning

There has been an explosion of literature on MSP in de past decade (Portman, 2015) and it is described as an 'idea whose time has come (Ehler, 2008). Based on an extensive literature review of scientific articles about MSP, published between 2006 and 2015[3], six characteristics (or synonyms thereof) of MSP were identified that, in various constellations occur very often in literature on MSP:

- *Area-based*: MSP parts with the traditional sectoral approach to sea-use management and instead takes into account all the activities that occur within a defined marine area as well as the cumulative effects of these activities (Douvere, 2008; Douvere & Ehler, 2009; Ehler, 2014; Flannery & Cinnéide, 2012; Portman, 2011; Young et al, 2007).
- *Integrated*: Contrary to the previous uncoordinated patchwork of sectoral policies, programs and actions plans, MSP integrates different uses and organizations across time and space (Douvere, 2008; Ehler, 2014; Kidd & Shaw, 2014; Portman, 2011), thereby bringing "coherence to decision-making and associated social and political processes that relate to particular places" (p3: Kidd & Shaw, 2014).
- *Strategic*: MSP allows for pro-active decision-making on the short term, based on a strategic plan or vision for the future (Agardy et al, 2011; Backer, 2011; Christie et al, 2014; Douvere, 2010; Drankier, 2012; Ehler, 2014; Kidd & Ellis, 2012).
- *Participative*: Early and continuous stakeholder involvement is necessary to encourage 'ownership' of the MSP, increase the legitimacy of the process and develop trust, as well as find incompatibilities and synergies between different functions (Flannery & Cinnéide, 2012; Kidd, 2013; Pomeroy & Douvere, 2008; Ritchie & Ellis, 2010).
- *Ecosystem-based:* Despite the shift towards a more utilitarian perspective in multi-objective MSP, the ecosystem-based approach remains central in MSP (Douvere, 2008; 2010; Douvere & Ehler, 2009; Ehler, 2014; Flannery & Cinnéide, 2012; Gilliland & Laffoley, 2008; Halpern et al, 2008; Maes, 2008; Qiu & Jones, 2013; Young et al, 2007; Zaucha, 2014). Ecosystem-based MSP aims at delivering sustainable development by balancing ecological, economic and social objectives within an ecosystem and maintain ecosystem-services (Ehler, 2014).
- *Adaptive*: MSP needs to remain sufficiently flexible to leave room for learning and innovation, while simultaneously providing a more transparent and stable framework for decision-making, thereby allowing for decision-making in the face of uncertainty and change (Christie et al, 2014; Collie et al, 2013; Douvere & Ehler, 2011; Ehler & Douvere, 2009; Flannery & Cinnéide, 2012;

[3] As described by Merrie & Olsson (2014), the starting point for the acceleration of MSP was the UNESCO/IOC workshop on MSP in 2006.

Kannen et al, 2012; Lange et al, 2010; Maes, 2008; O'Hagan, 2011; Portman, 2015; Roddwell et al, 2014; Young et al, 2007).

These characteristics reflect the general nature of MSP as described in literature. More detailed guidelines on how to develop MSP were designed by Ehler and Douvere (2009). Their approach consists of ten steps and accompanying tasks and actions. Although most literature on MSP does not provide such a detailed approach, a number of key aspects in the MSP process are mentioned repeatedly by various authors as crucial to successful MSP. First, the establishment of a strong legal basis and clear authority for both planning and implementation is emphasized as a necessary prerequisite for successful MSP (Collie et al, 2013; Drankier, 2012; Ehler & Douvere, 2009; Flannery & O'Cinnéide, 2012; Young et al, 2007). Second, the importance of defining clear goals, accompanied by measurable objectives, which can be implemented, monitored and enforced is stressed (Collie et al, 2013; Douvere, 2008; Ehler & Douvere, 2009; Gilliland & Laffoley, 2008). To increase the likelihood of success, stakeholder involvement during plan development, implementation, monitoring, evaluation and adaptation is encouraged (Ehler & Douvere, 2009; Douvere, 2010; Flannery & O'Cinnéide, 2012; Kidd, 2013; Pomeroy & Douvere, 2008; Young et al, 2007). Besides these more procedural aspects of MSP, some authors have also included more detailed remarks about the form of the actual MSPs, which are presented in Box 1 (Collie et al, 2013; Flannery & Cinneíde, 2012; Zaucha, 2014).

Box 1 The content of marine spatial plans

An MSP generally takes the form of a long-term, general and policy-oriented document (also called 'vision for the future' (Ehler & Douvere, 2009) or 'strategic vision' (O'Hagan, 2011)) which can be implemented using more detailed zoning maps (Ehler & Douvere, 2009). The type of plan also depends on the intensity of uses in a certain marine area. For example Flannery & Cinnéide (2012) write about 'urban' and 'rural seas'. Next to the intensity of uses, activities can be allocated using general objectives (e.g. development or preservation areas) or by specific uses (sea-bed mining, offshore energy, etc.). Moreover, a plan can be aimed at mapping the existing situation to *"guide existing uses and their future evolution"* or take the form of a pro-active development oriented plan that *"underpinned by a vision, mainly focuses on new opportunities for development"* (p.23) (Drankier, 2012). Based on these types of considerations plans can either be more discretionary or indicative.

2.3 Debates in marine spatial planning literature

Overall, this conceptualization of MSP in literature demonstrates a rather straightforward, technical understanding of planning and plan implementation for marine area. As illustrated most clearly in the step-by-step guide by Ehler & Douvere (2009), MSP seems to be interpreted as the design of a management plan. Plan implementation, then, is the execution of these plans and programs, the outcomes of which subsequently need to conform to previously set goals. Conformance can be measured using monitoring and evaluation based on indicators that refer to specific and measurable objectives (Collie et al, 2013; Douvere & Ehler, 2011). Subsequently, the plan can be adapted on the basis of new insights (Ehler & Douvere, 2009).

However, this conceptualization of MSP is not without critique. First, the rise of multi-objective MSP, as described earlier, coincided with a shift from a protection-oriented perception of the sea, towards a perception of the sea as an economic space where development needs to be balanced with environmental objectives (Douvere, 2010; Young et al, 2007). This shift reflects a fundamental discussion in MSP literature and practice between on the one hand, the protection oriented, hard sustainability paradigm focused on conservation, versus the development oriented, soft-sustainability paradigm focused on economic growth (Backer 2011; De Vivero & Mateos, 2012; Kannen 2012; Kannen et al, 2013; Kidd & Shaw, 2013; Qiu & Jones, 2013). For example, Jay et al (2012) call for caution, because the recurrent focus on the ecosystem-based approach as a leading paradigm in MSP might limit opportunities for other paradigms and perspectives. This includes, for example, paradigms from TSP which might provide useful insights for MSP.

This leads to a second debate, which centers around the fact that MSP can be perceived as the invention of planning by marine environmental- and resource managers, which is underpinned by a natural science approach with a focus on scientific rationalism (Jay, 2010a). This approach lacks sensitivity to the political and social nature of planning (Jay, 2010a; Jay et al, 2012; Kidd & Ellis, 2012; Kidd & Shaw, 2014). This recognition has led to calls for more engagement with MSP from the spatial planning community, to enrich the theoretical basis of MSP and provide insight into planning as a social and political process (Jay, 2010; Jay et al, 2012; Kidd & Ellis, 2012; Kidd & Shaw, 2014). However, the extent to which insights, concepts and practices from terrestrial spatial planning (TSP) can be transferred to MSP is a point of debate as well (Douvere, 2008; Jay et al, 2012; Kidd & Ellis, 2012; Kidd & Shaw, 2014).

A third debate centers around the problems with regards to the implementation of MSP (Kidd & Ellis, 2012; Kidd & Shaw, 2014; Plasman, 2008; Qui & Jones, 2013). According to Kidd & Ellis (2012) "international experience to date has indicated that there is often a gap between the content of marine plans and the ability to deliver the ambitions they set out" (p.60). This quote shows that an implementation gap is being recognized within MSP. However, based on the literature review, it seems that the role of implementation itself in MSP is not clear. Douvere & Ehler (2009) state that that "the end of planning is the beginning of implementation" (p.83). This statement illustrates that implementation is perceived as a subsequent, closely related activity that is part of broader sea-use management, not as part of the actual MSP process. Contrary to this perspective, Kidd & Shaw (2014) emphasize the importance of implementation as a key stage in MSP, where the social and political nature of decision-making is highlighted. However, as indicated earlier, it is exactly the social and political nature of decision-making which is not given sufficient attention in literature on MSP.

Overall, the terminology regarding the position of MSP with regards to *management*, *planning*, *implementation* and *governance* of the sea remains unclear. Furthermore, issues such as institutional design, policy making, and the role of power do not seem to be perceived as integral parts of the MSP process. Moreover, Qui & Jones (2013) even remark that "planning for important activities, such as […] offshore wind farms, […] remains relatively independent from wide-scale integrated MSP in some countries" (p.188). The debates discussed above demonstrate an increasing skepticism regarding the extent to which MSP is capable of providing "an integrated approach to marine planning and governance" (p.188: Qui & Jones, 2013). Although some authors (e.g. Jay et al, 2012; Kannen, 2010; Kidd & Ellis, 2012; Kidd & Shaw, 2014) have taken steps towards a more planning-oriented perspective on MSP, it is still perceived as a 'tool', instead of the planning system for the sea, equivalent to the terrestrial spatial planning system. On the basis of the literature review, it can be concluded that 'marine spatial planning as institutional design', including the formulation of policy, has not yet been recognized in MSP literature. This will be explained further in the next paragraphs.

2.4 MSP as the planning system for the sea

Although the position of MSP with regards to management, planning and governance requires more attention in the future, it is beyond this thesis to provide a detailed discussion on this issue. For this thesis it suffices to explain that a broader perspective on MSP is applied, in which MSP is conceptualized as the spatial planning system for the sea, including the related governance arrangements.

The term '*spatial planning system*' was defined in the EU compendium of Spatial Planning Systems and Policies as "the various institutional arrangements for expressing spatial planning objectives and the mechanisms employed for realizing them" (p.24: EC, 1997). This definition supports the statement by Alexander (2004;2006) that institutions are central to planning. Institutions are defined as "the rules of the game in society […] the humanly devised constraints that shape human interaction […] complexes of norms and technologies that persist over time by serving collectively valued purposes […] some have an organizational form, others exist as pervasive influences on behavior" (p.164: Alexander, 2012). It is important to realize that institutions have often grown over decades as the result of enduring interaction processes and, therefore, are not easily changed or replaced. Institutions therefore often reflect both past and present power relations, norms and values (Klijn & Koppenjan, 2006). Using this perspective, MSP

can be conceptualized as the framework in which institutional structures are discussed and adopted that aim to influence the values and priorities with regards to spatial distribution of activities at sea, as well as the mechanisms to achieve this. MSP, then, includes for example the drafting and implementation of policies, organizations, and the way these are used in decision-making.

Governance is concerned with "achieving collective action in the realm of public affairs, in conditions where it is not possible to rest on recourse to the authority of the state" (p.93: Stoker, 2000 in Davoudi & Strange, 2009). The shift from government to governance has coincided with greater involvement of a wider range of actors in policy-making and has created complex actor-networks with diverse power relations and responsibilities (Davoudi & Strange, 2009). By including the notion of governance, the role of both governmental and non-governmental organizations in developing and implementing policies and plans is acknowledged.

2.5 A policy perspective on MSP and offshore wind development

As established in the previous paragraph, the conceptualization of MSP as the planning system for the sea, allows for a broader analysis of MSP as institutional design. An important part of these institutions are policies which form the formal 'rules of the game'. By taking a policy perspective as a starting point, this thesis develops an approach for the analysis of the performance of MSP with regards to offshore wind energy, which is sensitive to the social and political nature of planning and decision-making process. A policy perspective places the social and political interactions around policy-making at the heart of the analysis and, thereby, helps to position concepts such as planning, governance and implementation with regards to MSP. Moreover, such a perspective diverts from the perception of planning as "rational problem solving (p. 11: Stone, 1997) through an "orderly sequence of stages almost as if on an assembly line" (p.10: Stone, 1997) in which goals and objectives are directly related to outcomes. Instead, a policy perspective ensures sensitivity to the inherently political nature of policy making in MSP; of the politics, interests and struggles involved in setting goals, objectives, rules and boundaries, as well as how these rules are interpreted, implemented and applied (Stone, 1997; Yanow, 1996).

According to Winsemius (1986), the development of public policy for various problems, is usually structured according to a certain pattern, independent of the problem these public policies are trying to solve. This pattern, called the 'policy lifecycle', consists of four phases:

(1) *Problem recognition* including the analysis of the size and severity of the problem. During the first phase, the lack of formal policy instruments often leads to ad hoc approaches and the extension of existing regulations.
(2) *Policy formulation* focussing on effectiveness rather than efficiency, including the setting of priorities, time schedules, who is involved and the development of instruments and mechanisms. The public and political attention increases during this phase as well as the pressure from both proponents and opponents of suggested policies.
(3) *Implementation* of policy and a focus on efficiency, including the streamlining regulation and procedures. It is important to set responsibilities during this phase and most pressure will result from parties that have a direct financial stake in the implementation.
(4) *Enforcement/management* of the improved situation to ensure the new status being held or improved. Uncertainties have been reduced by this time and the process has been institutionalized (i.e. embedded in the norms and values of a country) and opportunities for deregulation and decentralization present themselves (Winsemius, 1986).

In practice these phases will not be clearly demarcated. For example, interim policy can already be applied to implement solutions during the policy formulation phase (Winsemiusm 1986). Nonetheless, the policy lifecycle perspective can help structure the analysis of the performance of MSP regarding offshore wind energy in the Netherlands. First, on a more practical level, the policy lifecycle model demonstrates that both policy formulation and implementation are essential parts of planning processes – and therefore should be included in considerations regarding MSP. Second, the policy lifecycle allows for the structured analysis of policy problems and can, therefore, provide insight into the policy arena(s) around MSP and offshore wind energy.

Although the policy lifecycle is useful as a conceptual framework, policy-making is presented a straightforward process in which problems and solutions are perceived as unambiguous facts. However, the development of public policy is an arena where various values and interests by different stakeholders clash (Yanow, 1996; Stone, 1997). Often there is no single 'right' solution to a clearly defined problem; rather the perceptions of the problem and of the solution may differ among stakeholders (Yanow, 1996). Moreover, the setting of priorities in policy and legislation is not the end of these clashes. As Yanow (1996) describes: "Administrative activities may indeed begin with the passage of a bill, but the substance of legislation often has a prior history in legislative debates and societal dispositions, and these carry over into the administrative phase […] through policy language or agency artifacts [i.e. objects and acts] that embody those prior concepts, and it is these prior concepts that may constitute (part of) what is being implemented" (p.213). This quotation explains why there may be a difference or gap between policy statements and agency/stakeholder acts, objects and language. Policy making is not a straightforward process with clear goals that are subsequently implemented, and the progress towards which can be monitored according to clear, undisputed criteria. Rather, it is a dynamic process which is shaped by the interaction between stakeholders involved in the issue, their power, interests and the strategies they employ to pursue these interests. A policy, therefore, cannot fully determine the meaning that is attached to it, because each stakeholders in turn creates an own meaning through interpretation and subsequent action (Yanow, 1996).

Moreover, Yanow (1996) criticizes the often made recommendation in policy analyses, that a reduction in ambiguity increases the success of implementation. She emphasizes that the use of purposive ambiguity can "temporarily resolve conflicts and accommodate differences, allowing contending parties to legislate and move to implementory actions" (p.228). Ambiguity in policy documents, including MSP, allows for different opinions and interpretations and thereby reduces conflict and allows for the decision-making process to move forward. In light of this more dynamic and ambiguous nature of policy development and decision-making, it can be questioned whether the conformance of outcomes to set policy goals and objectives is an appropriate measure for evaluating the influence of MSP on offshore wind energy development. Literature on plan performance introduces a different frame of reference for studying the influence of plans on subsequent decision-making[4].

2.6 The performance of marine spatial plans

With regards to the concept of performance, this thesis will draw from two strands of literature: on the one hand implementation literature which provides a broader perspective on the concept of performance (Barrett & Fudge, 1981; Barrett, 2004); and on the other hand and literature regarding the performance of strategic spatial planning (see e.g. Faludi, 2000; Mastop, 2000; Mastop & Needham, 1997; Needham, 2000; Salet & Faludi, 2000).

Discussions regarding plan performance started as early as the 1980s in implementation literature. Barrett & Fudge (1981) discuss how implementation of policies can be conceptualized as a 'negotiated order' which is formed over the course of policy formulation. Implementation is understood as "an integral and continuing part of the political policy process rather than an administrative follow-on, and seen as a policy-action dialectic involving negotiation and bargaining between those seeking to put policy into effect and those upon whom action depends" (p.253: Barrett, 2004). Therefore, policy can be regarded as "both a statement of intent by those seeking to change or control behavior, and a negotiated output emerging from the implementation process" (p.253: Barrett, 2004). This is also the case for MSP, where implementation largely relies on private sector development (Kidd & Shaw, 2014). Therefore, the objective of public policy is often to permit and encourage or discourage certain courses of action within a set of procedural rules. In this situation, it is difficult to set objectives or criteria against which conformance can be measured (Barrett, 2004).

[4] In this thesis performance and conformance are used as two separate terms. However, literature on planning and implementation, including MSP, often uses the terms interchangeably. Especially performance is often used in a context were conformance is meant (Barrett, 2004).

Literature on strategic spatial plan performance provides a more practical, planning oriented perspective on the concept of performance. In line with Barrett (2004), Faludi (2000) emphasizes that the goal of strategic plans is to guide decision-making by government agencies as well as private actors by encouraging or discouraging certain courses of action. Therefore, the object of strategic spatial planning is not the conformance of material outcomes of the plan to predefined goals; rather it concerns the different actors and the way they use the plan in their decisions (Faludi, 2000). Assessing the 'way a plan is used' requires looking not only at conformance, but also at the 'performance' of a plan (Barret & Fudge, 1981; Faludi, 2000; Mastop, 2000). *Plan conformance* examines the direct relation between the plan and the material outcomes. *Plan performance*, however, pays attention to the interplay between the decisions and actions by the panning subject, and the decisions and actions of various actors to whom a plan might be addressed, the whole of which might potentially influence the material object. Examining plan performance, therefore, is in line with Yanow's (1996) argument on how policies create meaning, because the interplay between planning subject and object is taken into account and the performance perspective is sensitive to different interpretations of policies.

Using this performance perspective for the evaluation of MSP with regards to offshore wind energy, the question becomes whether MSP is used as an institutional framework and to what extent the rules set through MSP are used or referred to as an argument in decision-making, and to what degree (Mastop & Needham, 1997; Faludi, 2000; Mastop, 2000). The evaluation of plan performance requires "deconstructing decision situations into their components and identifying elements derived from plans and/or from the experience of participating in the processes that have led to their formulation" (p.310: Faludi, 2000). In developing a method for evaluating plan performance, Faludi (2000) names two conditions: the first – a necessary conditions – is that decision-makers know the plan. The second – a sufficient condition – is that they accept the plan as part of the context in which they have to make decisions. The degree of acceptance can be measured by identifying policy statements (also called the 'message of a plan') and subsequently compare them with the decisions and actions of groups that are addressed by these policy statements. The result of this comparison can be that there is conformance of decisions and actions with the policy statements or not. However, when there is no conformance, it does not mean that the plan was not useful in decision-making. Therefore it must be assessed "what really happened to the plan, how (if at all) it has been considered" (p.309: Faludi, 2000). This also counts when a plan is revised; then it would be task to assess the extent to which the plan was taken into account in the formulation of the new plan or revision of the plan (Faludi, 2000).

Based on the above argument, it would be necessary to first assess the message (or content) that was communicated by a plan. Needham (2000) provides factors which can help deconstruct the communication of the message by examining:

(1) The form of the message;
(2) The detail of the message;
(3) The parties to whom the message is addressed;
(4) The status of the message (how is the message intended to be used);
(5) The content of the message;
(6) The context for the plan/message (both administrative and geographically)

These factors can be used to investigate content of plans, how it is intended to be used and by whom. This framework will be applied in this thesis, which will be explained later.

Wallagh (1988, as described in Faludi, 2000) provides a typology for assessing how a plan (i.e. the message of a plan) has been considered in the decision-making process. According to this typology a plan performs when: (1) an explicit reference to (elements of) the plan is made; (2) arguments for possible departures are based on the plan; (3) consequences of non-conforming decisions contravening the plan are analyzed using the plan; (4) plan revisions are based on the previous plan (also called the regenerative capacity of the plan). This typology is applied in the results section.

The framework presented above might provide insights in the question *does the plan perform?* and thereby into the content of plans; however, it provides only limited insight into *how the plan performs?*. Although theories on plan performance do take into account whether the plan is used in day-to-

day decision-making, it might be important to more broadly assess how the plan performs (or not). Institutional design offers an additional way of analyzing plan performance, by examining how rules are set in MSP, particularly with regards to offshore wind energy, what the aims of these rules are, and how different actors pursue their interests by influencing and responding to these rules. In the next paragraph, it will be explained how theory on institutional design can provide insights into the rules that govern offshore wind energy. In paragraph 2.8 the conceptual model will explain how performance is applied in this study. In paragraph 3.3 the concept of plan performance will subsequently be operationalized.

2.7 MSP from an Institutional Design perspective

As explained earlier, institutions are central to planning. Planning, therefore, often demands Institutional Design (ID); that is "designing institutions: the devising and realization of rules, procedures, and organizational structures that will enable and constrain behaviour and action so as to accord with held values, achieve desired objectives, or execute given tasks"(p.213: Alexander, 2005). Despite the difficulties in changing institutions, ID is central to many aspects of planning. ID is used for example when the planning system or process is perceived to be flawed, to develop, organize and implement plans, policies, programs and projects, to create new organizations or reorganize existing organizations, and to develop or adapt legislation, regulations and procedures (Alexander, 2012). Alexander (2006) emphasizes that, although the term 'design' might suggest a form of instrumental rationality, it is a reflexive process due to the fact that initiators of ID are usually embedded in institutions. Moreover, ID often is a dialogic process (as opposed to radical transformation) in which repeated interaction processes over time might eventually lead to significant changes (Alexander, 2006).

Whereas Alexander (2005; 2006; 2012) applies a more abstract, public policy oriented view on ID, Klijn & Koppenjan (2006) apply a relational perspective in which they focus on institutions in the form of rules within policy networks, how these rules structure interactions, and the strategies applied by different stakeholders to change these rules (Klijn & Koppenjan, 2006). The advantage of using the framework by Klijn & Koppenjan (2006), is that it examines *why the plan performs* by looking at the message in the form of policy rules laid down in MSP, as well as whether and how these rules are interpreted and applied in decision-making regarding offshore wind energy. Using this framework, the target groups are not perceived as passive receivers of policy; rather they are seen as actors who are actively pursuing their interests in a policy network and are influencing and being constrained by these rules.

Since Klijn & Koppenjan (2006) focus on policy networks as the unit of analysis in their framework, it is important to first clarify what a policy network entails. Kenis & Schneider (1991) define a policy network as "specific structural arrangements in policy making […] [that] typically deal with policy problems which involve complex political, economic and technical task and resource interdependencies, and therefore presuppose a significant amount of expertise and other specialized and dispersed policy resources […] [which] includes a relatively stable set of mainly public and private corporate actors" (p.41-42). Thus, policy networks are structural arrangements around policy problems involving a relatively stable set of both public and private actors. In the case of this research, two policy networks are identified: (1) the policy network surrounding MSP; and (2) the policy network around RNE in which offshore wind energy policy is embedded. Klijn & Koppenjan (2006) frame policy networks as institutions. As described above, institutions are 'the rules of the game'; therefore behaviour of actors in policy networks is influenced, limited and guided by these rules (Klijn & Koppenjan, 2006).

According to Klijn & Koppenjan (2006), there are two types of rules: first, *interaction rules* "have a procedural character and tell actors what is and is not permitted within a network" (p.145). These rules determine the *access* to the policy network, as well as *interactions* within the network. Access rules then determine how exclusive networks are, who is allowed to participate in networks, and how they can exit. Interaction rules focus on when (not) to intervene, how information is to be made available and used, and how to deal with conflicts (Klijn & Koppenjan, 2006).

Second, *arena rules* "are rules that provide actors with a handle for determining the nature of the network and arena in which they find themselves" (p.145). Arena rules determine the relative *positions* of actors, the accepted *realities* and *pay-offs* (both financial and non-financial). Position rules are related to

the power and status of actors. Reality rules determine which arguments are accepted or not by setting e.g. standards, or because they are perceived as part of an actor's identity (i.e. some arguments are accepted if made by certain actors, while they might not be accepted if made by other actors). Pay-off rules focus on evaluation criteria and can be financial or non-material (Klijn & Koppenjan, 2006; Ostrom, 2011).

ID is the deliberate attempt to change rules in policy networks and refers to *"both to the activity of trying to change the institutional feature of policy networks, as to the content of the institutional change that is aimed for"* (p.149: Klijn & Koppenjan, 2006). Various strategies can be applied by actors to change network rules. Klijn and Koppenjan (2006) developed a conceptual framework for analysing the these various strategies and the rules they aim to change, which is provided in Table 1. They identify three categories of strategies:

(1) "Strategies aimed at the network composition" (p.149). The rationale behind this type of strategy is that by changing the network composition, interactions within the network - and thereby the outcomes of these interactions – can be influenced. The point of intervention of these strategies, therefore, is the composition of actors in a policy network. Strategies to change network compositions can have varying degrees of severity. Laying down current actor positions is a relatively light intervention that does not affect many rules. Heavy interventions that affect multiple rules (e.g. system modifications) are more likely to create resistance (Klijn & Koppenjan, 2006).

(2) "Strategies aimed at the network outcomes" (p.150). These strategies try to change strategic choices made by actors by influencing the standards or the logic for decisions-making. The point of intervention, in this case, is the choices made by actors. Therefore they necessarily aim at changing the arena rules (Klijn & Koppenjan, 2006).

(3) "Strategies aimed at the network interactions" (p.150). This type of strategy tries to change the rules that regulate processes within networks. The point of intervention of these strategies is the interactions between actors in a policy network. The strategies can be aimed at facilitating interactions, develop a framework for interactions, or create new linkages (Klijn & Koppenjan, 2006).

Strategies can either aim at direct interventions in rules, for example through (changes in) legislation or regulation which directly affect the options and/or behaviour of actors (Klijn & Koppenjan, 2006). However, strategies can also indirectly intervene in rules through 'reframing'. *"Reframing involves the bringing about of major changes in actors' perceptions so that they interpret situations in a different way and (drastically) adjust their behaviour"* (p.152: Klijn & Koppenjan, 2006). These more indirect strategies aim to achieve that actors interpret rules differently or form new rules by introducing e.g. stories, policy documents, or concepts that highlight problems and/or preferred solutions and thereby "*function as a vehicle to change policy and minds of actors*" (p.154: Klijn & Koppenjan, 2006).

The framework by Klijn & Koppenjan (2006) will be used to examine the rules and strategies that structure interaction between the policy networks around MSP and offshore wind energy, to provide insight into why MSP performs (or not) with regards to offshore wind energy. This will be explained in more detail in paragraph 2.8. In paragraph 3.3 these rules will be operationalized and connected to the codes related to plan performance.

	Arena rules			Interaction rules	
Strategy	Identity/ product rules	Pay-off rules	Position rules	Access rules	Interaction rules
Network composition					
1. Change actor positions			X		
2. Lay down actor positions	(X)			X	
3. Add actors			(X)	X	
4. Change access rules for games				X	
5. Influence network formation			(X)		X
6. Promote self-regulation	X	(X)	(X)		X
7. System modifications (e.g. market forces, reorganizations)	X	X	(X)	X	X
Network outcomes					
1. Change evaluation criteria	X	(X)			
2. Influence pay-off structure	(X)	X			
3. Influence professional codes	X	(X)			
Network interactions					
1. Conflict regulation			(X)		X
2. Change interaction procedures				(X)	X
3. Certification	X				X
4. Change supervisory relationships	(X)			X	X

Table 1 The connections between strategies and network rules (Klijn & Koppenjan, 2006).

2.8 Conceptual model for studying the relation between MSP and offshore wind energy

The literature and theory described above are combined in the conceptual model, depicted in figure 4. By placing the developments with regards to MSP and offshore wind energy in the Netherlands in the framework by Winsemius (1987), two policy networks can be identified that operate simultaneously and both appear to influence decision-making on offshore wind: one with regards to MSP and one with regards to renewable energy (RNE), as indicated in figure 4. The policy network around MSP develops spatial policy with regards to multiple sea-uses and functions. The policy network around renewable energy develops sectoral policy with regards to offshore wind energy (the criteria for identifying MSPs in the Dutch context, as well as energy related policy documents are explained in paragraph 3.1).

Based on the literature review, it was established that MSP usually involves the following six characteristics: area-based, strategic, participative, integrated, adaptive and ecosystem-based. These characteristics are used as the lens to structure the assessment of the performance of MSP. Moreover, these characteristics already form the answer to the first sub question, because they are part of what MSP is and what it means to achieve. Every chapter in the result section will therefore start with a short discussion of MSP literature with regards to the specific characteristic.

The analysis of the performance of MSP with regards to offshore wind energy, will require a two-step approach: (1) it will be explored to what extent the characteristics that are derived from literature on MSP are present in the Dutch MSPs and thereby in the formal rules that structure decision-making. This analysis will help answer the third sub question. (2) it will be explored to what extent these formal rules

that are set in the Dutch MSPs perform in guiding decision-making regarding offshore wind energy (the fourth sub question). With regards to performance, first of all, it is expected that the Dutch MSP will perform on the level of policy formulation, by influencing renewable energy policy. In figure 4, the connection between policy with regards to MSP and renewable energy is indicated using a two-way arrow because - based on the policy perspective as suggested by Yanow (1996) and Stone (1997) - policy creation is an interactive process, not one with a passive recipient. Second, MSP is expected to perform with regards to decision-making about offshore wind energy in the implementation phase. However, the extent to which MSP performs in guiding offshore wind energy (i.e. the thickness of the arrows) remains to be seen.

As indicated in paragraph 2.6, the question is not only whether, but also how MSP performs. In order to provide a more detailed answer to the 'how' questions, theory on institutional design has been introduced to examine the rules that structure interactions, as well as the strategies applied to change these rules. Therefore, the arrows which indicate performance in figure 4, refer to both whether the message of the plan is used in decision-making as well as how this message is used, thereby including the composition, outcome and interaction strategies related to institutional design, as explained in chapter 2.7.

The expected spatial claim by offshore wind energy was one of the primary reasons to start developing multi-objective MSPs (Douvere, 2008; Jay, 2010b). The expectation, therefore, is that there will be increased mutual interaction between the policy networks around RNE and MSP over time, which leads to increased performance of MSP regarding offshore wind energy. Multi-objective MSPs can assist in finding more efficient spatial allocation of marine uses, to avoid or minimize conflicts. Moreover, MSPs can set priorities and, thereby, help deal with conflicts between various functions. Finally, MSP can help identify opportunities for multifunctional use through integration across space, time and sectors (Douvere, 2008; Jay, 2010b; Ehler, 2014). Such multifunctional use of wind parks includes opportunities for example aquaculture, other types of renewable energy, marine protected areas, recreation, nurturing grounds for fish replenishment (Christie et al, 2014; PDNS, 2009).

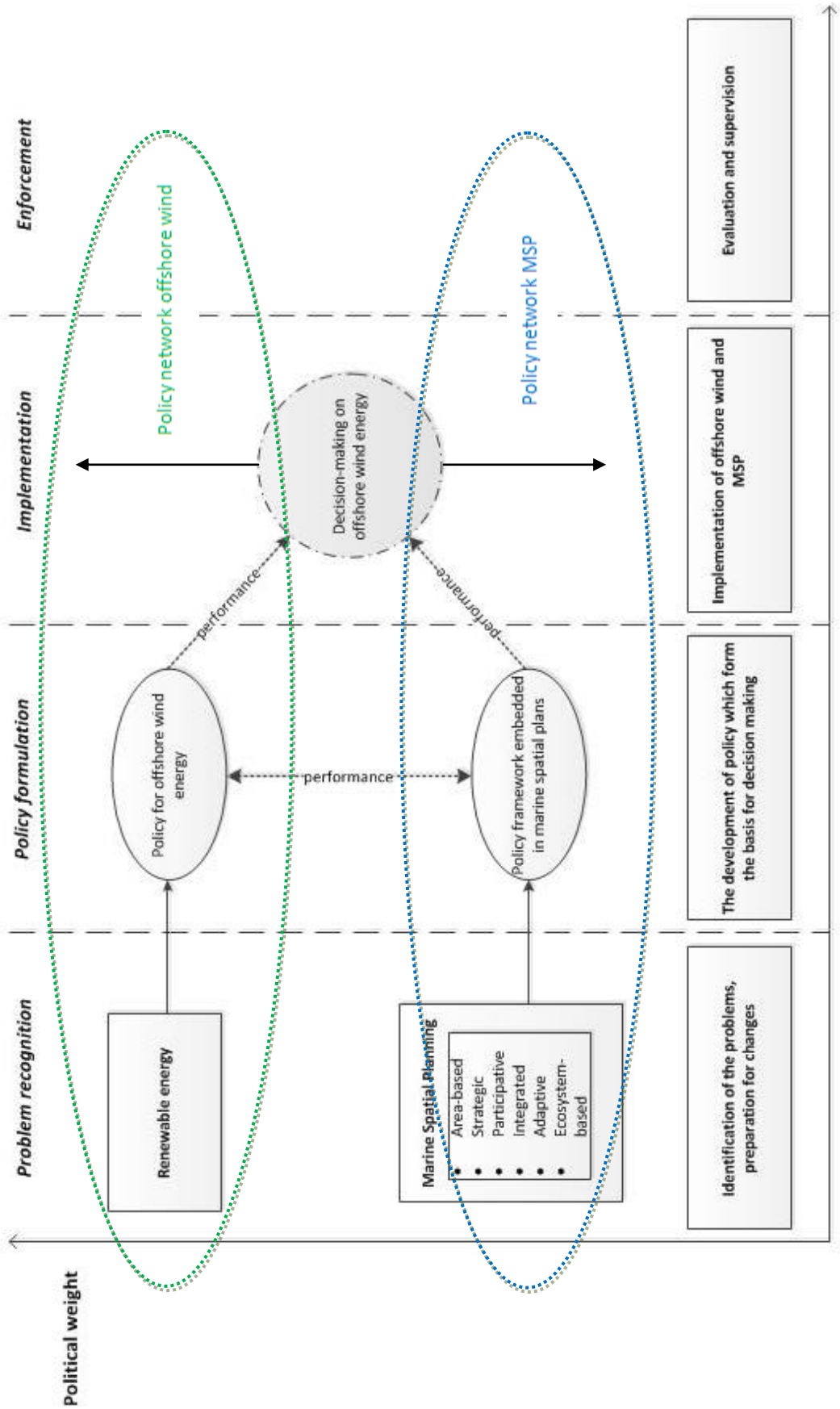


Figure 2 Conceptual model for studying the performance of MSP with regards to guiding offshore wind energy development

CHAPTER 3 – METHODOLOGY

In this thesis, a qualitative research methodology is applied which combines secondary data analysis through policy document analysis, which is triangulated through reflection on the basis of in-depth interviews and the analysis of communication through policy memos. First, the type of research will be explained, followed by an explication of the methods of data collection. Subsequently, the methods of data-analysis are presented including an explanation of how this methodology will be reflected in the result section.

3.1 Type of research

Contrary to MSP literature so far, which focuses on evaluation of conformance of MSP outcomes to set goals, this study uses a policy perspective including insights from theories on plan performance and institutional design to explore the role of MSP in decision-making regarding offshore wind energy in the Netherlands. Therefore, the study will have an evaluative character focusing on two levels: (1) the connection between MSP theory and Dutch MSP practice is assessed, and (2) MSP is assessed according to its performance with regards to decision-making on offshore wind energy.

According to Hennink et al (2011) qualitative research is useful for understanding decision-making processes, including the underlying norms and values that structure these processes. Therefore, this thesis will apply an interpretative policy analysis methodology. Yanow (2000) defines interpretive policy analysis as an approach which *"focuses on the meanings of policy, on the values, feelings, or beliefs they express, and on the processes by which those meanings are communicated to and 'read' by various audiences*" (p.429: Wagenaar, 2007). This methodology fits the theory on plan performance, as described above, which focuses on the use of plans by actors, thereby emphasizing the meaning communicated by the plan and how this is subsequently interpreted. In line with the explorative nature of this research, as well as the qualitative methods, and the fact that only Dutch policy has been assessed, the study will raise many questions which provide input for future research. Therefore, the generalization of results requires careful consideration of contextual factors.

The research will take a longitudinal perspective, by examining documents published between 2004 and 2015. This will allow for the assessment of the performance of MSPs over a longer period of time. The disadvantage of this perspective is that the interviewees were more familiar with recent developments and therefore provided less reflection on the earlier system.

3.2 Methods of data collection

The aim of this thesis is to create insight into the performance of MSP with regards to offshore wind energy. As established in the previous chapter, this will require analysis of the process of development and use of the 'message' of the policy documents by different parties. In line with the policy approach that is central in this thesis, the method of interpretative policy analysis (Yanow, 1996) is chosen to study the development and application of the message (or meaning) as set in public policy. This requires data on the development, the content and the usage of the message, which is expressed through the values, beliefs and arguments presented in policy and organizational documents and acts (Yanow, 1996).

Data for interpretative policy analysis is usually gathered using methods including interviewing, reading and/or observation (Yanow, 2007). The data for this thesis will be collected using a mixed method approach, which combined the 'reading' [analysis] of MSP and (energy) related policy documents, with reflection through in-depth interviews, and the observation of the documented process through analysis of policy memos. The 'reading' of policy documents will provide insight into the content of the message, as well as the development over time of this content. The interviews and policy memos will provide insight into contextual information and the rationale behind this 'message'. Moreover, these documents will provide insight into the construction of the message and how the interaction between the policy arenas of MSP and renewable energy occurs. This will provide knowledge about the extent to which decisions about offshore wind energy are based upon the message laid down in MSP. First, the four types of documents that were analyzed for this thesis will be discussed including (1) the MSPs, (2) the energy related

documents, (3) the related documents, and (4) the policy memos. It will be discussed which documents were selected, why and how. Second, the reasons for, and organization of, the in-depth interviews will be discussed.

3.2.1 The documents

As explained by O´Leary (2010), the process of textual analysis includes a number of step before the actual analysis starts. These steps include the gathering of texts, issues of access to the texts, the organization of collected texts, the review of their credibility and thereby the evidence they present including background data about who produced the text and when.

Since this research will examine published policy documents and policy memos which are available through government websites, accessing documents is no problem. The analyzed texts are divided in four categories: (1) the MSPs, (2) energy related policy documents, (3) other related policy documents, and (4) policy memos, which are provided in Tables 2, 3, 4 and 5. The tables are structured according to the following format: the year of publication, the name in both English and Dutch (including possible acronyms that will be applied in the rest of the thesis), the parties mentioned in the colophon, and the reference under which it can be found in the reference list. To improve the overview an readability, the first time an MSP is mentioned in a paragraph in the result section, it will be referred to by its full English name and afterwards by its acronym. Although some policy documents are available in English, all documents were assessed in the original language [Dutch] to avoid confusion with regards to terminology in the coding process.

MSP

The documents that are considered MSPs for the Dutch North Sea, are selected because they all provide integrated[5] policy for the Dutch North Sea and are part of the decision-making framework for the Dutch North Sea. The documents were identified because they are referred to on the government website (Noordzeeeloket.nl) as providing spatial policy for the Dutch North Sea, or because they mentioned as previous plans in the MSPs themselves. Table 2 provides an overview of the documents that are considered MSPs for the Dutch North Sea.

Date	Name	Authors	Reference
2004	*Spatial Planning Policy Document* [Nota Ruimte] (came into effect 2006) **SPPD**	Ministry of Transport, Public Works and Water Management (V&W); Ministry of Agriculture, Nature and Food Quality (LNV); Ministry of Housing, Spatial Planning and the Environment (VROM); Ministry of Economic Affairs (EZ).	Ministries of VROM, LNV, V&W & EZ (2004)
2005	*Integrated Management Plan for the North Sea 2015* [Integraal Beheersplan Noordzee 2015] **IMP**	Ministry of Transport, Public Works and Water Management (V&W); Ministry of Agriculture, Nature and Food Quality (LNV); Ministry of Housing, Spatial Planning and the Environment (VROM); Ministry of Economic Affairs (EZ).	IDON (2005)
2009	*National Water Plan 2009-2015* [Nationaal Waterplan 2009-2015] **NWP**	Ministry of Transport, public works and water management (V&W); Ministry of Housing, Spatial Planning and the Environment (VROM); Ministry of Agriculture, Nature and Food Quality (LNV);	Ministries of V&W, VROM & LNV (2009a)

[5] The term integrated in this context refers to the fact a documents is considered an MSP if they include policy for multiple sectors and uses, as opposed to sectoral policy.

2009	*Policy Document on the North Sea 2009-2015* [Beleidsnota Noordzee 2009-2015] **PDNS**	Ministry of Transport, public works and water management (V&W); Ministry of Housing, Spatial Planning and the Environment (VROM); Ministry of Agriculture, Nature and Food Quality (LNV);	Ministries of V&W, VROM & LNV (2009b)
2011	*Revision Integrated Management Plan for the North Sea 2015* [Herziening Integraal Beheersplan Noordzee 2015] **Revised IMP**	Ministry of Infrastructure and the Environment (I&M) Ministry of Economic Affairs, Agriculture and Innovation (EL&I) Ministry of Defense Rijkswaterstaat	IDON (2011)
2014	*White Paper on Offshore Wind Energy* [Strutuurvisie windenergie op zee] **SvWoz**	Ministry of Infrastructure and Environment (I&M) Ministry of Economic Affairs, Agriculture and Innovation (EL&I)	Ministries of I&M & EL&I (2014b)
2014	*Draft National Water Plan* [Ontwerp Nationaal Waterplan 2016-2021] **Draft-NWP 2**	Ministry of Infrastructure and Environment (I&M) Ministry of Economic Affairs, Agriculture and Innovation (EL&I)	Ministries of I&M & EL&I (2014c)
2014	*Draft Policy Document on the North Sea 2016-2021* [Ontwerp Beleidsnota Noordzee 2016-2021] **Draft-PDNS 2**	Ministry of Infrastructure and Environment (I&M) Ministry of Economic Affairs, Agriculture and Innovation (EL&I)	Ministries of I&M & EL&I (2014d)

Table 2 Dutch marine spatial plans

Related documents

A number of other plans and programs affected the development of offshore wind energy and/or MSP in the Netherlands, however they are not considered integrated plans that provide policy for the North Sea and therefore are not considered MSPs. There are two categories in these related documents: (1) documents focusing on energy policy (see table 3); and (2) spatial documents and plans that are not considered MSP according to the above criteria (see table 4). These documents were selected because they are referred to in the MSPs and are either of great importance for management and planning in the Netherlands (such as the BPRW and SVIR), or because they form sectoral policy documents with regards to (offshore wind) energy. Although many sectoral policies and plans affecting the sea or coast might influence MSP or offshore wind development indirectly (e.g. nature protection, fisheries regulation, water safety and quality), it goes beyond this thesis to discuss these plans, however, it is important to mention that they might potentially influence stakeholders perceptions with regards to MSP and offshore wind energy[6].

Year	Name	Authors	Reference
2008	*Sectorakkoord Energie 2008-2020* [Sector agreement Energy 2008-2020]	Convenant tussen Rijksoverheid en energiebranches in het kader van het Werkprogramma schoon en Zuinig (Rijksoverheid bestaande uit EZ, VROM, V&W; energiesector bestaande uit Vereniging EnergieNed (eNed), Nederlandse Vereniging	Rijksoverheid & energiebranches (2008)

[6] Examples of such documents are the *Delta Program* and accompanying plans and projects, the *national vision on the coast.* Furthermore, the *Common Fisheries Policy* and legislation regarding the implementation of the Marine Strategy Framework Directive (MSFD) such as the *Marine Strategy for the Dutch part of the North Sea* also belong to this category.

		voor Marktwerking in Energie (VME), en Netbeheer Nederland).	
2007	*Work program clean and efficient* [Werkprogramma schoon en zuinig]	Ministry of Housing, Spatial Planning and the Environment (VROM); Ministry of Economic Affairs (EZ); Ministry of Transport, public works and water management (V&W); Ministry of Agriculture, Nature and Food Quality (LNV); Ministry of Finance; Ministry of Foreign Affairs.	VROM (2007)
2011	*Green Deal Offshore Wind* [Green Deal Windenergie op Zee]	NWEA Ministry of EL&I Ministry of Internal Affairs Ministry of I&M	NWEA (2011)
2013	*Energy Agreement* [Energieakkoord]	Involved parties incl: Government NGOs Private parties	SER (2013)

Table 3 Related documents focusing on energy policy with relevance to Marine Spatial Planning and Offshore Wind Energy in the Netherlands

Year	Name	Authors	Reference
2009	*Management and Development Plan for National Waters* 2010-2015 [BPRW 2010-2015]	Rijkswaterstaat	RWS (2009)
2012	*National Policy Strategy for Infrastructure and the Environment* [Structuurvisie Infrastructuur en Ruimte]	Ministry of I&M	Ministry of I&M (2012)
2014	*Feasibility study wind within the 12-mile zone* [Haalbaarheidsstudie]	Ministry of I&M Ministry of EL&I	Ministries of I&M and EL&I (2014e)
2014	*North Sea Spatial Agenda 2050* [Gebiedsagenda Noordzee 2050]	Ministry of Infrastructure and Environment (I&M) Ministry of Economic Affairs, Agriculture and Innovation (EL&I)	Ministries of I&M & EL&I (2014a)
2014	*Draft BPRW 2016-2021* [ontwerp BPRW 2016-2021]	Rijkswaterstaat	RWS (2014)

Table 4 Related spatial documents with relevance for Marine Spatial Planning and Offshore Wind Energy in the Netherlands

Policy Memos

Many arguments behind changes in policy or decisions regarding offshore wind energy are not communicated in the official policy documents. Therefore, it has been decided to also examine policy memos regarding the subsidy schemes (SDE) as well as memos that address spatial planning and the appointment of areas at the North Sea and/or offshore wind energy in a more general manner. Table 5 provides an overview of the policy memos that will be. These memos were found because they are mentioned in articles, in other policy memos, or were attachments to policy documents. Moreover, some were found based on google searches for 'kamerbrief wind op zee' [policy memo offshore wind energy'] and 'kamerbrief SDE(+) wind op zee' [policy memo SDE(+) offshore wind]. The policy memos are numbered. These numbers, accompanied by the year of publication are referred to in the result section to keep a better overview due to the fact that not all memos have a clear title and/or reference number.

Nr.	Year	Authentication and topic	Author
1	2008	Kamerbrief VenW/DGW 2008/592: Windenergie op de Noordzee [Wind energy at the North Sea]	Ministery of V&W, EZ, VROM, LNV
2	2009	Kamerbrief 31239, No. 70: Stimulering duurzame energieproductie [stimulation sustainable energy]	Minister of EZ
3	2009	Regeling windenergie op zee 2009, nr. WJZ/9203919 [regulation offshore wind 2009]	Minister van EZ (after consulting ministers of VROM, LNV and Finance)
4	2011	Kamerbrief 29675, No. 118: Nader antwoord op de vraag of een rijksbestemmingsplan nodig is bij het sturen op inhoudelijke doelen voor de Noordzee [Answer tot he question whether a zoning ordinance is necessary to steer towards substantive goals fort he North Sea]	Ministry of I&M
5	2012	Kamerbrief 30195, No.31: Integraal Beheerplan Noordzee 2015 [Integrated Management Plan North Sea 2015] (reaction to the advice by the RLI)	Ministry of I&M and EL&I
6	2012	Kamerbrief RWS/SDG/NW12/73/119984: Verlengen vergunningen windparken op zee [extending permits offshore wind]	Ministry of I&M
7	2012	Kamerbrief 31239, no. 140: stand van zaken rond windenergie op zee (development regarding offshore wind energy)	Ministry of EL&I and I&M
8	2013	Kamerbrief IENM/BSL-2013/4610: Kamerbrief over structuurvisie Windenergie op Zee [Policy memo regarding White Paper Offshore Wind Energy]	Ministry of IenM
9	2014	Beantwoording feitelijke vragen ontwerp-rijksstructuurvisie Windenergie op zee [Answering questions regarding the draft White Paper on Offshore Wind Energy]	Ministry of I&M and EL&I
10	2014	Kamerbrief DGETM-ED/14153930: Windenergie op zee [Offshore wind energy]	Ministers of EL&I and I&M
11	2014	Kamerbrief IENM/BSK-2013/297316: Opvolger Nationaal Waterplan [sequel NWP]	Ministry of I&M
12	2014	Kamerbrief DGETM-ED/14164418: Beantwoording vragen over windenergie op zee [answering questions offshore wind]	Ministry of EL&I
13	2014	Memorie van toelichting ontwerp-wetsvoorstel windenergie op zee, internetconsultatie maart 2014 [explanatory memorandum draft Offshore Wind Energy Act, internet consultation March 2014]	Ministry of EL&I
14	2015	Kamerbrief IENM/BSK-2015/123818: Beantwoording Kamervragen van het lid Veldman (VVD) over gebiedsaanwijzing op de Noordzee [Answereing parlimentary questions by member Veldman (VVD) about the designation of areas for offshore wind]	Ministry of I&M
15	2015	Kamerbrief DGETM-ED/15062338: SDE+ Wind op Zee 2015 [SDE+ offshore wind 2015]	Minister of EL&I
16	2015	TK 34058, Nr. 9: Nota naar aanleiding van het nader verslag Regels omtrent windenergie op zee (Wet windenergie op zee) [memorandum regarding report about rules regarding offshore wind energy (Act)]	Minister of EL&I
17	2015	Kamerbrief 33561, Nr. 18: Benutting gebied IJmuiden ver [use of the area IJmuiden Ver]	Minsitry of EL&I
18	2015	Kamerbrief 34058J: Voortgang wind op zee.	Ministry of EL&I
19	2015	Regeling windenergie op zee 2015, nr. WJZ/15031513. [regulation offshore wind 2009]	Minister of EL&I (after consulting with minster of finance)

Table 5 Policy memos providing insight into the rationale behind decisions regarding offshore wind energy and spatial planning in the Dutch North Sea**.**

3.2.2 The interviews

The goal of the interviews was to have a source besides the document analysis which helps to reflect upon the results and allow for triangulation which leads to 'thick descriptions' (O'Leary, 2011). Therefore, three in-depth, face-to-face interviews of approximately one hour were held with government representatives from the Ministries of EL&I, I&M and with RWS. In order to include a non-governmental perspective, an independent expert with over 30 years of experience with renewable energy in general and specifically offshore wind energy, was interviewed. The reason for using semi-structured interviews is that this method allows for a more natural flow of information, which might lead to interesting and unexpected data and allow for follow-up questions (Hennink et al, 2011; O'Leary, 2010; Yanow, 2007).

Contact with the interviewees was made by calling gatekeepers and through snowballing. The interviews were held in a formal setting (e.g. the office of the interviewee) and were semi-structured. The interview guides are attached in appendix II, A., B., C., and D. As illustrated in the Appendix I, open questions were used to grasp interviewees basic understanding of MSP and offshore wind development, how these concepts developed, and their experience and opinions about this development and the connection between both. Moreover, some more detailed questions arising from the document analysis were added if necessary.

Interviews were, with permission of the interviewee, recorded. A detailed summary of the interviews was subsequently coded, as explained in the next chapter. When desired by the interviewee, the parts of the interview used in the thesis were summarized and send to the interviewee for redirection. The summaries of the interviews were not included in the Appendixes of this thesis due to possible sensitive information which has not been redirected.

3.3 Methods of data analysis

Through qualitative data analysis, a story is developed from gathered data, which *"seeks to decipher experiences within broader webs of meanings and within sets of social structures and processes"* (p. 291: Aitken & Valentine, 2006), thereby providing insight into why certain things happened and how this might be explained (Aitken & Valentine, 2006). In the case of this research, the units of analysis are the policy documents and the stakeholders involved in drafting these documents and applying them in decision-making (or not). Therefore, this research will attempt to develop a story from the documented experiences, choices and decisions-processes during policy-development and implementation related to MSP and offshore wind energy. Since this thesis is mainly based on policy documents and other communication by the government, and the interviews have been held primarily with government representatives, the results will also primarily provide insight into the government side of the policy process.

3.3.1 The coding process

Both the document analysis and analysis of interview data were executed using coding, with the help of the software program Atlast.ti. Atlas.ti is used because it helps to organize the coding process and provides a systematic overview of the citations for the different codes (O'Leary, 2010). The MSPs, related documents and policy memos provided in table 2, 3 and 4 include much information that is unrelated to the topic of this thesis. It is in certain instances not necessary, nor efficient to code the whole document. This is particularly the case with regards to the related documents. In these cases, those parts that explain the general position and aims of the document and/or explicitly address offshore wind or have been coded.

Different aspects of the literature and theory described in chapter two are combined to create manifest codes for studying the performance of MSP in guiding offshore wind energy. Since this thesis will use document analysis, the important aspects of the literature will be translated into codes. The code book is attached in table 1 of appendix II, and provides the definition of the codes including, if necessary, examples when they are applied.

The list of possible 'properties' of a message, as described by Needham (2000) (see table 6), forms the basis for the codes. Since the framework by Needham (2000) provides many different, and sometimes overlapping properties, the design of the code book requires critical engagement with these

properties to ensure clearly defined codes, minimize overlap and cover the breadth of issues important for assessing plan performance and the rules that structure interactions. Therefore, first, it will be explained how and why the framework by Needham is adapted. Second, the adapted version of the properties provided by Needham (2000), is related to the the 'rules of the game' by Klijn & Koppenjan (2006) (see see table 2, Appendix II) and to the six characteristics of MSP that were identified in paragraph 2.2 and that will be used to structure the result section (see table 3, Appendix II).

Category	Properties
1.The form of the message	This includes substantive and procedural norms which can be either general (applying to all locations) or to specific locations. Moreover, the message can also be published in the form of a plan which designates which development is allowed at which location.
2.The detail of the message	A message can either use a broad-brush approach showing general contours or be specific, thereby determining e.g. legal boundaries.
3.The parties to whom the message is addressed	These can either be the planning subject (the agency or organization drafting the plan) or the planning object (other parties).
4.The status of the message	This determines how the message is intended to be used; either binding or indicative on the planning subject or other parties. Moreover, the duration of the message is considered of importance to the status.
5.The content of the message	This category includes properties such as the role of politicians, professionals and stakeholders, but also information about linkages to other agencies and connections to other plans. Moreover, the level of detail is again included in this category.
6.The circumstances for strategic spatial planning	The circumstances include both the administrative context and the situation in the area for which the plan is drafted. This determines issues such as the urgency of the message, the strength of the planning subject (i.e. the level of agreement within agencies), the level of control by the planning subject over resources, intellectual capital, the level of consensus among stakeholders, the envisioned type of change, the complexity of the undertaking, as well as the degree of uncertainty, and the presence of other (sectoral) agencies in the area.

Table 6 Properties of the 'message' of a plan (based on Needham, 2000)

The category called 'the form of the message' by Needham (2000) seems to provide information about norms, which, essentially, specify aspects of the content of the documents. On the other hand, the category that Needham (2000) calls 'the content of the message' involves a broad range of properties, including information about who was involved in drafting the message, and a repetition of issues regarding the content and detail of the message. In this thesis, these codes will therefore be categorized under the code family *'drafting the message'*. Moreover, the categories 'detail of the message', 'to whom the message is addressed' and the 'status of the message' show a large degree of overlap, and all refer, in some form, to aspects that provide insight into the status of the message. Therefore, these categories were combined to form the code family '*status of the message*'. Subsequently, the category called 'circumstances for strategic spatial planning' seems to include codes that address the *context of the message*.

The code family c*ontent of the message* covers statements about the substantive and procedural norms, boundaries and priorities of the plan.

- The codes *general substantive* and *general procedural norms* were created to cover general remarks that always apply everywhere. The code *area-specific norms* was created for statements about a certain area. The general and area-specific norms thereby provide insight into the area-based nature of plans. This includes for example, statements specifically about the 12-mile zone.
- The code a*ctivity-specific norms*, was added for statements that apply to a certain activity or sector. This will help assess the level of integration across the scope of plan, thereby providing insights into which activities/sectors are (not) integrated. This code includes for example, issues of coordination between uses and multifunctional use of sea space. Both the area- and activity specific norms provide insight into the reality rules that structure which arguments are accepted;

moreover, the activity-specific norms also provide insight into the pay-off rules, because they affect how certain choices are evaluated and thereby the costs and benefits of certain choices.

- The code *monitoring and evaluation* is added for procedural norms that specifically address the content of monitoring and evaluation procedures. Monitoring and evaluation is expected to provide input to adaptive approach in MSP.
- Moreover, the *ecosystem-based* is added to provide information on the development of the ecosystem-based characteristic throughout the documents. Due to the area-based nature of many ecosystem considerations, this code will overlap with area-based norms. However, because eco-system based considerations form a separate characteristic of MSP, a separate code is used. Moreover, the code *type of change* is closely related to ecosystem-based approaches, because it provides insight into whether the MSP uses a hard- or soft sustainability approach, which has an impact on the position of the ecosystem in MSPs.

The code family *status of the message* focuses on who is addressed by the message and in what manner the message is intended to be used.

- The message can be addressed, as indicted by Needham (2000), to either the *planning subject* (the party or organization that drafts the plan or document) and/or *other parties*. To whom certain aspects of the plan are addressed can be relevant to all characteristics. These codes also affect the reality rules by Klijn & Koppenjan (2006), because they determine which arguments are accepted by which parties.
- Moreover, the message can be either *binding* or *indicative*. An indicative message often more broadly provides insight in ambitions or preferences, and therefore takes a more broad-brush approach. A binding message often is more specific and provides insight into hard boundaries. The more binding or indicative nature of a message will also be relevant to different characteristics and to provide insight into the nature of MSP in the Netherlands.
- The code *flexibility/adaptation* was added for statements about exceptions to norms and explicit remarks about the adaptation of plans to new insights. This code is also related to how conflicts are solved.
- The code *time scale* covers remarks about the time frame of the plan and thereby into the extent to which it can be considered strategic.

Therefore, the code family *drafting the message* was created which describes how the message is drafted and by whom.

- This includes, in line with Needham (2000), statements about *stakeholder involvement*, which are split up in three codes: who was involved, when they were involved and how they were chosen. Moreover, the role of *politicians* is also important in assessing the message of a plan according to Needham (2000). The code *consensus between stakeholders* provides insight into the level of agreement between stakeholders about means, ends and discourses. Moreover, the code *agenda setting* is included for statements about who determines which issues are addressed in the message and on which grounds. These codes provide input for understanding the performance of MSP with regards to the participation process. Moreover, this set of codes also provides insight into the access and position rules by Klijn & Koppenjan (2006) because they provide insight in who is involved in the policy network(s) and how they relate to each other.
- Moreover, this code family also includes *coordination* with other government agencies or ministries and the *connection to other plans* as suggested by Needham (2000). Moreover, the code *consensus within government* is added because it provides insight into the strength of the message based on the level of agreement about the message between government agencies. These codes will contribute to understanding the level of organizational integration in MSPs. These codes provide insight into the interaction rules by by Klijn & Koppenjan (2006) because they determine for example, how conflicts are settled and when to intervene.

Finally the code family *context of the message* is adopted to cover related issues which influence the message.

- An important code regarding the context is the *discourse*, which is used for citations that clearly describe the language used with regards to certain issues and can thereby also provide insights into how this language changed. This code can therefore relate to different characteristics, but will provide insight into the reality rules by Klijn & Koppenjan (2006) because it forms the basis of the arguments that are used by the government. Moreover, shifts in the discourses can provide insight into the strategies applied by the government.
- In line with Needham (2000), the context also includes statements about the perceived *urgency* of the issues or whether revisions are more *routine* within a set framework or outline. This also influences whether the message is of a more strategic nature. Moreover, routine revisions can provide insight into the adaptive approach in MSPs.
- The *authority* of the planning subject with regards to the issues they address and in relation to other parties; the *resources* needed to realize proposed outcomes or changes; and the *legislative* basis for plans and projects all influence the level of integration that is strived for and/or possible. Moreover these codes influence the position rules by Klijn & Koppenjan (2006). Legislation affects all these rules because they determine both the interactions, as well as the nature of the arena itself.
- Moreover, the level of *uncertainty* is also included. Citations regarding the degree of uncertainty are important, because they influence behavior of actors. More complex problems with higher levels of uncertainty will make investors more hesitant because of increased risks. This code therefore relates to adaptivity, which is presented as a way of dealing with uncertainty.

3.3.2 Towards a result section

The content analysis of the policy documents, interviews and policy memos focuses on thematic analysis of the Dutch MSPs with regards to the six characteristics. However, instead of focusing solely on what is being said, within the themes, the analysis also looks at the underlying meanings. Using directed coding, the coding will be done by reading the documents and attaching codes to the relevant citations based on predefined codes, which are described in the code-book (Hsieh & Shannon, 2005). This means that codes are not attached because certain words or sentences are necessarily present. Instead, the meaning of a certain citation determines which code would be attached (Hsieh & Shannon, 2005). For example, "the 12-mile zone must be kept free of permanent obstacles" was coded as an 'area-specific norm' because it refers to norms for a certain area.

Lens	MSPs	Related Documents	Policy Memos	Interviews	**Paragraph**
Area-based	←			→	§4.1: performance regarding an area-based approach
Integrated	←			→	§4.2: performance regarding integration
Strategic	←			→	§4.3: performance regarding a strategic plan or vision
Participative	←			→	§4.4: performance regarding participation
Ecosystem-based	←			→	§4.5: performance regarding ecosystem-based approach
Adaptive	←			→	§4.6: performance regarding adaptiveness

Table 7 The structure of the result section

Per MSP characteristic, an overviews of the citations for the respective codes was produced using Atlas.ti. These lists of citations subsequently allowed for the identification of patterns throughout the documents and interviews. Thereby, the structure of the result section, as depicted in table 7, is a

combination of the conceptual model and the methodology. Every paragraph will apply the two-step approach which includes both a discussion of the relation between MSP theory and Dutch MSP practice, as well as a discussion of the performance of MSP practice on offshore wind energy development in the Netherlands. This will allows for results on both the theoretical and the practical level.

The result section will, first of all, discuss whether plans are known/mentioned in other plans and the interviews. This is one of the essential conditions of plan performance (Faludi, 2000). Second, the result section will, per characteristic, discuss those themes that occur often and/or are emphasized much throughout the documents. These themes form the most important aspects of the message with regards to Dutch MSPs and offshore wind energy, and provide insight into how this message (1) relates to literature on MSP, and (2) performs with regards to offshore wind energy. Moreover, themes or issues that illustrate a remarkable shift or appear to be contradictory (within MSPs, or between MSPs and other documents) are discussed, because they demonstrate how the message is (not) used. These themes will, in line with Wallagh (in Faludi, 2000), provide insight in whether non-conforming decisions are based upon the plan. Moreover, in these themes that demonstrate shifts or apparent contradictions, elements of the strategies to change the message can be found.

A few critical notes are important to understand how to interpret the results of this thesis. This study focuses on policy documents and communications published by the government, as well as interviews with government representatives. Since both MSP and renewable energy in the Netherlands are forms of public policy, these policy documents are central to policy debates and struggles. The communications in the form of policy memos and reflection upon these processes by government representatives in interviews, form a useful addition to the government perspective, as well as provide some insight into issues that have been introduces by other parties. However, the consequence of these choices is that the data will primarily provide insight into the government perspective on the development of MSPs and how this has changed, and not into the role of other parties in this process.

Moreover, as explained by Yanow (1996), the nature of interpretative policy analysis is that it is sensitive to context-specific knowledge – in this case primarily the Dutch government developments and actions. Therefore, the generalization of results needs to be approached with care. However, the explorative nature of this research does lead to many questions, that might provide interesting points of departure for further research.

CHAPTER 4 – RESULTS

The typology for plan performance by Wallagh (1988, in Faludi, 2000) states that an indicator of plan performance is when a plan is referred to in other plans, decision-making and/or plan revisions. Based on an analysis of whether, and regarding which topics, the analyzed documents referred to each other, some initial results are found[7]. First, it seems that the earlier MSPs, the *Spatial Planning Policy Document [SPPD, 2004]* and *Integrated Management Plan for the North Sea* 2015 *[IMP, 2005]* barely performed, because they are hardly mentioned in subsequent documents at all. The *SPPD [2004]* and *IMP [2005]* were only referred to in their direct revisions (the *National Water Plan 2009-2015 [NWP, 2009] and Policy Document on the North Sea 2009-2016 [PDNS, 2009]* and the *revised-IMP, 2011*) and in a letter to the parliament *[1,2008]*, usually with regards to the fact that they are not capable of dealing with the 21st century challenges for the marine area. Even in documents that discuss the problems regarding the round II system (for example in the *13, 2014*), the *SPPD [2004]* and *IMP [2005]* are not mentioned. An illustrative example of this lack of performance is the 6000 MW target. The *SPPD [2004]* states that "the ambition is to realize 6000 MW in 2020 in wind parks at sea in the Dutch EEZ" (p. 167). However, in subsequent documents, the *SPPD [2004]* is not referred to when this target is mentioned Moreover, instead of referring to the SPPD, documents refer to other energy-related documents that were published later with regards to this target. For example, the *NWP [2009]* refers to the Work Program Clean & Efficient.

Second, the *NWP* and *PDNS [2009]* (and the revision of the NWP in the form of the *White Paper on Offshore Wind Energy [SvWoz, 2014]*) have performed, but primarily with regards to the appointment of wind energy areas. Subsequent documents do refer to the NWP and PDNS, but primarily within the context of the appointment of wind energy areas [see for example *10,2014*; *14, 2014*; and *15,2015*]. The *Offshore Wind Energy Act [2015]* provides a statutory basis to the performance of the NWP (and therefore PDNS) with regards to the appointment of wind energy areas, through Art 3 (2) which states that "a plot can only be appointed in areas that have been appointed in the National Water Plan". Therefore, the NWP will continue to perform with regards to the appointment of offshore wind energy areas in the future. However, with regards to more concrete decisions regarding offshore wind energy, it remains questionable to what extent the MSPs perform.

Third, the energy related documents are referred to, and targets set in these document are included in MSPs and policy memos. However, these energy related documents barely refer to the (content of) MSPs. For example, on the one hand, the *Energy Agreement [2013]* is referred to in almost all subsequent documents[8] for one or multiple of the following reasons: the agreement sets a new target for offshore wind energy (to have 4450MW operational in 2023); it sets the time frame for the realization of offshore wind energy in a roadmap; it refers to the agreement about 40% cost reduction as set in the Green Deal Offshore Wind; and it states the obligation for the government to develop a robust legislative framework. However, the *Energy Agreement [2013]* itself does not mention any of the MSPs (except for the *SvWoz [2014]* which is referred to in the context of accelerating the appointment of additional wind energy areas to ensure cost-effective and fast realization of the targets). With regards to other energy related policy documents [i.e. the *Work program Clean & Efficient, 2007* and *Green Deal Offshore Wind*, 2011] a similar pattern can be identified, although it is most obvious in the Energy Agreement. This indicates that offshore wind energy development is mainly led by specific energy policy. Rather than being an integrated part of the development of marine areas, the spatial consequences of the decisions and tasks set in energy policy are subsequently included in the MSPs.

[7] As indicated in the result section, the first time the MSPs and related documents are referred to in each paragraph, the full English name will be used accompanied by the abbreviation. In the subsequent part of the paragraph only the abbreviation will be used. Since the policy memos do not have conclusive names, they are referred to using the number given to them in Table 5.

[8] including the *SvWoz, 2014; draft-NWP, 2014; draft-PDNS, 2014; North Sea Spatial Agenda, 2014; Feasibility Study, 2014; draft-BPRW, 2014; 9, 2014; 10, 2014; 12, 2014; 13, 2014; 15, 2015; 16, 2015; 18, 2015;* and *19, 2015*.

When examining the use of the 'message' in subsequent documents and decision making (as suggested by Faludi, 2000), this perspective becomes more nuanced. Therefore, in the following paragraphs, the performance of MSP on decision-making regarding offshore wind energy will be explained using the six main characteristics of MSP that were extracted from literature. These criteria will form the sub-chapters. The analysis focuses on two levels: first, the connections between MSP theory and MSP practice in the Netherlands is discussed, and second, the performance of the Dutch MSPs on decision-making regarding round II and round III system for offshore wind energy development. This two-step approach allows for conclusions that connect theory and practice.

4.1 Area-based

According to literature, MSP parts with the traditional sectoral approach to sea-use management and instead takes into account all the activities that occur within a defined marine area as well as the cumulative effects of these activities. Planning and management can then be tailored to the specific characteristics of a certain area (Douvere, 2008; Douvere & Ehler, 2009; Ehler, 2014; Flannery & Cinnéide, 2012; Portman, 2011; Young et al, 2007). Although an area-based approach is basically a form of territorial integration (next to e.g. cross-sectoral and organizational integration as discussed in paragraph 4.2) (Kidd, 2013; Portman, 2011), it was decided to discussed the area-based focus separately because of the explicit focus placed upon the area-based approach in MSP literature.

Two perspectives on area-based approaches can be identified. First, earlier forms of area-based policy often use exclusion policy to avoid conflicts. This can be illustrated by earlier examples of MSP in e.g. the Great Barrier Reef, or the Florida Keys Marine Sanctuary (Collie et al, 2013). Second, the rise of multi-objective MSP led to a more holistic (also called comprehensive or system-) view on the planning and management of marine areas. By taking a holistic approach, conflicts and compatibilities among the different activities in certain areas can be identified and, especially in multi-objective MSP, help identify solutions that are sensitive to various functions within an area and possibilities for synergies between these functions (Agardy et al, 2011; Douvere, 2008; Scarff et al, 2015; Young et al, 2007).

Based on the policy analysis, three themes were identified that are central in the codes about general and area-based norms. These themes illustrate most clearly the performance of an area-based approach in decisions regarding offshore wind development. First, the locations where wind energy development is allowed, and how these areas are chosen will be discussed. Second, the 12 mile zone (territorial sea) is discussed as a specific area for which area-based policy has been developed. Third, area-based approaches are applied to a certain extent for areas with special ecological features. However, these aspects will be discussed in more detail in paragraph 4.4 about the ecosystem-based approach.

4.1.1 Wind energy areas

This section will discuss the selection of areas where wind energy development is allowed, and the argumentation behind these choices. This thesis discusses the round II and round III system, between which a shift can be identified from exclusion policy purely aimed at avoiding conflicts towards an exclusion policy with an increased use of coordination between functions to minimize conflicts. However, as will be illustrated below, this coordination is only aimed at minimizing, not at solving conflicts through an area-based approach.

The round II system

The first efforts at MSP, which formed the background for the Round II system for offshore wind energy, applied an exclusion policy aimed at complete avoidance of conflicts. After ensuring acceptable locations during the permit procedure, eventually, the costs determined the location of the wind parks that were realized for round II. This illustrates an institutional design strategy aimed primarily at setting some basic interaction rules to avoid conflict through setting priorities; there seems to be little to no regard for the network outcomes and the composition of the network.

The *Spatial Planning Policy Document [SPPD, 2004]* and *Integrated Management Plan for the North Sea 2015 [IMP, 2005]* broadly divided the North Sea in three parts: (1) directly adjacent to the

coast, up to the NAP -20 m line, the functions recreation, coastline protection and land reclamation were prioritized; (2) between the NAP -20 m line and the 12 nautical mile border (called the 12-mile zone from here onwards), sand extraction was given priority; (3) beyond the 12-mile zone - in the EEZ - wind energy was given priority. Moreover, reservations were made for shipping routes, defense areas, and areas with special ecological features. In practice this meant an exclusion policy which stated that a developer could request a permit for offshore wind energy everywhere in the EEZ, except for: shipping routes, clearways, and anchorage areas, defense areas, areas reserved for the extraction of concrete- and masonry sand, safety zones around installations, the areas required for maintenance around cables and pipelines, and the 12-mile zone. This illustrates that the approach chosen for the round II system is aimed purely at avoiding conflicts between activities through an exclusion policy. The point of intervention of this exclusion policy is the interaction between uses, by ensuring a minimum amount of interaction.

The general discourse regarding offshore wind energy is that there is no great sense of urgency to develop more explicit or detailed policy to deal with possible conflicts. This is captured very well by the following citation from the *IMP [2005]*:

> *"The realization of 6000 MW will probably require a few dozen offshore wind parks. A the moment this is not perceived as a problem. The development of offshore wind energy is, after all, only in an early stage. If there is a reason to do so, it will be examined whether further spatial planning is necessary" (p.65).*

An integrated assessment framework was developed in the *SPPD [2004]* and worked out in the *IMP [2005]*, which was applicable to all activities requiring a permit. It is curious that, despite the fact that no problems were foreseen, the realization of 6000 MW in the EEZ was determined an imperative reason of overriding public in the *SPPD [2004]*, because this status prioritizes offshore wind energy compared to certain other functions. For example, through this status, offshore wind energy was exempted from the requirements in the integrated assessment framework to demonstrate the usefulness and need for the activity [*SPPD, 2004*]. Moreover, this label also allowed for construction of offshore wind parks in ecologically sensitive areas – which was usually forbidden - if there were no feasible alternatives. Labeling offshore wind energy within the EEZ an imperative reason of overriding public interest, demonstrates that some conflicts are expected (e.g. with regards to offshore wind energy and the environment) and some basic interaction rules are set for regulating these conflicts (e.g. offshore wind energy is only allowed if there are no feasible alternatives).

As stated in the integrated assessment framework *[IMP, 2005]*, initiators of projects will not gain exclusive rights to use an area and multifunctional-use is encouraged. However, possible compatibilities are not recognized or sought after in the policy. Instead, based on consultation with the primary initiator, co-use might be possible "as long as the primary initiator does not suffer damage or hindrance" (p.71: *IMP, 2005*). This demonstrates that, although multifunctional use is an important theme in the integrated assessment framework, it is not a priority that is actively encouraged through policy and/or action.

The round II system led to a chaotic situation, in which 79 initiatives filed an initial memorandum, nineteen initiatives requested a permit, twelve permits were handed out, of which only three eventually received subsidy *[13, 2014]*. These initiatives were spread across the North Sea, positioned in between shipping lanes, and sometimes overlapping *[interview RWS; interview independent expert]*. Other sea-uses, in particular the shipping sector, expressed their concerned with regards to these developments *[interview RWS; interview independent expert]*. However, all twelve permits were evaluated using the integrated assessment framework. The fact that the permit was handed out meant that the location was found acceptable according to the policy set down in the SPPD and IMP *[interview RWS]*, which illustrates the conformance of the permits to the Round II system. The eventual decision for the three permits that are (being) realized was based on the tender for subsidy *[RWS interview]*. Initially, subsidy for 450 MW offshore wind energy was committed, which was extended with another 500MW in 2009 *[2,2009]*. In 2010, the tender for subsidy was opened, and won by the parties with the lowest bid (who needed the least amount of subsidy), after correction for the length of the cable to shore *[3,2009]*. This tender was won by the Gemini parks, and the rest of the subsidy was through a second procedure provided

to Eneco Luchterduinen *[RWS interview]*. After ensuring acceptable locations during the permit procedure, eventually, the costs determined the location of the wind parks that were realized for round III.

Basically, in the round II system for offshore wind development, the MSPs set some priorities through a strategy aimed at regulating the basic interactions between uses to avoid conflict. However, when examining the implicit ambition of avoiding conflicts, the Round II system did not perform; rather it illustrated the amount of conflict wind energy is causing with regards to existing sea-uses.

The round III system

As explained in the *Policy Document on the North Sea 2009-2015 [PDNS, 2009]*, the round II system caused a large administrative burden due to the fact that every single application had to be assessed in relation to other use functions, as well as the marine environment. Moreover, due to the lack of connection to the available subsidy, many resources (in time and money) were wasted by both the government and market parties in the preparation for permits that were not going to be used. The *National Water Plan 2009-2015 [NWP, 2009]* and accompanying *PDNS [2009]*[9] introduce a completely different approach for the Round III system for offshore wind energy development, in which the government appoints wind energy areas at sea. Permits for wind parks will only be handed out for plots located within these wind energy areas, by means of a plot decision[10]. This section will first explain in more detail how MSP performs with regards to the selection of wind energy areas. Second, the appointment of plots within these wind energy areas will be discussed. In general, when it comes to an area-based approach, the Round III system also applies an exclusion policy to determine the location of wind energy areas. However, as will be illustrated below, the focus on the criteria of cost-efficiency has led to the allocation wind energy areas at locations where conflicts cannot be avoided. How these conflicts are dealt with is explained in more detail in paragraph 4.2.

The general discourse in the *NWP [2009]* has shifted compared to earlier MSPs, demonstrating an increased recognition of the fact that the North Sea offers only a limited amount of space which needs to be carefully allocated to various uses and functions. Therefore, policy is developed to balance different uses of the North Sea. This can be illustrated using the following citation from the *NWP [2009]*:

> *"In the crowded Dutch part of the North Sea, there is not enough space to just allow any function without further consideration. Rather a careful 'recalibration' of North Sea policy is required, in relation to new societal challenges. The most important starting points for this recalibration are: sustainable economic development which is balanced with the marine ecosystem, room for large scale renewable energy and reservation of areas for sand extraction, which needs to be balanced with existing sea uses." (p.196: NWP, 2009)*

In order to steer the development of wind energy, in the *NWP [2009]*, the government took on the task of appointing wind energy areas to enable the realization of 6000MW offshore wind energy until 2020. It is important to realize that the *NWP*, *PDNS [2009]* and later the *White Paper on Offshore Wind Energy [SvWoz, 2014]* only appoint gross areas; these documents do not make statements about the exact location of wind parks within these areas. This means that, within the wind energy areas, functions such as cables and pipelines, recreational shipping, mining and ecological values still require coordination *[SvWoz, 2014]*.

[9] It is important to be aware of the fact that the PDNS, although it is referred to separately in this thesis, is an attachment to (and thereby part of) the NWP, which provides more detail on the North Sea policy as explained in the NWP.

[10] These permits are handed out on the basis of the Offshore Wind Energy Act. The Offshore Wind Energy Act determines that the government takes a plot-decision, based on an EIA and appropriate assessment. A tender will be issued for these plots, which will be won by the party who requires the least amount of subsidy. This party will automatically also receive the wind permit on the basis of the Offshore Wind Energy Act *[Offshore Wind Energy Act, 2015]*.

Policy Document on the North Sea 2009-2015	**Policy Document on the North Sea 2016-2021**
Cost effective wind energy	*Cost effective wind energy within the framework of the Offshore Wind Energy Act*
As close as possible to the coast and near landing points	An efficient spatial allocation for wind parks and landing points.
Large areas that are at least 80km2 (400-500MW)	Areas with room for the realization of 700MW (or a multitude thereof).
Spatially dispersed areas to allow for optimal use of the wind front to avoid cluttering	
Minimizing conflict with other uses of national importance	*Minimizing conflict with other uses of national importance*
Shipping: offshore wind parks needs to keep a safe distance of two nautical miles from shipping lanes, clearways, and anchorage areas. If necessary, there are possibilities for tailor-made approaches.	*Shipping*: apply the 'Design criterion: distance between shipping routes and wind parks'.
Oil- and gas extraction: Offshore wind parks are not allowed within the 500 m safety zone around platforms for oil- and gas extraction, or the 5 nautical mile safety zone for platforms with a helicopter platform. If necessary, there are possibilities for tailor-made approaches.	*Oil- and gas extraction*: the starting point for platforms with a helicopter deck is to keep an obstacle-free zone of 5 nautical miles. However, in case of conflicts, the 'Design process: distance between mining locations and wind parks' needs to be applied.
Defense: Installations for offshore wind are not allowed within defense areas.	*Defense*: Installations for offshore wind are not allowed within defense areas.
Sand extraction: offshore wind parks need to be located as much as possible outside of the 12-mile zone, to minimize conflict with sand extraction.	*Sand extraction*: Appointed wind energy areas do not overlap with areas where sand extraction is prioritized.
Efficient and safe use of the North Sea which is balanced with the marine ecosystem	*Efficient and safe use of the North Sea which is balanced with the marine ecosystem*
Marine environment: "to avoid possible significant effects, thus far, Natura 2000 areas have been avoided. Other possibly ecologically valuable areas […] have been spared as much as possible" (p.41).	*Marine environment:* "to avoid possible significant effects, Natura 2000 areas have been avoided." (p.67). The 'Assessment framework ecology and cumulation' will be applied in future spatial decisions regarding offshore wind energy.
Efficient use of space: avoid cluttering at sea by dispersed and sizable offshore wind energy areas, and allow, as much as possible, multi-use of areas.	*Passage and multi-use*: Currently passage and multi-use is not allowed. However, the intention is to open operational wind parks, within set restrictions, to other uses and passage of ships below a certain size (to be included in the final version of the document).
Perception: Avoid the 12-mile zone as much as possible to ensure an unobstructed view on the horizon	*Perception*: So far, no wind energy areas have been appointed within the 12-mile zone to ensure the unobstructed view on the horizon. Permanent, visible objects can be allowed for activities of national importance, if there are not reasonable alternatives and no significant effects to coastal protection. Damage to the unobstructed view on the horizon, recreation and fisheries will need to be minimized.
	Other: - Plot-decisions will, if possible, take into account fishing grounds - It will be examined under which conditions it is possible to reduce safety- and maintenance zones around cables and pipelines. - Archeological and cultural heritage in the EEZ needs to be taken into account when offshore wind projects affect the seabed

Table 8 Comparison of the criteria and considerations when appointing wind energy areas between the PDNS 2009-2016 (left column) and the PDNS 2016-2021 (right column) (based on the *PDNS [2009]* and *draft-PDNS [2014]*) .

Activities of national importance are given priority in the *NWP* and *PDNS [2009]* and in the *draft National Water Plan 2016-2021 [draft-NWP, 2014]* and *draft Policy Document on the North Sea 2016-2021 [draft-PDNS, 2014]*. Offshore wind energy development is – next to shipping, oil-and gas extraction, CO2- storage, defense and sand extraction - labeled as an activity of national importance. The *PDNS [2009]* set the following basic principles for North Sea policy: (1) prioritize development of activities of national importance by minimizing conflict between different activities of national importance, and (2) efficient and safe use of the North Sea which is balanced with the marine ecosystem, which are continued in de the *draft-PDNS [2014]*. The appointment of offshore wind energy areas in the NWP was based upon a "most conflict-free development with regards to the interests of shipping, the marine ecosystem, oil- and gas, defense and aviation" (p.6: *SvWoz, 2014*). Morover, during the *Interview with the Ministry of I&M*, it was explained that wind energy areas are appointed at those locations that remain after impossibilities are crossed off, and the pros and cons of the remaining areas are weighted against each other. The citation as well as the statements from the interview illustrate that, similar to the old system, the primary objective of the new system is to avoid through an exclusion policy.

Table 8 provides a comparison of the considerations and criteria for determining the locations of wind energy areas for the *PDNS [2009]* (left column) and the *draft-PDNS [2014]* (right column). First of all, it is important to examine the performance of the *PDNS [2009]* with regards to the appointment of wind energy areas. Second, the differences between the *PDNS [2009]* and *draft-PDNS [2014]* will be discussed, because this provides insight into the interaction-strategies applied by the government.

Based on the criteria in Table 8 (left-column), the *NWP [2009]* appointed two wind energy areas (Borrsele and IJmuiden Ver) and identified two search areas in which space needed to be found for additional wind energy areas (Hollandse Kust and Ten Noorden van de Waddeneilanden). The search area Ten Noorden van de Waddeneilanden is appointed to ensure more spatially dispersed areas for optimal use of the wind front *[PDNS, 2009]*. The search area Hollandse Kust is appointed because the "cost-effective implementation of offshore wind energy – primarily due to the water depth and the distance to the onshore grid connection – requires the realization of a substantial area closer to shore" (p.207: NWP, 2009). These two areas were appointed in a partial revision of the NWP, called the *White Paper on Offshore Wind Energy [SvWoz, 2014]*.

It is important to notice that the requirements in the *NWP [2009]*, to realize 6000MW in the most *cost-effective manner* (essentially a space neutral criterion), translates to the spatial criteria to develop large wind parks, closer to shore and in shallower water. Due to the expected costs, the central and northern part of the North Sea were not considered feasible for offshore wind until 2020 *[PDNS, 2009]*. Therefore, "the analysis for appointing wind energy areas that allow for a cost-effective realization of 6000MW, focuses on the (crowded) southern part of the EEZ" (p.45: *PDNS, 2009*).

In general, the *NWP* and *PDNS [2009]* do seem to perform with regards to the appointment of offshore wind energy areas, because the criteria set in these MSPs form the background for the decisions about these areas. However, this performance seems to be based upon either the criteria with regards to conflict avoidance, or on cost-effectiveness. With regards to Borrsel and IJmuiden Ver, few conflicts with other uses are expected *[interview I&M]*. Thereby, with regards to these areas there is performance based on the basic principle of minimizing conflicts between uses of national importance. However, the appointment of the area Hollandse Kust appears to perform mainly with regards to cost-efficiency, but not when looking at conflict avoidance. Contrary, as indicated during multiple *interviews [RWS, I&M]*, the development of wind energy in Hollandse Kust is expected to be much more difficult due to the number of expected conflicts with other interests.

Where the MSPs do perform in providing the framework for offshore wind energy through the appointment of offshore wind energy areas, they do not perform with regards to the appointment of wind parks themselves. The elaboration of the planned locations for the wind parks up to 2019 (in order to realize the target of 3450 MW operational in 2023 as set in the energy agreement) was published in a letter to the parliament *[10,2014]*. This decision, thereby, was not made based on the MSP and the decision was subsequently mentioned in the *draft-NWP* and *draft-PDNS [2014]*. The whole task of 3500MW will be realized in the wind energy areas Borssele and two parts of the wind energy areas Hollandse Kust, called

HKA and HKB. These areas in front of Hollandse Kust still require the appointment of two stretches within the 12-mile zone. This is remarkable, because it illustrates that the decision to appoint the wind energy area within the 12-mile zone follows the decision to realize wind parks in these areas. Therefore, the appointment of wind energy areas, seems to follow the intention to appoint plots rather than the other way around. This will be explained in more detail in as will be discussed in section 4.1.2.

The reason provided for first developing Borssele, is that this area is already completely appointed and, therefore, preparations for plot-decisions can start earlier: "By starting in Borssele, the target of 3450MW in 2023 will be realized in the fastest manner" (p.3: *12, 2014*). Moreover, the development of Borrsele is easier than Hollandse Kust because there are fewer conflicts *[Interview RWS, I&M]*. For the areas HKA and HKB many conflicts are expected with e.g. mining, shipping, fisheries and sand extraction. In general, starting in Borrsele and then moving to HKA and HKB is based on the consideration that 3500 MW can then be realized in the cheapest and fastest way; not on area-based (or spatial) considerations. Moreover, this example illustrates that the cost-argument, eventually, seems to be more important than the area-based approach aimed at conflict minimization.

The realization that conflicts are unavoidable, and the need to deal with conflicts that result from the appointment of wind energy area Hollandse Kust, have caused the round III system to increasingly develop interaction rules to not only avoid conflicts but also deal with these potential conflicts. However, instead of an area-based approach in which an overview of conflicts and compatibilities between various (potential) functions in an area, are used to identify solutions and possible synergies (Agardy et al, 2011; Scarff et al, 2015; Young et al, 2007), these conflicts are primarily dealt with by the introduction of bi-sectoral frameworks that guide the interaction between wind energy and various other uses of national importance. This will be explained further in paragraph 4.2.

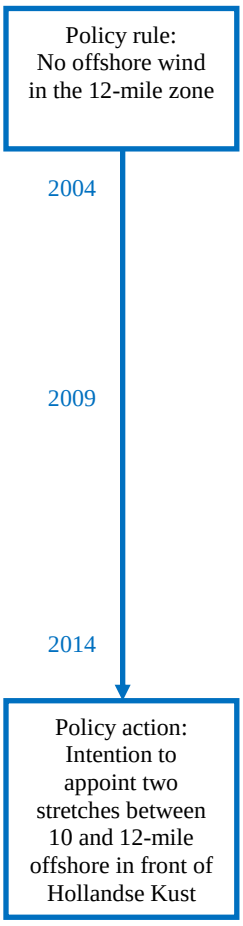
In general, therefore, the area-based approach taken in Dutch MSP for the appointment of offshore wind energy areas is one of exclusion policy aimed at minimizing conflicts. Although potential conflicts are increasingly recognized, solutions are not sought after using area-based approaches.

4.1.2 The 12-mile zone

The policy development with regards to the 12-mile zone (i.e. the territorial sea) is a re-occurring, and interesting theme related to area-based policy. All MSPs emphasize the importance of the amenity value of the open sea, which should be ensured through an unobstructed view on the horizon by banning visible permanent objects from the 12-mile zone (the territorial sea)[11]. From the NWP [2009] onwards, the unobstructed view on the horizon is even declared a national interest. Additional benefits that are attached to a ban on permanent objects in the 12-mile zone include the avoidance of conflicts with sand extraction, which is prioritized between the NAP-20 line and the 12-mile zone [*SPPD, 2004; IMP, 2005; NWP, 2009; PDNS, 2009; draft-NWP, 2014; draft-PDNS, 2014]*, and that the 12-mile zone provides room for recreation and certain types of fisheries [*NWP, 2009; PDNS, 2009; draft-NWP2, 2014; draft-PDNS, 2014*]. Despite these arguments, exceptions to this policy rule have developed over time with regards to wind energy. These exceptions, on the one hand, illustrate the performance of the cost-argument over the conflict-avoidance principle, and on the other hand illustrate the use of strategies aimed at 'reframing' (Klijn & Koppenjan, 2006) by the government.

[11] In this thesis, the term 12-mile zone (which refers to 12 nautical mile, equivalent to 22.2 km) will be applied, because this is the term used by Dutch MSPs to describe the territorial sea. The interesting aspect about this boundary is, that it is not necessarily related to the visibility of the turbines from shore. In general the rule is that the further from shore wind parks are located, the less visible they are. However, depending on factors such as the height of the turbines and the weather, wind parks are visible beyond this line as well *[feasibility study, 2014]*.

The discourse with regards to exceptions to the policy to ban on permanent objects from the 12-mile zone, demonstrates a gradual shift over time:



In the *SPPD [2004]*, although permanent objects in the 12-mile zone are allowed for reasons of overriding public interests, offshore wind energy is declared such an interest only for up to 6000MW in the EEZ, thereby explicitly excluding the 12-mile zone. Therefore, as stated in the *IMP [2005]*, new offshore wind development needs to be realized outside the 12-mile zone.

In the *NWP* and *PDNS [2009]*, the realization of 6000MW offshore wind energy by 2020 is declared a national interest, specifications with regards to the EEZ are no longer included. Moreover, the NWP makes an explicit exception from the rule that no permanent objects can be constructed in the 12 mile zone for offshore wind energy, by stating that "based on decision-making regarding the wind energy areas in the search areas in front of Hollandse Kust, it is possible - by placing wind turbines on the inner border of the 12-mile zone – to locally deviate [from this norm]" (p.213: *NWP, 2009*).

In 2013, the intention is expressed to draft a feasibility study to examine the possibilities for offshore wind development between 3 and 12-mile offshore [*8,2013*].

In 2014, *feasibility study wind within the 12-mile zone [feasibility study, 2014]* was published, accompanied by a policy memo which announced the intention to "add to these two areas [Noord and Zuid Hollandse Kust] a small stretch of a maximum of 2 nautical mile within the twelve mile zone. The 12-mile zone will thereby be spared as much as possible. Without these stretches, the development of offshore wind energy will be significantly more expensive because wind parks will need to be constructed further offshore. We would add that these parks will be located further offshore than the closest existing wind park" (p.3: *10, 2014*).

The appointment of these stretches is to take place by means of a revision of the NWP 2016-2021 called the 'Government Structural Vision on the Designation of Additions to the Coast of Holland' in 2016 [*10,2014*].

The above sketch of the timeline with regards to the discourse around the 12-mile zone illustrates two things. First of all, it is clear that the decision to appoint offshore wind energy areas within the 12-mile zone is based upon the cost argument[12]. Due to the contradictory criteria in the NWP, as discussed in the previous section, it can be seen as performance when these stretches within the 12-mile zone are appointed as wind energy areas because the cost-efficient realization of offshore wind - potentially through appointment of a stretches in front of Hollandse Kust - is a criterion in the *NWP [2009]*. However, the MSP can also be stated to perform if arguments from the NWP are used to block the intended policy action (e.g. because there are alternatives, or because there are conflicts with other uses). It will be interesting to assess the outcomes of this process.

[12] The cost-argument is based on: (1) the direct cost-reduction, because, according to the government, it is cheaper to build close to shore, and (2) the indirectly cost-reduction, because these stretches are necessary to be able to realize 700MW (or a multitude thereof) as required for connection to the standard platform for grid connection by TenneT. The first argument is related to the MSPs, the second argument has been added later based on energy-related policy.

Independent of whether these stretches are appointed, it is remarkable that the process to appoint these stretches is based upon the ambition to develop wind parks in this area. The policy rule is that wind parks can only be located within appointed wind energy areas. Therefore, it is very interesting to observe that the decision to appoint the wind energy area in front of Hollandse Kust within the 12-mile zone (through a revision of the NWP 2016-2021), follows the ambition to take plot-decisions for the development of wind parks in this area (which was announced in a letter to the parliament *[10,2014]*. This illustrates that the decisions made in policy arena around renewable (wind) energy, to some extent direct the appointment of wind energy areas through MSP.

Second, the changes in the discourse illustrate how a policy message can be used for persuasion (as described by Stone, 1997; and Yanow, 1996) through a careful reframing strategy (as explained by Klijn & Koppenjan, 2006). As indicated by multiple interviewees, the topic of wind energy in the 12-mile zone is politically sensitive, which might be the reason for the cautious approach taken by the government. Box 2 briefly explains the process and outcomes of the *feasibility study [2014]*, which is particularly interesting with regards to the strategy employed by the government.

Box 2 *The feasibility study offshore wind energy [2014]*

The feasibility study consists of two phases:

1. A *quick scan* which examined the (im)possibilities along the whole coast between the 3 and 12-mile offshore, based on an exclusion policy in which e.g. shipping lanes, the 3 mile zone and Natura 2000 areas were usually* excluded. Five areas were selected that offered possibilities for offshore wind energy within the 12-mile zone.
2. For these areas a *social cost-benefits analysis* was performed, which compared the costs of the realization of wind energy targets within and outside of the 12-mile zone. The costs of development and exploitation were compared with the indirect and external (societal) costs regarding sand extraction, recreation, oil- and gas extraction, ecology and shipping

The conclusion was that wind energy was possible in all areas, and although there were negative effects on e.g. fisheries, ecology, shipping, and the amenity value of the landscape, "the lower costs of development and exploitation […] are of such an amount, that they exceed the negative effects on other functions" (p28). However, the area called Maasvlakte was found to have the most positive business case, followed by Zuid Hollandse Kust, then Noord Hollandse Kust, subsequently Ameland, and last Zeeuwse Kust.

*the area called Maasvlakte was located within 3 mile from the coast.

First of all, it is remarkable that apparently there were search areas in the Quick Scan, which, as illustrated in Box 2, aimed to assess (im)possibilities along the whole coast. However, the feasibility study states that "in the quick scan it was noticed that the [Ministry of] Defense could potentially make room within the search area Noord Hollandse Kust" (p.22). Although it is a positive sign in light of MSP literature that the functions of wind energy and defense are coordinated, the use of the term 'search area' hints towards a preference for this area in front of Hollandse Kust early on in the process. In light of the statements in the *NWP [2009]* and the intention to appoint the two stretches in front of Hollandse Kust as explained in the policy memo *[10, 2014]*, it can be questioned to what extent all the areas called Maasvlakte, Ameland and Zeeuwse Kust (as discussed in Box 2) were seriously considered, or whether they were part of the communication and bargaining strategy by the government.

A further illustration of this strategy, is the arguments with which the choice for the stretches in front of Hollandse Kust are presented, as well as the argument why the other areas were not chosen. These arguments are presented in the letter to the parliament *[10,2014]*, which started with emphasizing that the area between 3 and 10 nautical mile would not be used; nor would the other areas examined in the feasibility study be exploited. The reason for picking the stretches in front of Noord and Zuid Hollandse Kust, are that: (1) by picking these areas, only minimal use will be made of the 12-mile zone and, thereby, the objections of various stakeholders will be taken into account, while a significant cost-reduction can still be achieved; and (2) these two stretches are required to ensure the development of offshore wind energy according to the time frame set down in the Energy Agreement; and (3) by connecting the areas within the 12-mile zone to areas outside of the 12-mile zone, the unobstructed view on the horizon in other

areas is maintained. Moreover, focusing on why the other areas were not chosen, it is stated that "in none of the five areas, wind energy is beforehand considered impossible. However, some important remarks must be placed. The ecological aspects might form a problem, particularly for the area Maasvlakte, and for the areas Ameland and Zeeland, international agreements might form constraints. Moreover, these areas are too small for cost-effective incorporation of a standard platform" (p.9: *10, 2014*). By placing emphasis on the negative points of the areas that were not appointed, this citation clearly illustrates the reframing strategy applied by the government to promote the appointment of these stretches within the 12-mile zone in front of Hollandse Kust, which is part of the policy struggle inherent to MSP with regards to offshore wind energy.

4.2. Integrated

Integration is deemed crucial for the success of MSP initiatives, because it brings "coherence to decision-making and associated social and political processes that relate to particular places" (p3: Kidd & Shaw, 2014), contrary to the previous uncoordinated patchwork of sectoral policies, programs and actions plans that ignored interrelations across uses and borders (Douvere, 2008; Ehler, 2014; Kidd & Shaw, 2014; Portman, 2011). Both Kidd (2013) and Portman (2011) developed a framework for considering integration in MSP. Although they stress different aspects of integration, both frameworks emphasize the need for integration across uses (cross-sectoral integration), as well as organizational (or administrative) integration. This paragraph will first provide some background information with regards to cross-sectoral and organizational integration.

The code activity-based norms provides insight into the most important themes with regards to cross-sectoral integration. Two themes seem to return throughout the citations for this code: (1) coordination between uses; and (2) multifunctional use. These themes show some overlap with the previous paragraph on the area-based approach. However, in this paragraph it will be discussed in more detail how the different functions are coordinated, how this relates to multi-functional use, and to what extent this can be perceived as performance of the integrated approach of MSP with regards to wind energy in the Netherlands. Literature on MSP emphasizes the need for cross-sectoral integration by looking for compatibilities between uses and opportunities for multifunctional use (or co-use). Such cross-sectoral integration can assist in solving conflicts with regards to the limited amount of available sea-space (Christie et al, 2014; Directive 2014/89/EU; Douvere, 2008; Kannen 2012; Young et a, 2007). However, beyond general statements about obvious conflicts and compatibilities (e.g. conflicts between shipping and wind parks, and possible compatibilities between aquaculture and wind parks), these articles do not provide much guidance on how multifunctional use needs to take shaped. Christie et al (2014) are the only authors encountered in the literature review, that provide more detailed insights into factors that affect opportunities for multi-functional use. In their research they examine possibilities for co-location of wind farms with Marine Protected Areas (MPAs), fishing, and aquaculture in the UK. Their conclusions emphasize that site-specific characteristics are crucial with regards to the opportunities for multifunctional use. This includes biological, ecological, hydrological, commercial and legal factors. Moreover, co-location often requires joint projects, rather than the joining up of activities once the wind park is operational (Christie et al, 2014). Although these insights are useful, they are still fairly limited because opportunities for co-location also include, for example, other forms of renewable energy including technologies based on wave energy and salinity (as emphasized in Dutch MSPs *[draft-PDNS, 2014]*), or for the production of seaweed for biofuels (Chung et al, 2013). Research into factors that enable or constrain multifunctional use with regards to these uses appears to be lacking.

With regards to organization integration, the themes that are prominent throughout the lists of codes are legislation and authority. Although these two themes are codes for analyzing organizational integration themselves, they are also reflected in the other codes (coordination, resources, and consensus within the government) which demonstrates a recurring focus on these themes. Moreover, in literature on MSP, these two aspects are also emphasized as important prerequisites of MSP. Literature on MSP emphasizes the need for a strong legal basis and clear authority (Collie et al, 2013; Drankier, 2012; Flannery & Cineíde, 2012). With regards to legislation, it is possible to either extent current legislation

governing terrestrial planning to the sea (as was the case in e.g. Germany and the Netherlands), or develop a completely new system for marine areas (as was the case in e.g. the UK) (Drankier, 2012; Kidd & Ellis, 2012). According to Drankier (2012), the UK system is *"best prepared for developing cross-sectoral MSP"* (p.22), because it devoted time and resources towards developing a comprehensive legal framework which takes into account the specific characteristics of the marine environment, before it developed planning documents. Authority for the planning process and for implementation can either be vested within existing institutions (possibly a new department within an existing institution) or a completely new institution (Collie et al, 2013). Flannery & Cinneíde (2012) emphasize that the use of existing authorities may frustrate implementation due to the tradition of sectoral management which is difficult to break up, and the history of an authority including possible existing conflicts with other agencies and/or sectors which might form a barrier for cross-sectoral cooperation.

The main result of this paragraph is that the performance of MSP with regards to integration appears to be very limited, because decision-making regarding wind energy has become less integrated with other sea-uses in the Round III system and more independent from the Dutch MSPs. This result is supported by a first observation with regards to integration, based on the previous paragraph 4.1. It is striking that both the *White Paper on Offshore Wind Energy [SvWoz, 2014]* and the announced 'Government Structural Vision on the Designation of Additions to the Coast of Holland' are published as sectoral revisions of the integrated NWP. This illustrates that energy is prioritized and thereby deliberately not integrated with other uses. A possible explanation for the use of these sectoral revisions for the appointment of additional wind energy areas, is related to the political sensitivity of the designation of these areas (particularly within the 12-mile zone). This political sensitivity was acknowledged by all interviewees *[RWS, EZ, I&M, independent expert]*. As an integrated plan, the NWP presents policy for various topics related to water management. By creating sectoral revisions for these politically sensitive topics (wind energy at Hollandse Kust due to the number of conflicts, and within the 12-mile zone due to heightened visibility and the number of conflicts), possible appeals and objections directed against these topics will not affect policy regarding other uses. Based on this possible explanation, it might be questionable to what extent integration of a politically sensitive topic such as offshore wind energy development is feasible at all.

4.2.1 Cross-sectoral integration

This section, will focus on the analysis of how different uses and interests are balanced with regards to offshore wind energy, and to what extent this is guided by MSP. There are two terms with regards to cross-sectoral integration that are repeatedly used in the analyzed documents: the first is coordination between uses and the second is multifunctional use. Often these terms are used in connection to each other or as synonyms. The *draft Policy Document on the North Sea 2016-2021 [draft-PDNS, 2014]* for example states that "multifunctional use requires good coordination between functions" (p.19). Coordination between uses, in the analyzed documents, often is applied in a context where two functions try to avoid or resolve (expected) conflicts. The result of this coordination is that two functions change their relative position to one another (e.g. the turning of a defense area to provide room for an offshore wind area *[interview EZ]*), or that a certain degree of co-existence is achieved (e.g. tailor-made approaches to reduce safety zones around cables and pipelines *[draft-PDNS, 2014]*). Although these examples of cross-sectoral integration use coordination to avoid conflicts and sometimes even resolve (potential) conflicts, there is only very limited attention for coordination to achieve multifunctional use. As explained earlier, a cross-sectoral approach aimed at realizing multifunctional use, would attempt to identify synergies between various (potential) activities in the wind energy area and solutions in which multiple functions can benefit from one another. In the following paragraph it will be explained that in Dutch MSPs, the focus lies mainly on coordination aimed at conflict avoidance. Attempts to deal with conflicts, first of all try to minimize the occurrence of conflicts, but some attempts at conflict resolution are present. However, multifunctional solutions are barely sought after. This illustrates that the Dutch government applies strategies aimed at network interaction to regulate conflicts and set interaction procedures in MSP, but realizing a more integrated approach might also require strategies aimed at network outcomes. This

argument can be illustrated by the development of the exclusion policy throughout round II and III, and how conflicts were dealt with throughout this policy.

Coordination between sectors

Initially, in the *Spatial Planning Policy Document [SPPD, 2004]* and *Integrated Management Plan for the North Sea [2005]*, coordination with other uses was not perceived as a necessity due to the exclusion policy which was designed to avoid conflict. Moreover, every permit application was assessed using the integrated assessment framework, thereby coordination was possible (mainly with regards to the environment) on the permit level *[SPPD, 2004; IMP, 2005]*. This illustrates, the earlier argument in this thesis that the round two system mainly aimed at setting some basic interaction rules. Involuntarily, this lack of coordination in the round II system did produce a practical example of a major coordination effort, in the form of a revision of the shipping routes in the North sea. As explained earlier, the 79 initiatives that were filed on the basis of the round II system led to protest from the shipping sector. On the basis of this protest, a dialogue was started between RWS and the shipping sector that revised the shipping routes at the North Sea to create more space for wind energy *[Interview RWS, Independent expert]*. However, it is important to mention that this coordination effort was not a result of performance of MSPs, because it was not initiated by or discussed within the policy arena around MSP. Contrary, the dialogue with the shipping sector was a result of the lack of coordination by the MSPs in the Round II system, and focused purely on coordinating shipping and offshore wind. The revised shipping routes were subsequently included in the MSPs.

In the *National Water Plan 2009-2016 [NWP, 2009]* and the *Policy Documents on the North Sea 2009-2016 [PDNS, 2009]*, the government took responsibility for appointing wind energy areas, thereby creating the possibility for coordination, not only at the level of the permit (as was the case during the Round II system), but also during the appointment of wind energy areas and, therefore, at an earlier stage in the decision-making process. As illustrated in Table 8 (left column), the criteria allow for 'tailor-made approaches' to deal with conflicts between wind energy and other uses of national importance (i.e. shipping and installations for oil and gas extraction). This demonstrates awareness of the need for interaction procedures to minimize conflicts that cannot be avoided. However, in the *PDNS [2009]* these interaction procedures took the form of a policy rule which allows for tailor-made approaches; how these approaches were to take shape was not explained.

The comparison between the *PDNS [2009]* (Table 8, left column) and the *draft- PDNS [2014]* (Table 8, right column) illustrates a shift towards more detailed interaction regulations to not only avoid, but also deal with conflicts during the Round III system. Three frameworks were developed and subsequently integrated in MSP to deal with conflicts between wind energy and specific other uses of national importance, and between wind energy and the environment: (1) the 'Design criterion: distance between shipping routes and wind parks'[13]; (2) the 'Design process: distance between mining locations and wind parks'; and (3) the 'Assessment framework ecology and cumulation' (which will be discussed in paragraph 4.4). With regards to sand extraction, tailor-made approaches are encouraged if conflicts were to occur in the future *[draft-PDNS, 2014]*. This illustrates a similar approach to the one followed for shipping and mining: the opportunities for the establishment of interaction procedures are created by allowing for 'tailor-made' approaches. However, not all of these framework were developed in the context of MSP; instead they were initiated by e.g. the shipping sector, or based on criticism from the commission on the EIA. Moreover, a confusing aspect is that the different frameworks appear to be applicable at different points during the decision-making process, however, this is not clearly communicated. The framework for shipping appears to be applicable at the level of the appointment of wind energy areas (the MSPs), the framework for mining is applicable at the level of the plot-decision, and the framework for

[13] The design criterion for shipping is essentially an adapted version of the exclusion policy which takes into account a number of factors (e.g. the size of the ships using the route) to determine the necessary size of the safety zone, which is less than the previous 2 nautical miles.

ecology and cumulation is applicable at both the level of the appointment of wind energy areas (the MSPs) and to the plot-decision.

With regards to other uses (not of national importance), the *draft-PDNS [2014]* suggest to take into account uses such as fisheries, recreation, cables and pipelines, and cultural heritage. However, the term 'take into account' does not demonstrate pressure to actually ensure coordination with these other uses on the level of the appointment of wind energy areas[14]. Moreover, on the permit level (now connected to the plot-decision), the integrated assessment framework - embedded in the MSPs - is no longer applicable due to the enactment of the Offshore Wind Energy Act. This Act introduces sectoral regulation with regards to decision-making about the location of offshore wind parks through plot-decisions. With regards to the plot decision, article 3 (3) of the Offshore Wind Energy Act states that the following aspects should be taken into account: "(a) the societal function of the sea, including the importance of efficient use of sea space; (b) the effects of [a plot-decision] on third parties; (c) the environmental interests […]; (d) the importance of an efficient connection to a grid". Other uses, as third parties, therefore, again have no insurance how their interests are to be taken into account. According to the explanatory memorandum regarding the Offshore Wind Energy Act *[13, 2014]*, this coordination needs to take place in the context of the EIA procedure. However, as was even acknowledged in one of the earlier MSPs *[IMP, 2005]*, the EIA-procedure does not connect consequences or additional requirements to possible significant spatial effects (on other uses). In the *IMP [2005]*, the fact that spatial consequences are not taken into account, was the reason to always apply the test from the integrated assessment framework which examined the location choice. By removing decisions about offshore wind parks from the integrated assessment framework, the test regarding the location choice is no longer applicable and, therefore, it is questionable to what extent significant spatial effects are taken into account in plot-decisions. Some of these conflicts will likely be resolved because certain users can eventually use the space between turbines due to the framework for 'passage and co-use of wind parks' that is currently being developed. This framework will be discussed in more detail in the next paragraph about multifunctional use.

The analysis shows that procedures for the coordination between uses have become more detailed and specific, especially with regards to interaction between wind energy and specific other uses of national importance and the environment. However, in general, these coordination efforts seem to be aimed primarily at minimizing conflicts (that cannot be avoided), through bi-sectoral interaction procedures with other uses of national importance; the extent to which other uses (not of national importance) will be taken into account remains to be seen. Moreover, there is a lack of clarity in the MSPs with regards to when coordination with regards to various uses needs to take place.

MSP performs in appointing offshore wind energy areas, thereby allowing for coordination at an earlier stage in the process. However, it is questionable to what extent the NWP and PDNS will actually be able to perform with regards to the plot-decisions, because the enactment of the Offshore Wind Energy Act has introduced a sectoral system for offshore wind energy permits which is no longer part of the integrated assessment framework. Since no tenders were issued and no permits were handed out on the basis of this system, no information about actual coordination with other uses on the permit level was available so far. Independent of the this lack of actual experience with the Round III system, it seems that while measures for coordination have increased over time, integration has decreased; policy for offshore wind energy has become more sectoral and less guided by the MSPs.

Multi-functional use

The document analysis shows that the government is aware of opportunities for multifunctional-use. The *PDNS [2009]* states that "multi-functional use, like sustainable non-sea-bed disturbing fishery, marine aquaculture and recreation are allowed as much as possible" (p.41). The *PDNS [2009]* also includes a table in which possibilities for future multifunctional use related to wind energy are described, including

[14] Only the obligation to ensure some degree preservation of underwater heritage is laid down in an international agreement (the Malta agreement) and translated into national legislation (the Monuments Act).

opportunities for: the production of sea tang for bio-fuel; other types of renewable energy production; aquaculture; nature development; and recreation by taking tourists to offshore wind parks. Multifunctional use is, in principle, allowed and even encouraged in all MSPs, based on the argument that space can be used more efficiently. This demonstrates that the arguments for encouraging multifunctional use in Dutch MSPs are the same compared to MSP literature. From the *IMP [2005]* onwards, the mantra is 'multifunctional use where possible', which is translated into a policy rule that states that permit holders, although they hold the exclusive right for a respective activity within the area, will not gain the exclusive right to use an area. Moreover, in the integrated assessment framework, the test regarding location choice even requires developers to take into account opportunities for multifunctional use *[IMP, 2015]*. Although there is a clear intention to realize multifunctional use, and the principle is supported by a policy rule, the operationalization of this principle seems to be lacking (which, as discussed above, is also the case in most literature on MSP). First of all, there seem to be differences in the policy rules with regards to multifunctional use of activities of national importance and other activities. Second, it is questionable to what extent the new Offshore Wind Energy Act leaves room for multifunctional use.

In the *PDNS [2009]*, the prioritization of uses of national importance created a two-step approach with regards to multifunctional use of areas: if *uses of national importance* overlap (that is: if conflict cannot be avoided), co-use is encouraged, as long as the primary initiator does not suffer *disproportionate* damage or hindrance. However, if other uses (not of national importance) want to use areas appointed to an activity of national importance, this is only allowed if they do not hinder this activity *[PDNS, 2009]*. Based on this policy, for example, combinations of wind energy and other types of RNE (in the *draft-PDNS [2014]* RNE is stated to be an activity of national importance) are more likely than combinations of wind energy and aquaculture (aquaculture is not an activity of national importance). Moreover, the policy rule demonstrates a focus on a first initiator and other uses that subsequently want to use the area. However, as indicated by Chrisie et al (2014), co-location of activities requires joint projects, rather than joining up activities after the park is already operational.

A positive sign with regards to a shift towards more multifunctional use is that under pressure from various sectors *[interviews with RWS and the independent expert]* and to avoid unnecessary barriers and create goodwill *[interview EZ]*, a framework is being developed for 'passage and co-use of wind parks'. Currently, this framework aims to enable passage by ships smaller than 24 m length, co-use of recreation and activities that do not disturb the sea-bed, as well as other forms of renewable energy *[draft-PDNS, 2014]*. Furthermore, the *draft-PDNS [2014]* states that "the balancing of interests [for multifunctional use] will occur within the framework of setting the safety zone around the wind park or – if it concerns activities with fixed constructions – during the permit-process" (p.69). Specific, pre-defined activities will be allowed to use operational wind parks[15], which will be determined during the installation of the safety zone (a responsibility of RWS). Certain pre-defined, mobile activities are thereby exempted from the policy rule to not enter the safety zone of offshore wind parks, thereby resolving some conflicts with regards to some specific uses. Moreover, on the basis of individual assessments of risks for damage and hinder to wind parks, fixed activities might be allowed to use the wind park, which will be assessed during the permit process, thereby creating possibilities for multifunctional use. The development of this framework can be considered performance by MSP, because, as demonstrated at by the citation at the beginning of this section, it was already considered a necessity in the first *NWP [2009]*.

However, the MSP will only perform with regards to resolving conflicts with those activities that are allowed to use the wind park after setting the safety zone. It remains questionable to what extent those activities (not of national importance) that do not fit the requirements for using the wind park, will be taken into account. Moreover, since combinations between activities with fixed constructions are decided upon during the permit process, it remains to be seen to what extent these combinations will be found. The reason for this doubt, is that – as will be explained in more detail in the paragraph about organizational

[15] The government is expected to make a decision about whether and under which conditions multifunctional use and passage of operational wind parks is allowed in the final version of the NWP and PDNS 2016-2021 which will be published December 2015.

integration – the Offshore Wind Energy Act provides a separate process for wind energy permits, while other activities are still subject to permit requirements under the Water Act. Moreover, the discourse with regards to passage and multi-use still illustrates a sectoral focus on wind energy projects. Other activities and functions might be allowed to use the wind park based on an assessment of danger and hinder with regards to the wind park. However, the idea of multifunctional uses is to look for synergies between various (potential) activities in the wind energy area and to find solutions where multiple functions can benefit from one another.

In general, offshore wind energy seems to have become less integrated with the broader planning system for the sea in the form of MSP. Interaction rules have been established on both the level of wind energy areas and the level of plot-decisions, but these focus on bi-sectoral interaction to avoid or minimize conflicts between wind energy and other uses of national importance. The framework for passage and multi-use illustrates a shift towards more multifunctional use of wind parks and towards resolving some conflicts, because it allows for some specific activities to also use operational wind parks. However, it is questionable whether cross-sectoral integration will emerge in practice because the sectoral priority on wind parks, as illustrated above, appears to be related to a lack of organizational integration, as will be discussed below.

4.2.2 Organizational integration

As described at the beginning of this paragraph, organizational integration is an important part of the integrated approach within MSP. By analyzing the development of legislation and authority in the MSPs insight can be gathered into the level of organizational integration. The previous sections regarding the area-based approach and cross-sectoral integration, primarily focus on the content of the MSPs. This section, however, focusses on the procedural context for the policy development in MSP. The themes of legislation and authority, therefore, are only indirectly related to the performance of MSP. However, these themes can provide insight into why MSP performed or not because both legislation and determining authority, is a form of institutional design which directly affects the option and behavior of actors.

Legislation

In light of the literature discussed earlier, the Dutch legislative background for MSP and wind energy in particular, forms an interesting case. The Dutch system started by extending existing legislation, but recently developed a completely new system; however the new system is specifically developed for offshore wind energy, not for the whole marine area.

The *SPPD [2004]* was the first spatial policy framework for the Dutch part of the North Sea. This document was based on the legislative framework provided by the 1999 extension of the existing Public Works Act (Wbr) to the EEZ. In combination with prevailing legislation regarding mining, ground removal and the intended extension of Nature Protection Act and Flora- and Fauna Act, this was considered a sufficient legislative framework for regulating the activities in the EEZ. This also means that the Spatial Planning Act was not valid in the EEZ at this time. Permits for the round II wind parks were based upon the Wbr and the policy rules on the application of the Wbr for installations in the EEZ of 2004, and assessed using the integrated assessment framework *[IMP, 2005]*. The Round II system is criticized for a lack of coordination between the permit process and the available subsidy. As a result, resources were wasted on the applications for permits and decision-making about these applications. Moreover, the long lead times of the Round II projects, due to inefficiency in permit procedures and decision-making on subsidies, required revisions of the permits later on during the process *[3,2009]*.

The extension of spatial planning regulation to the EEZ was included in the planned revision of the Spatial Planning Act in 2008. Moreover, in 2009 the Water Act came into force, which required the establishment of the NWP. The NWP provides integrated policy for the whole water system, including North Sea policy (which is detailed in the PDNS). It thereby replaced the North Sea policy in the SPPD *[NWP, 2009]*. For spatial aspects, the NWP functions as a structure vision on the basis of the Spatial Planning Act (Wro). Thereby, the NWP can appoint areas which are reserved for activities of national importance, including wind energy areas, which offers more opportunities for the government to control

the development of offshore wind in space and time. Moreover, based on the Water Act, the Wbr permit was replaced by the permit on the basis of the Water Act *[NWP, 2009]*. However, as described earlier, the *NWP [2009]* determines that within wind energy areas, permits will only be handed out in the context of new legislation for round three wind parks. Thus, except for revisions of the Wbr permits of the round II system due to long lead times, no permits on the basis of the Water Act were handed out for offshore wind parks. Whereas the *SPPD [2004]* and *IMP [2005]* only set some interaction rules through the application of the integrated assessment framework, the *NWP* and *PDNS [2009]*, by appointing wind energy areas, introduced a strategy aimed at network outcomes, which changed the whole logic for decision making.

The legislation for round III wind parks came into effect the 1st of July 2015 in the form of the Offshore Wind Energy Act. The Act introduces two new instruments: the plot-decision and the wind-permit. The plot-decision specifies the boundaries and conditions for the development of a wind park at a certain plot. Instead of the permit on the basis of the Water Act, the Wind Energy Act introduces a separate wind permit. Coordination between the subsidy and permit is ensured by connecting the tender for SDO+ subsidy to the permit. This means that the tender is won by the party with the lowest bid, who will thereby automatically receive the wind-permit, and thereby the exclusive right to develop and exploit a wind park at the respective plot [*Offshore Wind Energy Act, 2015*]. By including the requirements for assessing natural values, as laid down in the Nature Protection Act, the number of decision-moments are reduced to a minimum, which also reduces the opportunities for objection and appeal and thereby reduces the administrative burden [*13, 2014*]. The Offshore Wind Energy Act is an example of an institutional design strategy which, at the level of the wind park, changed the network composition (a system modification with regards to responsibilities for permit application, as will be explained in the section about authority), outcomes (a shift in the logic for decision-making about wind parks) and interactions (as described earlier, the Act sets redefines the interaction procedures with regards to wind park locations).

Contrary to the examples in literature on MSP which describe the development towards more integrated approaches for planning at sea, this new act explicitly removes wind energy from current and future integrated approaches to marine planning and forms sectoral legislation for wind energy development. The permit requirement on the basis of the Water Act has been replaced by the permit on the basis of the Offshore Wind Energy Act [*13, 2014*][16]. All other (new) uses will remain to be subject to the permit requirements on the basis of the Water Act, only wind energy is now (and in the future) excluded from this requirement. This is illustrated by a policy memorandum *[13, 2014]* which suggests excluding offshore wind energy from the new integrated spatial planning regulation (the Environment & Planning Act [Omgevingswet]), which is planned to replace the Wro and Water Act (and several other Acts) in 2018. The development of sectoral regulation to ensure quick and cost-efficient development of offshore wind according to set targets, raises questions regarding the extent to which offshore wind energy can be regulated efficiently in an integrated manner as long as the government's focus lies with spending the least possible amount for subsidy. The discussion of the legislative framework illustrates the formal institutionalization of a sectoral approach which prioritizes offshore wind energy.

Authority

The national government is responsible for North Sea policy further than 1 mile offshore *[NWP, 2009]*. The authority for offshore wind energy and spatial planning is divided between the Ministry of I&M and the Ministry of EL&I and has shifted between the round II and round III system[17]. In general, the Ministry of I&M (previously V&W) bears the systems responsibility for spatial policy in the Netherlands, including

[16] The Water Act does remain of importance for "general (space-neutral) rules with regards to offshore wind parks" (p.16: *13, 2014*) including e.g. the requirements to ensure the visibility of the park and the installation of the safety zone around wind parks *[13, 2014]*.

[17] Moreover, in 2010 the Dutch Ministries of Transport, Public Works and Water Management (V&W) and Housing, Spatial Planning and the Environment (VROM) merged to form the *Ministry of Infrastructure and the Environment* (I&M). The Ministries of Agriculture, Nature and Food Quality (LNV) and Economic Affairs (EA) merged to form the *Ministry of Economic Affairs, Agriculture and Innovation* (EL&I).

North Sea policy. The minister of I&M is responsible for the coordination of North Sea policy. In this role, the Ministry of I&M is responsible for the publication of MSPs in the Netherlands. RWS, the executive organization of I&M, is the coordinating manager meaning that they are the first contact for most intended activities for the North Sea and they are responsible for certain permits (incl. permit on the basis of the Wbr, later the Water Act) *[BPRW, 2009]*. However, the Ministry of EL&I bears system responsibility for energy policy *[SvWoz, 2014]*, and thereby is responsible for sectoral policy with regards to energy (including the *Work-program Clean & Efficient, 2007*; the *Sector Agreement Energy, 2008*; the *Green Deal Offshore Wind, 2011*; and the *Energy Agreement, 2013*) and for the decisions regarding subsidy for offshore wind *[3, 2009; 15, 2015; 19, 2015]*.

During the round II system, the Ministry of V&W (later I&M) was the competent authority for granting permits on the basis of the Wbr, including permits for the installation of offshore wind turbines further than 12 nautical mile offshore; in practice, the assessment of permit applications was a responsibility of RWS, the executive organ of the Ministry of V&W *[IMP, 2005]*. However, SDE subsidy for the round II parks was the responsibility of the Ministry of EZ (later EL&I) *[3,2009]*. This demonstrates that existing position rules, were basically extended to wind energy. As described above, this system caused major problems and led to a call for a more robust legislative framework which connects the issuance of areas for offshore wind energy with the availability of subsidy *[*e.g. *1, 2008; Sector Agreement Energy, 2008; 2, 2009; NWP, 2009; PDNS, 2009; Green Deal Offshore Wind, 2011; Energy Agreement, 2013]*.

The *Offshore Wind Energy Act [2015]* shifts responsibility for the plot-decision (and thereby the exact location and conditions for offshore wind parks) to the Ministry of EL&I. In the round III system, the Ministry of EL&I is the competent authority for both the SDE+ subsidy and the wind-permit *[13, 2014]*. The Ministry of I&M is the joint-competent authority for plot-decisions, which means that these documents also require the signature of the Minister of I&M. Moreover, plots can only be located within wind energy areas that are appointed in the NWP, for which the Ministry of I&M is the competent authority (and the Ministry of EL&I is the joint-competent authority) *[Offshore Wind Energy Act, 2015]*. Furthermore, the Ministry of EL& I cooperates with RWS in the preparation of the plot-decisions and assesses these decisions as coordinating manager for the North Sea *[draft-BPRW, 2014]*. As indicated by all the interviewees, this shift is considered a positive one, because the decision-making power is now located where the responsibility lies. Moreover, although responsibilities are divided, close cooperation between the ministries is the rule *[Interviews EZ, I&M, RWS]*. Independent of cooperation between the different authorities, the above description further strengthens the argument in the previous section, that the Offshore Wind Energy Act initiated a major system shift which affected both arena rules and interaction rules through a dramatic change in actor positions and responsibilities. Not only does the Offshore Wind Energy Act change the positions and responsibilities within the government, private parties - who had responsibilities with regards to the permit application, location choice and thereby conflict regulation during the round II system - now are involved after the plot-decision has been issued.

Authority in both the Round II and III system, has been vested in existing institutions. It is clear that, as long as subsidy is required, there needs to be some sort of connection between the resources available for offshore wind energy and the permit procedure. The new system provides in this connection. However, the government (the Ministries of EL&I and I&M) now control all aspects of the process with regards to offshore wind energy, and even the monitoring functions are divided among these two ministries. As stated in a policy memo, the government sees itself as "initiator, director, controller, securer of various interests, intermediary and quick decision-maker" (p.4: *5, 2012*). Examining authority also shows that roles overlap; for example, RWS is involved in the drafting of the plot-decisions but also as controller. Therefore, it may be questionable to what extent the government is able to perform this variety of roles and the various interests that belong to these roles in a balanced manner. For example, it remains to be seen to what extent the role of initiator and director of the process - with a large stake in realizing the set targets – can be integrated with the role of controller and balancer of interests.

The results for integration demonstrate that, with regards to offshore wind energy, the government actively pursuits a sectoral, rather than an integrated approach. This active pursuit of a sectoral strategy

has almost completely removed decision-making regarding offshore wind parks from the influence of MSPs. The Dutch MSPs have increasingly incorporated mechanisms to not only avoid, but also minimize and even solve some conflicts, through the application of the framework for passage and co-use. However, first of all, these interaction procedures are often bi-sectoral, rather than aimed at cross-sectoral integration. Moreover, due to the Offshore Wind Energy Act, the MSPs only appear to perform at the level of the appointment of wind energy areas, not with regards to wind parks. However, in light of the above results with regards to integration, it can also be doubted to what extent cross-sectoral and organizational integration is currently feasible for offshore wind energy in the Netherlands, especially in light of the need for subsidy and the political sensitivity as described in paragraph 4.1. Although the concept of multi-objective MSP might have originated due to the expected spatial claims by offshore wind energy, thus far, both in content and process, MSP seems to follow rather than lead the development of offshore wind energy. The question then becomes, whether the Dutch MSP does provide a long-term strategy with regards to offshore wind energy.

4.3 Strategic

The importance of integration, not only across space, but also across time is acknowledged in the MSPs. Integration across time requires connecting current decisions and actions to the consequences and vision of the future. A strategic (or future-oriented) approach is considered an essential part of MSP because it allows for proactive decision-making on the short-term to arrive at a desirable future on the long-term and thereby contributes to integration across time (Agardy et al, 2011; Backer, 2011; Christie et al, 2014; Douvere, 2010; Drankier, 2012; Ehler, 2014; Kidd & Ellis, 2012). The output of MSP processes is often envisioned to be a long-term strategic plan or vision (Douvere, 2008; Maes, 2008; Douvere & Ehler, 2009). This plan or vision should guide (sectoral) decision-making by visualizing implications of decisions over space and time, which helps anticipate potential conflicts and determine priorities (Douvere, 2010; Douvere & Ehler, 2009; Long, 2013). By applying a strategic approach, MSP is expected to contribute to more transparent and consistent decision-making, and reduce uncertainty for developers (Douvere, 2008; Gilliland & Laffoley, 2008; Qiu & Jones, 2012).

This strong focus on the strategic nature in MSP literature, is not reflected in the Dutch plans, which are much more pragmatic and short-term. The plans that did cover a longer time period (10-20 years), were replaced or needed revisions before reaching the end of their term. For example, the *Spatial Planning Policy Document [SPPD, 2004]* was intended to form the framework for North Sea policy until 2020, but it was replaced in 2009 by the *National Water Plan 2009-2015 [NWP*, 2009] which has a routine revision term of 6 years. Moreover, the *Integrated Management Plan 2015 [IMP, 2005]* was intended to be valid until 2015, but due to the policy changes in the NWP it was revised in 2011 *[revised-IMP, 2011]*. The *Spatial Agenda 2050 [2014]* is the most strategic document, however this document does not have an official policy status and is not mentioned in any of the interviews. In the following section, first the marginal role of strategic thinking in Dutch MSPs will be discussed, as well as how this relates to performance. Second, the lack of strategy with regards to offshore wind energy will be discussed. Third, a possible explanation for this lack of strategy will be offered by placing

However, there does appear to be a shift towards more strategic thinking in Dutch MSP. It is worth noting that the *draft National Water Plan 2016-2021 [draft-NWP, 2014]* and *draft-PDNS [2014]* are the first MSPs to actually include an explicit vision, by referring to some aspects of the *Spatial Agenda 2050 [2014]*. This vision, however, is very broad and only marginally supported by actions. The vision aims at sustainable use of the North Sea through a development-oriented approach in which policy guidance ensures that space is used efficiently by attuning different uses to each other. The actions included in the *draft-PDNS [2014]* on the basis of this vision include: the development of the Masterplan Energy North Sea 2030-2050; research into technology for tidal- and wave energy; and research into combined energy-parks. These actions address renewable energy in a sectoral manner and seem to be aimed primarily at technological research and research into economic feasibility, not at policy to enable or encourage integration of use functions. It can be concluded that there seems to be an a shift towards a somewhat more strategic approach, however, it is very recent and therefore it is difficult to make

statements about the performance of this strategy. However, those actions that have been announced on the basis of the strategy do not seem to hint at performance of the MSPs because they announce sectoral research and a sectoral Energy vision; the policy consequences of the vision in the *draft-PDNS [2014]* do not appear to be taken into account.

This knowledge about implications for policy is crucial, because, as described in the introduction of this paragraph, an important function of the strategic approach is to make decisions about current actions and policy in light of the vision and options for the future. The lack of such future-oriented thinking with regards to offshore wind energy can be illustrated by the example of the *Offshore Wind Energy Act [2015]*. The Act is aimed purely at realizing the targets (as set in the roadmap until 2019) for offshore wind energy in the fastest and most cost-efficient manner. Therefore, the locations of offshore wind parks are now regulated through a separate framework and a separate permit, while (as acknowledged in *16, 2015*) other uses - including other types of marine energy generation - still require a permit on the basis of the Water Act. Thereby, separate policy procedures have been created for activities that would require joint planning. The *Offshore Wind Energy Act*, therefore, is a good example of a current action that is calibrated towards realizing current wind energy targets, without much consideration for long-term ambitions.

Based on the above discussion, it can be concluded that current policy actions and decisions with regards to offshore wind energy are not based upon strategic considerations either. There is no vision for the development of offshore wind energy beyond 2019 (which is the target for the tenders for 3450MW on the basis of the *Energy Agreement [2013]*). One of the main criticisms by the independent expert on the Dutch system for offshore wind energy, was that the logic behind the system focusses on realizing targets without a strategic vision. This focus on targets is further illustrated during the *interview with the Ministry of I&M*, where it is stated that the focus lies on reaching the target set in the Energy Agreement - which due to a combination of factors happened to be set at 3450MW. Moreover, the fact that a path has been set out for wind energy development until 2019, already demonstrates an increase in long-term thinking, and a higher degree of certainty and transparency compared to the Round II system *[Interview I&M]*.

The fact that a degree of certainty and stability until 2019 is already perceived as an increase in strategy during the interview with the Ministry of I&M, demonstrates the unstable nature of the energy related documents. The introduction of Chapter 4, illustrates that energy related documents have provided input for the MSPs, instead of the other way around. Therefore, the constant changes in evaluation criteria and interaction procedures with regards to the policy network around renewable energy - and wind energy in particular - might form part of the explanation for the lack of strategy in the MSPs. A possible reason for the lack of consistency in the policy arena around renewable energy seems to be the political cycle. As illustrated in table 9, it appears that every cabinet since 2006 developed their own energy related documents, in the form of an agreement with the sector, in which a certain course of action was set out. The sector agreement energy by cabinet Balkenende IV (which is an agreement based upon the *work*

Cabinets	**Energy related policy documents**	**Subsidy schemes**
Balkenende IV (2006-2010)		MEP (until 2006)
	Work program clean & efficient (2007)	
	Sector agreement Energy (2008)	SDE (2008-2011)
Rutte I (2010-2012)		
	Green Deal Offhsore Wind (2011)	SDE+ (2011-current)
Rutte II (2012-current)		
	Energy Agreement (2013)	

Table 9 The influence of different cabinets on renewable energy policy.

program clean & efficient [2007]) was meant to be valid until 2020. The subsequent *Green Deal Offshore Wind* by cabinet Rutte I was meant to be valid until 2015. The *Energy Agreement [2013]* by cabinet Rutte II sets targets for wind energy tenders up till 2019. These constant changes in both the arena and interactions rules governing the policy arenas surrounding RNE, create an unstable context. Moreover, according to the *Interview with RWS*, the reason for the time that passed between the NWP in 2009 and actual action in the form of, for example, the publication of the White Paper on Offshore Wind Energy, was due to the fact that wind energy had low priority in the cabinet Rutte I.

The above discussion illustrates that decisions regarding offshore wind energy are tightly connected to the political cycle which has a maximum of four years in the Netherlands. Moreover, the political sensitivity of decisions regarding offshore wind energy, and the apparent lack of consensus on the vision and approach towards RNE policy, might form part of the explanation for the lack of a strategic approach in wind energy policy and MSP. However, the fact that this lack of consistency in the policy arena around renewable energy seems to affect the policy arena around MSP, again demonstrates the lack of performance of the Dutch MSPs with regards to offshore wind energy, thereby strengthening the impression that MSP is following, rather than leading offshore wind energy development in the Netherlands.

4.4 Ecosystem-based

Despite the shift towards a more utilitarian perspective towards sea-use in multi-objective MSPs, the ecosystem-based approach remains central in literature on MSP (see e.g. Douvere, 2008; 2010; Douvere & Ehler, 2009; Ehler, 2014; Flannery & Cinnéide, 2012; Gilliland & Laffoley, 2008; Maes, 2008; Qiu & Jones, 2013; Young et al, 2007; Zaucha, 2014). Moreover, the new EU Directive on MSP (Directive 2014/89/EU) focuses on the ecosystem-based approach as a mechanism to ensure the sustainable development of the sea. The ecosystem-based approach aims at delivering sustainable development by balancing ecological, economic and social objectives within an ecosystem and maintain ecosystem-services (Ehler, 2014). Therefore, MSP is expected to be better able to take into account the cumulative effects of multiple uses occurring at sea (Douvere, 2008; Ehler, 2014; Flannery & Cinnéide, 2012; Halpern et al, 2008). Although an ecosystem-based approach is central in MSP, it is important to mention that MSP is simultaneously presented in some literature as an important tool for the implementation of ecosystem-based management as well (Halpern et al, 2008; Douvere, 2008; Ehler & Douvere, 2009). This is an important difference, because on the one hand the ecosystem-based approach is a tool within MSP, on the other hand MSP is a tool for ecosystem-based management. It is not always clear which of these two perspectives is used in MSP literature.

The ecosystem-based approach and precautionary principle are promoted in all Dutch MSPs, usually with reference to international conferences (e.g. OSPAR) and EU directives (e.g. MSFD, WFD, and BHD). The integrated assessment framework (*Integrated Management Plan North Sea 2015 [IMP, 2005]; revised-IMP, 2011; draft-Policy Document on the North Sea 2016-2021 [draft-PDNS, 2014]*) explicitly uses an ecosystem-based approach and applies the precautionary principle to permit applications. In this system, the EIA and appropriate assessment are important tools to help the competent authority determine whether precaution is applied. Moreover, when activities affect ecologically sensitive areas, a specific framework on the basis of the Nature Protection Act is applied. Besides these considerations at the project level, environmental considerations are also taken into account at the scale of the plan (the MSP), for which an EIA-requirement and appropriate assessment are also required (*White Paper on Offshore Wind Energy [SvWoz, 2014]; feasibility-study regarding offshore wind in the 12-mile zone [feasibility study, 2014]*). Currently, the State is developing a framework for ecology and cumulation. This framework ensures that the State takes into account the cumulative effects of all wind parks on the environment when appointing offshore wind energy areas and plot-decisions *[SvWoz, 2014; draft-PDNS, 2014]*.

MSP theory and Dutch MSP practice, on first sight, do seem to point in the same direction regarding the application of an ecosystem-based approach to the governance for the sea. However, as will

be explained below, there always seem to be exceptions to policy rules concerning the ecosystem, with regards to offshore wind energy. Ecosystem-considerations do not result in per definition lead to exclusion of offshore wind energy, they do however, make development in certain protected areas less likely. Thereby, the MSPs do seem to perform to a certain extent with regards to the ecosystem-based approach. However, the Offshore Wind Energy Act has removed offshore wind development from the integrated assessment framework – and thereby from the explicit ecosystem-based approach. The Offshore Wind Energy Act incorporates those aspects of the Nature Protection Act that are based upon EU-legislation, however, all requirements that go beyond these required standards are neutralized with regards to offshore wind *[13, 2015]*.

Although ecosystem-considerations are prominent in the Dutch MSPs, these considerations are not a discretionary criterion on the basis of which offshore wind is excluded from certain areas. In the most recent version of the *draft-PDNS [2014]*, policy with regards to vulnerable and ecologically sensitive areas and species, focuses on regulating or excluding functions that are a threat to those values that need to be protected, not to indefinite closure of areas. With regards to offshore wind energy, thus far, Natura 2000 areas have been avoided and ecologically sensitive areas have been spared as much as possible [*draft-PDNS, 2014*]. However, the following citation clearly illustrates that exemptions, even in case of significant effects to Natura 2000 areas, are possible for offshore wind energy:

> *"When the Minister of EL&I, in conformity with the minster of I&M, on the basis of the appropriate assessment, cannot be certain that a wind park will not affect Natura 2000 areas, he can still adopt a plot-decision, if there are no alternative solutions and there are forcing reasons of large public interest. In this case, the ministers needs to examine before they adopt the decision, whether there are alternatives. […]. The development of offshore wind energy is a forcing reason of large public interest. Therefore, the ministers will need to incorporate compensation measures in the permit requirements."* (p.12; *13,2014*)

Such exemptions have been included in policy from the first MSPs onwards (e.g. the *Spatial Planning Poilcy Document [SPPD, 2014]; IMP, 2005*). All MSPs have included requirements for mitigation of significant effects on the environment. For those effects that cannot be prevented, compensation is required. Natura 2000 areas require mitigation and compensation with an obligation to results before the activity takes place [resultaatsverplichting]. However, areas that do not have a protected status require an obligation to best effort [inspanningsverplichting]. Despite the possibilities for exemptions, so far, no use has been made of these opportunities. In Round II, permit applications were rejected on the basis of environmental arguments *[Interview RWS]*. Moreover, ecosystem considerations are given much attention in decision-making about offshore wind energy areas, e.g. in the *SvWoz [2014]*. The policy in which use of Natura 2000 areas and ecologically sensitive areas is discouraged through the setting of additional requirements, thereby, does seem to have performed. However, this appears to be performance of European legislation through the MSPs, rather than performance of the MSPs themselves. In general, though, the Netherlands has included these European requirements for an ecosystem-based approach by including a strategy in the MSPs, which is aimed at the interactions between uses and the environment, and that has been relatively stable throughout the MSPs.

However, the Offshore Wind Energy Act has removed decision-making regarding offshore wind parks from the integrated assessment framework. Moreover, the new wind energy permit incorporates requirements from the Nature Protection Act and the Flora- and Fauna Act. Therefore, wind energy projects do not require separate permits or exemptions on the basis of these Acts. Moreover, certain provisions of the Nature Protection Act and Flora- and Fauna Act are declared non applicable, in so far as they exceed European requirements *[13, 2014; Offshore Wind Energy Act]*. Therefore, it is questionable to what extent the ecosystem-based approach and precautionary principle still apply to actual offshore wind parks.

Despite these changes, a positive sign hinting towards the application of an ecosystem-based approach, is the development of the framework 'ecology and cumulation', which is to be applied in appointing offshore wind energy areas as well as in plot-decisions. The goal of this framework is to clarify how to review the cumulative effects of offshore wind parks by themselves, and in cumulation with other

wind parks and other activities. It is important to mention though, that this framework was developed as a result of a proposal from commission-EIA in response to the *SvWoz [2014]*. Similar to the other frameworks discussed in the chapter about cross-sectoral integration, again, the framework has been developed specifically for the coordination of wind parks and the environment, and was subsequently incorporated in the *draft-PDNS [2014]*. However, the fact that this framework does take into account the cumulative effects of wind parks and other activities at sea illustrates a degree of integration. Moreover, with the implementation of this framework, Dutch MSPs do appear to follow the line that is set in literature on MSP with regards to the ecosystem-based approach, in particular with regards to wind energy.

In light of the above discussion, it appears that the Dutch MSPs prioritize economic development of national importance, but do take into account an ecosystem-based approach and precautionary principle, primarily through the integrated assessment framework. Ecosystem-based considerations seem to be regulated by setting interaction procedures. However, with regards to wind energy there seem to be two developments: (1) on the one hand the Offshore Wind Energy Act has removed offshore wind energy from the integrated assessment framework, which points towards a less ecosystem-based approach; (2) on the other hand, the development of the framework ecology and cumulation for offshore wind energy projects and -areas, does point towards an innovative and practical ecosystem-based approach on both the plan and project level, which is in line with the ideas presented in literature. The new framework does appear to ensure the application of an ecosystem-based approach, despite the fact that the integrated assessment framework is no longer applicable, to decisions on offshore wind parks.

4.5 Participative

Literature on MSP generally emphasizes the importance of a participative approach and stakeholder involvement is presented as a key aspect of successful MSP (Flannery & Cinnéide, 2012; Kidd, 2013; Pomeroy & Douvere, 2008; Ritchie & Ellis, 2010). According to Pomeroy and Douvere (2008) early and continuous stakeholder involvement is necessary to encourage ‘ownership’ of the plan, increase the legitimacy of the process and develop trust. Moreover, due to the importance of private parties in the exploitation of marine areas, Kidd (2013) and Kidd & Shaw (2014) stress the importance of communication and negotiation in an open and transparent planning process. Other arguments provided for a participative approaches are that it: (1) enhances the information base and understanding of marine ecosystems and current patterns of interaction; (2) sheds light on the impact of human uses and management on these ecosystems, and; (3) identify and resolve possible conflicts and/or compatibilities among objectives and uses (Pomeroy & Douvere, 2008). Kannen (2012) emphasizes that especially during the early discussion of a strategic nature stakeholder engagement is crucial. At the strategic level, underlying values and beliefs are expected to be more open to discussion because priorities have not been set. Furthermore, it is important that various stakeholders engage with each other to foster dialogue between parties and thereby enable cross-sectoral strategies (Flannery & Cinnéide, 2012).

The relationship of the government with various stakeholders seems to be intensive and constant. In all interviews this cooperation with different parties is emphasized, as well as in various analyzed documents (*White Paper on Offshore Wind Energy [SvWoz, 2014]*; *feasibility-study regarding offshore wind in the 12-mile zone [feasibility study, 2014]*). However, in general, participation processes related to offshore wind energy seem to include one or two sectors and the government at a time, with multiple of these processes occurring simultaneously. The main goal of this participation seems to be coordination between wind energy and other uses to avoid conflict, in line with the discussion in the paragraph about integration. A good example is the process around the rerouting of shipping lanes in 2012, to ensure the safety of shipping and the efficient use of space for wind energy on the North Sea. Under direction of the Ministry of I&M, and in cooperation with the directly involved (i.e. the wind permit holders and shipping sector) a proposal was developed for an altered shipping route system *[SvWoz, 2014]*. Another example is the development of the frameworks for offshore wind energy in relation to (1) shipping, (2) mining and (3) ecology as included in the *draft Policy Document on the North Sea 2016-2021 [draft-PDNS, 2014]*. Each of these frameworks was developed in accordance with the respective sector. These examples

demonstrate that the main goal of participation with regards to offshore wind energy, is early coordination through interaction procedures to avoid conflict. Moreover, it is debatable to what extent these participation processes can be attributed to performance by MSP, since often they seem to be developed in a separate context and included in MSP afterwards.

Processes in which various stakeholders discuss the barriers and possibilities for the North Sea or a certain area within the North Sea seem to be limited. There is one example - the *feasibility study [2014]* - where participation sessions with all stakeholders were organized, to gather insight into (im)possibilities and, barriers and opportunities of offshore wind energy in the 12-mile zone. However, the sessions do not appear to be structural and seem part of the reframing strategy linked to the high political sensitivity of the topic (this high political sensitivity of wind energy within the 12-mile zone was indicated during various interview *[RWS, I&M, EZ]*). As discussed in the first chapter about the 12-mile zone, this political sensitivity seems to have a large impact on the communication strategy by the government. The communication strategy pays much more attention to various stakeholders interest compared to the appointment of other wind energy areas (e.g. Borssele, Ijmuiden Ver, Hollandse Kust and Ten Noorden van de Waddeneilanden). Moreover, it is interesting to see how this, purely administrative border[18], appears to make a huge difference to the perception of stakeholders. For example, in the *SvWoz [2014]*, which appointed the wind energy Hollandse Kust outside of the 12-mile zone, municipalities were not mentioned as involved parties.

So far, participation at the level of the plan seems to be limited to the possibility to submit perspectives, which are responded to through an explanatory memorandum *[SvWoz, 2014]*. On the level of the wind park, the opportunities for participation through legal measures in the Offshore Wind Energy Act are kept to a minimum. By minimizing the number of decision-moments, the accumulation of objections and appeals is avoided. Moreover, there is only one moment at which appeals can be made and brought to court. Furthermore, objections and appeal is only possible for the plot-decision. The development plan for the plot is not open to objection and appeal [*13,2014*]. This demonstrates that on the (1) participation is mainly a tool to avoid or minimize conflict; (2) participation is applied as a reframing strategy for politically sensitive decisions; and (3) legal opportunities for appeal and objection are minimized. Participation does not appear to be applied as an opportunity for knowledge-exchange and to examine possible multi-functional solutions.

4.6 Adaptive

The adaptive approach is commonly cited as a crucial aspect of MSP because it helps to deal with uncertainty and change (Christie et al, 2014; Collie et al, 2013; Douvere, 2010; Ehler & Douvere, 2009; Flannery & Cinnéide, 2012; Kannen et al, 2012; Lange et al, 2010; Maes, 2008; O'Hagan, 2011; Portman, 2015; Roddwell et al, 2014; Young et al, 2007). Adaptive management ensures that MSP remains sufficiently flexible to leave room for learning and innovation, while simultaneously providing a more transparent and stable framework for decision-making (Christie et al, 2014; Douvere, 2010; O'Hagan, 2011). Monitoring and evaluation are of crucial importance to establish whether MSP actually led to anticipated outcomes and is an important part of adaptive management (Douvere, 2010; Ehler & Douvere, 2009). Adaptive processes, therefore, mean that policies are adjusted on the basis of an iterative learning process using new scientific insights and the results of monitoring and evaluation (Christie et al, 2014; Douvere, 2010). Such adaptive processes can subsequently result in more adaptive spatial arrangements because new insights can be incorporated regarding synergies between functions. According to Christie et al (2014), the adaptive approach is particularly relevant with regards to examining the possibilities for multifunctional use, because identification of such opportunities requires pilot projects in combination with continued monitoring.

However, Dutch MSPs do not seem to operationalize adaptive processes. Moreover, the procedures laid down in the Offshore Wind Energy Act appear to focus on developing a robust framework

[18] For example, the border does not mark a line in the visibility of wind parks. These parks are also visible beyond the 12-mile zone, depending on the size of the turbines and the weather.

for cost-effective and fast development of offshore wind, thereby excluding possibilities for learning and innovation. First, the performance of Dutch MSPs with regards to an adaptive approach will be illustrated. Second, the focus on a robust, rather than adaptive system with regards to offshore wind energy will be explained and related back to the lack of a long-term strategy and problems with regards to cross-sectoral integration.

The *National Water Plan 2009-2015 [NWP, 2009]* introduced regular plan revisions on a statutory basis into the marine planning system; based on the Water Act, the NWP needs to be revised every 6 years. Because of these regular revisions, the *White Paper on Offshore Wind Energy [SvWoz, 2014]*, introduces the idea to include the integrated assessment framework (previously in the Integrated Management Plan) into the NWP, to ensure regular evaluation and actualization moments. Such statutory revisions are what Collie et al (2013) call passive adaptive management; mechanisms to ensure that new insights and knowledge is incorporated in the revised plan are lacking. Therefore, the adaptive approach is not actively operationalized. Moreover, in the *Policy Document on the North Sea 2009-2015 [PDNS, 2009]* and the *draft Policy Document on the North Sea 2016-2021 [draft-PDNS, 2014]*, adaptive management on the basis of monitoring and evaluation is explicitly mentioned only with regards to the environment, not with regards to other activities.

One could argue that adaptation on the basis of previous experience has occurred with regards to the revised round III system for offshore wind development. The problems of the round II system were analyzed and this analysis provided input for the discussion about a new system [see e.g. 2, 2009; 13, 2014]. However, this form of adaptation cannot be attributed to MSP; contrary, it demonstrates a lack of adaptability and performance in Dutch MSPs regarding offshore wind energy. This can be illustrated using three examples. (1) The *Integrated Management Plan 2015 [2005]*, when it comes to offshore wind energy, was outdated before it was published. It is stated in the *IMP [2005]* that due to the large amount of permit applications for offshore wind energy development at the beginning of 2005, "it is necessary to research how permit-granting procedures and subsidies for wind energy, for both the short and the long-term, can be coordinated in an efficient manner" (p.42). This citation illustrates that the document that published the detailed policy framework for Round II offshore wind development, already acknowledged that the system was not functioning as intended. (2) As explained in the introduction of this chapter, the discussions of the flaws of the Round II system never refer to the *Spatial Planning Policy Document [2004]* or *IMP [2005]*. (3) The *NWP* and *PDNS [2009]* – besides the appointment of wind energy areas – have not influenced the development of offshore wind energy. A moratorium was set for new permits for offshore wind energy development in 2008, and the *NWP* and *PDNS* [*2009*] only stated that new permits would be handed out in light of the framework for offshore wind that was being developed. Instead of providing a framework for offshore wind energy, MSP often seems to follow the developments around the round III system that are discussed and decided upon in the policy network around renewable energy and wind energy in particular.

In general, experimentation, innovation and pilot projects have been encouraged in Dutch MSPs by including policy rules that, for example, allow for exemptions from the integrated assessment framework for the purpose of experimentation *[PDNS, 2009; revised-IMP, 2011, draft-PDNS, 2014]*. However, two examples illustrate how innovation with regards to offshore wind energy (and thereby opportunities for innovative solutions, new insights and knowledge and adaptation) are currently being excluded, by the focus on a robust system to ensure cost-efficient and fast realization of offshore wind energy targets. The first example is the shift in the goals for renewable energy subsidies between the SDE and the SDE+. The arguments for changing from the MEP to the SDE (which came into effect in 2008), included opportunities in the SDE to take into account both cost-effectiveness and innovation when assessing projects *[Work Program Clean & Efficient, 2007]*. However, in 2011 the SDE was replaced by the SDE+. The most important characteristic of the SDE+ was to "support the most cost-effective options [for renewable energy] first. Offshore wind energy is not excluded from the SDE+, but, for the coming years, does not appear to be capable of competing with other renewable techniques for available resources" (p.1: *7, 2012*). Although reservation in SDE+ budget currently have been made to enable the

realization of the 3450 MW from the Energy Agreement, the SDE+ still focusses purely on cost-effectiveness, not on innovation.

The second example concerns the demonstration project called Leeghwater. Leeghwater was an innovation park for offshore wind energy, which was perceived as crucial for making offshore wind energy more cost-effective in both the *Green Deal [2011]* and the *Energy Agreement [2013]*. The plan for this demonstration park was prepared by the Sector. In a letter to the parliament *[15, 2015]* in May 2015, after a discussion of the plan for the demonstration project among the ministry and the sector, the conclusion is:

> *"that the new system offers possibilities for innovation within the regular wind parks, but that there is a risk that groundbreaking innovations are excluded. Therefore, it was decided to guarantee room for innovation through one innovation-plot for two turbines of a total of max 20 MW in the second Borssele tender. With an innovation-plot, a contractual separation is realized between innovative and regular wind turbines, which ensures space for innovation"* (p. 11: *15, 2015*).

The citation demonstrates a large ambiguity in the approach regarding innovation. First, although it is not explicitly stated, it is implied that because innovation in regular wind parks is sufficiently possible, the demonstration park is no longer required. Second, it is stated that for groundbreaking innovation room needs to be reserved, which raises questions regarding the level of innovation that is actually possible in regular parks. Third, the contractual separation between regular and innovative parks is emphasized to ensure space for innovations, which almost appears to contradict the first argument that innovation is sufficiently possible in regular wind parks. It is interesting to observe that, in August 2015, various media published articles about the fact that the demonstration project was cancelled. The arguments provided for the cancellation in the article by Trommelen (2015) in the Volkskrant included the costs and the fact that the private sector no longer needs large-scale demonstration projects. These arguments differ from the ones given in the letter to the parliament. Moreover, the fact that the private sector no longer needs these projects is related to the strategy currently employed by the government.

Trommelen (2015) cites Peter Eecen of the Energy Research Center Netherlands, stating that "the pressure by financers in offshore wind parks is high; they want to exclude all risks which makes large innovation at those locations [regular wind parks] impossible" (Trommelen, 2015). This focus on the reduction of risks for large offshore wind energy projects was also emphasized during the interview with the Ministry of EZ, because it is an important factor related to overall cost reduction, which leads to an interesting observation with regards to the connection between costs, risks and innovation with regards to wind energy in the Netherlands. Due to the government focus on cost-reduction, in order to spend less money on subsidy, a system has been developed which requires the realization of large parks (350 MW). The realization of these large parks sets high requirements on financing. The financers want to minimize risks with regards to the return on their investment. Innovative projects, experiments and learning-by-doing – central aspects of an adaptive approach – lead to higher risks and, therefore, higher costs on the short term and will therefore not be realized in regular parks.

The above connection between costs, risks and innovation, again demonstrates a focus on short term realization of set targets, without consideration of the possible long-term benefits of a more adaptive approach. As long as Dutch wind parks require large amounts of subsidy, the logic of cost-efficiency will encourage sectoral procedures that focus on minimizing risk and uncertainty; it therefore seem unlikely that more adaptive procedures will emerge for offshore wind parks. Due to the lack of adaptiveness in procedures, it is unlikely that more adaptive spatial arrangements will arise, thereby reducing the opportunities for a more efficient spatial distribution of activities at sea with cross-sectoral integration through area-based synergies, as promoted in MSP.

CHAPTER 5 – DISCUSSION AND REFLECTION

In this chapter, the results will be discussed and a number of questions will be raised for further research. First, a discussion of basic premises of the cost-efficiency argument is provided. Second, a critical reflection on the results, particularly in relation to the Offshore Wind Energy Act is provided. Third, the lack of attention to innovation in MSP literature is addressed. Fourth, a reflection on the broader position of MSP and North Sea policy in Dutch water management is provided. Finally, the chosen approach and data are reflected upon.

Increasingly, policy for offshore wind has been formulated in separate policy networks, to (partly) be included in the MSPs afterwards. The most important reason for this development appears to be the focus on cost-efficiency. Cost-efficiency is interpreted as the amount of subsidy which the State (the Ministry of EL&I) will have to pay [see *10,2014*]. However, this is a very narrow definition of cost-efficiency. Besides the lack of attention for the long-term benefits of, for example, innovation, various aspects that relate to the costs of plan development and appeal are not taken into account. These include, for example, the extra costs in the form of plan development for the appointment of wind energy areas (a responsibility of the Ministry of I&M), the higher costs of arranging the communication process (as described in the chapter about the 12-mile zone), the higher risk of objection and appeal to both the plans and plot-decisions, and the costs involved in coordination with other uses, are all not taken into account. Therefore, it might be questionable whether, eventually, it will be really be more cost-effective to develop offshore wind energy within the 12-mile zone.

The Offshore Wind Energy Act has provided insight into the new system for offshore wind development, however, since no tenders have been issued yet for the Round III system, it remains to be seen how this system is applied in practice. All government *interviewees [EZ, RWS and IenM]* considered the round III system for the greater part complete, no large future developments are expected. However, some major questions arise on the basis of the analysis in this thesis of the round III system and the role of MSP in decisions-making. A first question concerns the integrated approach which is promoted in MSP literature, and the extent to which the new system with the wind permit will allow for multi-functional use since other activities still require a permit on the basis of the Water Act and are regulated through the integrated assessment framework. Especially in light of the – according to all interviewees – positive responses to the new Dutch system, it can be questioned to what extent integrated MSP is capable of performing with regards to offshore wind energy. Factors such as the amount of subsidy necessary to realize these projects, as well as the political sensitivity of decisions about these subsidies and about the projects within the 12-mile zone, lead to the impression that, at the moment, an integrated policy framework might not be feasible for offshore wind energy. This is illustrated by the fact that instead of including decisions about offshore wind energy areas in the integrated National Water Plan, separate, sectoral revisions of the NWP are published in which these areas are appointed. It seems that due to instability and a lack of consensus about offshore wind energy, it is deliberately handled in a sectoral manner. Maybe a certain degree of stability and consensus about the policy approach is needed, before this policy can be treated in an integrated manner. Therefore, it can be questioned whether MSP, which in literature is presented as an ‘idea whose time has come’ (Ehler, 2008), might be too ambitious, too early with regards to offshore wind energy in the Netherlands. In light of these thoughts, it might be interesting to compare the Dutch system to other European approaches with regards to MSP and offshore wind energy. Moreover the experience with regards to policy development for offshore wind energy across Europe, could help avoiding obvious pitfalls with regards to other new marine uses, in particular ocean energy. For example, the combination between subsidies and location might also be important for these types of development.

Despite the fact that current policy is not encouraging innovation, it has been a point of discussion through the MSPs and primarily the energy related documents. Since the reason for the development of MSP is the increased number of activities at sea, and many of these activities are recognized to be at early stages of their development, innovation and experimentation – with regards to both technology and policy - should be a central topic in MSP. Literature on MSP needs to increase awareness and provide guidance with regards to the role of innovation. However, in the literature review performed for this thesis,

innovation was barely addressed. The topic of innovation is related to improved guidance with regards to more general, the adaptive nature of MSP and how flexibility and robustness can be balance. Possible entrances for this approach can relate to literature regarding e.g. transition management (Rotmans & Loorbach, 2009), and resilience (e.g. Folke et al, 2010; Lloyd et al, 2013) including the panarchy of adaptive cycles and complex adaptive systems (see e.g. Chapin et al, 2009).

The next discussion point will go into detail about some general observations with regards to the role of MSP and North Sea Policy in Dutch planning. When examining the positioning of MSP with regards to water management and spatial planning in the Netherlands and Europe, two things stand out. First, it is worth noticing that North Sea policy is barely integrated in the broader discourses around water management and spatial planning in the Netherlands. This is most clearly illustrated by the position of the North Sea in the NWP. North Sea policy is explained in a separate chapter - which is barely referred to in the rest of the plan - and the PDNS is an Appendix to the NWP. Moreover, in the NWP 2016-2021 the chapter which specifically connects water and space not mention the North Sea, nor offshore wind. Second, the term 'MSP' it mentioned only in an international context with reference to the EU, and in the NWP in relation to the EU requirement to include land-sea interactions. However, MSP as a term is not explicitly connected to activities and documents published by the Dutch government. Therefore, it seems that the Dutch documents and actions are not explicitly being recognized as spatial plans for the marine area by the Dutch government itself.

This chapter will end with a reflection on the data, and the chosen approach in this thesis. In general, the conceptualization of MSP as the planning system for the sea appears to be a useful approach which leads to valuable insights due to a broader perspective on both the content (the message) of the MSP, as well as the process behind the development of this message.

This thesis, has primarily focussed on the government perspective, based on policy documents and interviews with one representative of the most important governmental stakeholders (the Ministry of I&M, RWS and EZ). In order to get a more detailed and nuanced story of how the message was and is constructed, and how and why decisions were and are being made on the basis of this message, more detailed insight into the perspective of different sectors who deal with this policy in their day-to-day practice would have been of added value to the analysis. In this thesis, only the interview with the independent expert was used to include a non-governmental view. However, since this was only one interview with one person's opinion and experience, the amount of non-governmental data included in this thesis is very limited. At this point, it is necessary to remark that, although interview requests were send, the offshore wind energy sector did not respond to these requests. Possible causes include the political sensitivity of the topic of offshore wind energy in general, and the fact that in December the tenders for the first Round III parks will be issued, while the process for Round II took place between five and ten years ago.

The coding process and data analysis has led to the identification of patterns throughout the documents and interviews with regards to the six characteristics of MSP. However, the number of documents and interviews that were analysed, and the dynamic nature of institutional development with regards to the MSP and offshore wind energy in recent years, created long lists of citations for certain codes (especially the more broad codes related to the content of the message such as the area and activity based norms). Therefore, the identification of important themes and patterns within the codes related to area- and activity based norms (which provided input primarily for the chapters on area-based and cross-sectoral integration) was also more difficult. This process required a quite extensive second, more open coding process for the identification of main themes and patterns. Moreover, the writing process also proved more difficult due to the large number of themes and patterns and the choices that needed to be made to be able to provide a concise, but still nuanced story. Although more detailed codes related to the content of the documents might form a solution for this problem, more detailed codes also form a restriction and might push the results towards certain (predetermined) themes. The more open coding process that now formed the basis for the identification of the main themes and patterns might, to a certain degree, have been guided by the literature with regards to the six characteristics, because the literature review took place before the coding and data analysis. However, the chosen approach also allowed for the

identification of those themes that occur particularly often in the citations, were emphasized much, or that showed remarkable shifts in a non-restricted manner.

In general, the approach to examine the development of MSP and offshore wind energy over the course of the Round II and Round III system (approximately from 2004 up to, and including 2015) has provided useful insights that helped answering the research question. However, the virtual explosion of policy documents since approximately 2013, also creates difficulties during the analysis. Both with regards to MSP, and offshore wind energy, during the time of writing and shortly after, developments (will have) occurred. For example, this thesis has used the draft document of the NWP and PDNS 2016-2021, the final versions of which will be published in December 2015, and a revision of which is announced for 2016. This highly dynamic context and, for example, the fact that no plot-decision have been taken yet (also announced for December 2015), in many cases leads to questions that cannot be answered at the moment. These questions would require further research in a number of years.

Moreover, in this thesis - due to time constraints and in order to include the most important documents with policy relevance - documents were considered MSP if they provide integrated policy for the Dutch North Sea. However, when positioning MSP as the planning system for the sea, other types of plans require more attention as well. For example, the North Sea Spatial Agenda 2050 or projects for international (regional) cooperation, although they do not provide policy, would require more attention because they might perform in influencing the policy documents. This would also be an interesting topic for further research.

CHAPTER 6 – CONCLUSION

Offshore wind energy is presented as one of the primary reasons for the development of multi-objective MSP in the countries around the North Sea, including the Netherlands (Douvere, 2008; Ehler, 2014; Jay, 2010b). Contrary to existing literature on MSP, in which MSP is primarily presented as a 'tool' for spatial management of marine areas, this thesis has framed MSP as the spatial planning system for the sea, which allows for a broader policy perspective on the development of marine spatial plans, and how these plans are actually used in decision-making regarding offshore wind energy, or not. The main research question was to what extent, and how, MSP performs in guiding offshore wind energy development in the Netherlands? Six key characteristics of MSP were used to analyze the performance of Dutch MSP, first in light of MSP literature, and second in light of decision-making regarding offshore wind energy.

Comparing MSP literature with Dutch MSP practice, a number of observations can be made. In Dutch MSP practice, the area-based approach focuses on conflict avoidance and minimization through an exclusion policy and strategies aimed at coordination between uses of national importance, rather than an area-based perspective with cross-sectoral integration. Contrary to suggestions from literature, a strategic approach seems to be lacking in the Dutch MSPs. Although the focus in Dutch MSPs lies on economic development, the ecosystem-based approach does play a large role in Dutch MSPs. Moreover, the development of a framework for assessing cumulative effects of wind parks in conjunction with other uses, is in line with calls from literature. Participation in Dutch MSP seems to be a method for avoiding and minimizing conflicts, rather than an opportunity for gathering information about opportunities and possible synergies. With regards to an adaptive approach, the National Water Plan and accompanying Policy Document have a routine revision term of 6 years, which demonstrates a form of passive adaptive management that is not actively operationalized. When comparing the definition of MSP, as provided in paragraph 2.1, with Dutch practice, it can be concluded that the Dutch MSPs have allocated sea space to different uses. Moreover, the plans aim at achieving economic and ecological objectives – i.e. the activities of national importance and the European environmental regulations - which were prioritized through a political process. Social objectives are only marginally addressed. Essentially, the Dutch MSPs allocate sea space to different uses of national importance to achieve economic objectives set through a political process, while taking into account as much as possible the framework regarding ecological objectives as required by EU regulations.

The earlier MSPs, that formed the background for the Round II system for offshore wind energy, have barely performed with regards to offshore wind energy. The *Spatial Planning Policy Document [2004]* and *Integrated Management Plan for the North Sea [2005]* were not mentioned in discussions of the Round II system. Moreover, although the outcomes (the locations of the wind energy areas) conformed to the plan, performance seems to be lacking because the plan did not meet the underlying goal of conflicts avoidance. In general, there does not appear to have been a careful process of institutional design. Existing authority and legislation was extended to the EEZ. The strategies that were employed, included some basic interactions rules aimed at conflict avoidance. Possible network outcomes with regards to policy for offshore wind energy, do not appear to have been considered, which is illustrated by the fact that the government was surprised by the amount of initial memorandums, complains by various sectors who noticed these claims and the fact that the *IMP [2005]* already indicated that the system it detailed for offshore wind energy was outdated.

With regards to the round III system, the Dutch MSPs perform to a limited extent in guiding offshore wind development. The National Water Plan and Policy Document on the North Sea appear to perform only with regards to the appointment of offshore wind energy areas, not with regards to the location of wind parks. By changing the logic for decision-making in the Round III system, strategies aimed at the network outcomes are applied aimed at changing arena rules. However, with regards to the appointment of wind energy areas, the primary goal appears to be to avoid conflicts with other activities of national importance by applying an exclusion policy. Simultaneously, the focus on cost-efficiency has introduced criteria that contradict this exclusion policy and have led to the appointment of areas in which conflicts with other uses of national importance cannot be avoided. To minimize these conflicts, strategies

have been developed for coordination with other uses of national importance. However, most coordination with these other activities occurs during the appointment of plots for wind energy parks.

These plot-decisions which determine the location of wind parks, however, are based upon sectoral legislation which is aimed at fast and cost-efficient realization of targets determined in the policy arena around RNE. The focus thereby lies on minimizing uncertainty and risk, through a top-down process controlled by the government. Moreover, the case of the 12-mile zone also illustrates that the decision to appoint wind areas (through MSP) actually *followed* the ambition to appoint wind parks through plot-decisions in the 12-mile zone. This is curious in light of the policy lifecycle by Winsemius (1987), because implementation decisions (stage 3 in the policy lifecycle) in the form of the decision to appoint plots for offshore wind energy in front of Hollandse Kust, lead to policy formulation (stage 2 in the policy cycle) in the form of the appointment of wind energy areas through the sectoral revision of the NWP 2016-2021.

Overall, offshore wind energy seems to be regulated increasingly on a sectoral basis, through policy which implicitly discourages cross-sectoral integration through area-based approaches. When comparing the ambitions of MSP, especially with regards to area-based and integrated approaches that look for function combinations in space and over time, instead of increased mutual interaction and integration of the policy arenas around RNE and offshore wind energy, there appears to be divergence with an increased focus on a sectoral approach for offshore wind energy. Moreover, the Dutch MSPs seem to follow decisions made regarding offshore wind energy in other policy networks, rather than providing the framework for these decisions. The Dutch MSPs, therefore, do not seem to form a systematic and integrated planning system with regards to offshore wind energy. In the case of offshore wind energy, the high level of both technological and policy development, as well as the political sensitivity and lack of consensus, raise questions whether offshore wind energy can currently be guided by integrated plans in the Dutch context.

A general conclusion, based on the literature review and supported by the results, is that MSP literature focuses too much on MSP as a ´tool´, and not as the spatial planning system for the sea. Independent of the difference between land and sea, the coordination of different functions – especially in a new fields such as MSP - requires the design of institutions of various kinds. The analysis of Dutch MSP practice illustrates that the lack of conscious institutional design in the Round II system seems to be related to a lack of performance. Moreover, the response in the form of the Round III system illustrates more conscious design of policies and regulations which affected the interactions, outcomes and the composition of the policy network around MSP and offshore wind energy. However, where initially, convergence was expected through increased mutual interaction, the Round III system rather shows divergence through the development of a separate system for offshore wind energy which is removed from the integrated planning efforts and even implicitly discourages these integrated, adaptive and area-based efforts that are central to MSP. This discussion illustrates that policy-making for MSP, in particular with regards to a politically sensitive topic such as offshore wind energy, is not a straightforward and rational exercise, but rather a struggle for power and influence, which can lead to contradicting criteria, goals and targets. Although the logic behind more integrated, strategic, areas-based, participative, and adaptive approaches to MSP potentially offers opportunities for more efficient spatial use and long-term cost-efficiency in the Netherlands, the politically sensitive nature of decision making about offshore wind energy appears to have created a system in which these approaches are actively discouraged in favor of a top-down approach aimed at minimization of costs and risks.

This research explored the government perspective with regards to policy for MSP and offshore wind energy. For further research it would be interesting to go into more detail about the actual process of policy design for both MSP and offshore wind energy and the roles of the various actors in these process, to get a better grasp on the roles of the different parties in the policy-making process and the strategies applied by these parties. Moreover, it would be interesting to compare the Dutch process with other European countries. For example, it would be interesting to apply this policy perspective to case of the United Kingdom, which is praised in literature for first designing a system which is attuned to the marine context, before developing plans (Drankier, 2012). It would be interesting to see to what extent MSP is

actually guiding offshore wind energy development in this case. Moreover, this thesis and comparable case studies could provide a starting point for research into how MSP can improve its role in guiding the development (of offshore wind energy but also other uses) in the face of political sensitivity and power.

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APPENDIX I: INTERVIEW GUIDES

A. Interview guide RWS

Datum: 23-09-2015
Den Haag

Introductievragen:

- Mag het interview opgenomen worden?

Introductie onderzoek: relatie tussen ruimtelijke plannen voor de Noordzee en besluitvorming rond wind op zee

Kunt u een korte algemene samenvatting geven van uw werkzaamheden (op dit gebied)?

Algemene ervaring met ruimtelijke ordening op zee

- In hoeverre bent u bekent met het concept ruimtelijke ordening op zee (in het Engels Marine Spatial Planning) en andere strategieën en vormen van governance en op zee?
  - Hoe verhoudt zicht dit tot planning op land (Wat zijn naar uw mening de verschillen met RO op land)?
  - Wat is uw mening over de Nederlandse ontwikkelingen op dit gebied?
- In hoeverre is RWS betrokken bij het opstellen van deze ruimtelijke plannen?
  - Wat zijn de belangen van RWS in het opstellen van deze plannen en hoe worden deze nagestreefd?
  - Wie zijn er verder nog bij betrokken en wat zijn de verhoudingen met deze partijen?
- Zijn er verschuivingen opgetreden in de rol van RWS over de loop van de tijd?
  - Wat vindt u van deze verschuivingen? (positief, negatief)
  - Hoe zou het beter kunnen, wat is nodig?

Algemeen over de rol van RWS m.b.t. wind op zee

- Wat is de rol van RWS met betrekking tot wind op zee?
  - Wat zijn de belangrijkste taken van RWS met betrekking tot wind op zee?
- Hoe vind besluitvorming over offshore wind plaats?
  - Wie zijn er nog meer bij betrokken?
  - Hoe zijn de verhoudingen tussen de partijen?
- Hoe is dit veranderd over de tijd?
  - Wat vindt u van deze veranderingen?
  - Hoe zou het beter kunnen, wat zijn uw verwachtingen, wat is nodig

De invloed van ruimtelijke ordening op zee voor wind op zee (waarom, welke aspecten?)

- In hoeverre denkt u dat ruimtelijke ordening op zee belangrijk is voor wind op zee?
  - Welke aspecten zijn het meest van belang en waarom? (strategie of content)
  - Welke minder/zijn er ook negatieve effecten en waarom? (knelpunten, en hoe worden deze opgelost?)
    - ⇨ Kan scherpere/strakkere/andere MSP helpen/bijdragen aan OWF ontwikkeling?
- In hoeverre worden de ruimtelijke plannen gebruikt in besluitvorming over wind op zee?
- Hoe verhoudt het ruimtelijke framework (bijvoorbeeld de NWP, PDNS en IBN etc.) zich tot de beheertaak van RWS op de Noordzee (schoon, veilig, transportfunctie) zoals gecommuniceerd in het BPRW (bij het beoordelen van wind op zee)?
- De besluiten rond de SDE lijken een belangrijke rol te hebben gespeelt in de tweede ronde (Gemini/Luchterduinen) na het afgeven van de Wbr vergunningen, wat vindt u hiervan en in hoeverre was RWS hierbij betrokken?

  - In hoeverre speelden de inmiddels gepubliceerde ruimtelijke plannen (het NWP en PDNS) een rol hierin?
- Waarom is er besloten te wachten met het uitschrijven van nieuwe tenders na het publiceren van het nieuwe systeem in 2009 (NWP en PDNS)?
- Wat is de rol RWS in nieuwe system o.b.v. Wet Windenergie op Zee? In het BPRW staat de RWS betrokken is bij de voorbereiding van kavelbesluiten en bij de toetsing hiervan, maar wat dit in de praktijk inhoudt is mij nog niet duidelijk
  - Wat is de rol van RWS bij de voorbereiding van kavelbesluiten en hoe verhoudt zich dit tot het ministerie van EZ?
  - Wat houdt de rol van RWS met betrekking tot de toetsing van kavelbesluiten?
  - Wat is de verwachting over de samenwerking met EL&I, zijn er verschillen in focus?

<u>Samenwerking → geïntegreerd in andere vragen, zo niet:</u>

- Hoe verloopt de communicatie van RWS met de offshore wind sector
  - Waarover
  - Wanneer
  - Met wie (niet)?
  - Knelpunten
  - Proberen deze partijen het beleid te beïnvloeden en zo ja, op welke wijze? (wat zijn de belangrijkste belangen van deze partijen en hoe proberen ze die te behartigen?)

- Hoe verloopt de communicatie van RWS met andere sectoren met betrekking tot besluitvorming over offshore wind?
  - Waarover
  - Wanneer
  - Met wie (niet)?
  - Knelpunten
  - Proberen deze partijen het beleid te beïnvloeden en zo ja, op welke wijze?

- Hoe verloopt de samenwerking met IenM en EZ?
  - Waarover
  - Wanneer
  - Knelpunten
  - Hoe probeert RWS zijn belangen door te laten werken in het beleid m.b.t. RO en offshore wind?

Afsluiting: Dank u wel voor het interview

B. Interview Guide EZ

Datum: 23-9-2015
Den Haag

Introductievragen:

- Mag het interview opgenomen worden?

Introductie onderzoek: relatie tussen ruimtelijke plannen voor de Noordzee en besluitvorming rond wind op zee

Kunt u een korte algemene samenvatting geven van uw werkzaamheden (op dit gebied)?

Algemeen over de rol van EZ m.b.t. wind op zee

- Wat is de rol van EZ met betrekking tot wind op zee?
  - Wat zijn de belangrijkste taken van EZ met betrekking tot wind op zee?
- Hoe vind besluitvorming over offshore wind plaats?
  - Wie zijn er nog meer bij betrokken?
  - Hoe zijn de verhoudingen tussen de partijen?
- Hoe is dit veranderd over de tijd?
  - Wat vindt u van deze veranderingen?
  - Hoe zou het beter kunnen, wat zijn uw verwachtingen, wat is nodig?

Algemene ervaring met ruimtelijke ordening op zee

- In hoeverre bent u bekent met het concept ruimtelijke ordening op zee (in het Engels Marine Spatial Planning) en andere strategieën en vormen van governance en op zee?
  - Hoe verhoudt zicht dit tot planning op land (Wat zijn naar uw mening de verschillen met RO op land)?
  - Wat is uw mening over de Nederlandse ontwikkelingen op dit gebied?
- In hoeverre is EZ betrokken bij het opstellen van deze ruimtelijke plannen?
  - Wat zijn de belangen van EZ in het opstellen van deze plannen en hoe worden deze nagestreefd?
  - Wie zijn er verder nog bij betrokken en wat zijn de verhoudingen met deze partijen?
- Zijn er verschuivingen opgetreden in de rol van EZ over de loop van de tijd?
  - Wat vindt u van deze verschuivingen? (positief, negatief)
  - Hoe zou het beter kunnen, wat is nodig?

De invloed van ruimtelijke ordening op zee voor wind op zee (waarom, welke aspecten?)

- In hoeverre denkt u dat ruimtelijke ordening op zee belangrijk is voor wind op zee?
  - Welke aspecten zijn het meest van belang en waarom? (strategie of content)
  - Welke minder/zijn er ook negatieve effecten en waarom? (knelpunten, en hoe worden deze opgelost?)
    - ⇨ Kan scherpere/strakkere/andere MSP helpen/bijdragen aan OWF ontwikkeling?
- Welke rol spelen de ruimtelijke plannen in besluitvorming over wind op zee?
- In hoeverre zijn andere partijen binnen de windenergie sector betrokken bij het opstellen van de ruimtelijke plannen?
- De besluiten rond de SDE lijken een belangrijke rol te hebben gespeelt in de uiteindelijke beslissingen over de ronde 2 parken (Gemini/Luchterduinen), wat is uw mening hierover? (en over de procedure rond ronde 2 in het algemeen)
  - In hoeverre speelden de inmiddels gepubliceerde ruimtelijke plannen (het NWP en PDNS) een rol hierin?
- Waarom is er besloten te wachten met het uitschrijven van nieuwe tenders na het publiceren van het nieuwe systeem in 2009 (NWP en PDNS)?

- Wat is de rol EZ in nieuwe system o.b.v. Wet Windenergie op Zee?
  - Wat is de rol van EZ bij de voorbereiding en besluitvorming van kavelbesluiten en hoe verhoudt zich dit tot de andere partijen?
  - Wat is de ervaring en verwachting over de samenwerking met I&M en RWS, zijn er verschillen in focus?

<u>Samenwerking → geïntegreerd in andere vragen, zo niet:</u>

- Hoe verloopt de communicatie van EZ met de offshore wind sector
  - Waarover
  - Wanneer
  - Met wie (niet)?
  - Knelpunten
  - Proberen deze partijen het beleid te beïnvloeden en zo ja, op welke wijze? (wat zijn de belangrijkste belangen van deze partijen en hoe proberen ze die te behartigen?)

- Hoe verloopt de communicatie van EZ met andere sectoren met betrekking tot besluitvorming over offshore wind?
  - Waarover
  - Wanneer
  - Met wie (niet)?
  - Knelpunten
  - Proberen deze partijen het beleid te beïnvloeden en zo ja, op welke wijze?

- Hoe verloopt de samenwerking met IenM en RWS?
  - Waarover
  - Wanneer
  - Knelpunten
  - Hoe probeert EZ zijn belangen door te laten werken in het beleid m.b.t. RO en offshore wind?

Afsluiting: Dank u wel voor het interview

C. Interview guide IenM

Datum: 5-10-2015
Den Haag

Introductievragen:

- Mag het interview opgenomen worden?

Introductie onderzoek: relatie tussen ruimtelijke plannen voor de Noordzee en besluitvorming rond wind op zee

Kunt u een korte algemene samenvatting geven van uw werkzaamheden op dit gebied?

Algemene ervaring met ruimtelijke ordening op zee

- In hoeverre bent u bekent met het concept ruimtelijke ordening op zee (in het Engels Marine Spatial Planning) en andere strategieën en vormen van governance en op zee?
  - Hoe verhoudt zicht dit tot planning op land (Wat zijn naar uw mening de verschillen met RO op land)?
  - Wat is uw mening over de Nederlandse ontwikkelingen op dit gebied?
- Wat zijn de belangrijkste taken van IenM bij het opstellen van deze ruimtelijke plannen?
  - Wat zijn de belangen van IenM in het opstellen van deze plannen en hoe worden deze nagestreefd?
  - Wie zijn er verder nog bij betrokken en wat zijn de verhoudingen met deze partijen?
- Zijn er verschuivingen opgetreden in de rol van IenM over de loop van de tijd?
  - Wat vindt u van deze verschuivingen? (positief, negatief)
  - Hoe zou het beter kunnen, wat is nodig?

Algemeen over de rol van IenM m.b.t. wind op zee

- Wat is de rol van IenM met betrekking tot wind op zee?
  - Wat zijn de belangrijkste taken van IenM met betrekking tot wind op zee?
- Hoe vind besluitvorming over offshore wind plaats?
  - Wie zijn er nog meer bij betrokken?
  - Hoe zijn de verhoudingen tussen de partijen?
- Hoe is dit veranderd over de tijd?
  - Wat vindt u van deze veranderingen?
  - Hoe zou het beter kunnen, wat zijn uw verwachtingen, wat is nodig

De invloed van ruimtelijke ordening op zee voor wind op zee (waarom, welke aspecten?)

- In hoeverre denkt u dat ruimtelijke ordening op zee belangrijk is voor wind op zee?
  - Welke aspecten zijn het meest van belang en waarom? (strategie of content)
  - Welke minder/zijn er ook negatieve effecten en waarom? (knelpunten, en hoe worden deze opgelost?)
    - ⇨ Kan scherpere/strakkere/andere MSP helpen/bijdragen aan OWF ontwikkeling?
- In hoeverre worden de ruimtelijke plannen gebruikt in besluitvorming over wind op zee?
- De besluiten rond de SDE lijken een belangrijke rol te hebben gespeelt in de tweede ronde (Gemini/Luchterduinen) na het afgeven van de Wbr vergunningen, wat vindt u hiervan en in hoeverre was IenM hierbij betrokken?
  - In hoeverre speelden de inmiddels gepubliceerde ruimtelijke plannen (het NWP en PDNS) een rol hierin?
- Binnenkort worden de tenders uitgeschreven op basis van het nieuwe systeem, waarom is er zoveel tijd overheen gegaan sinds het eerste NWP waarin het nieuwe systeem reeds geschetst werd?
- Wat is de rol IenM in het nieuwe system o.b.v. Wet Windenergie op Zee?

- Wat is de rol van IenM bij de (voorbereiding van) kavelbesluiten en hoe verhoudt zich dit tot het ministerie van EZ?
- Wat is de verwachting over de samenwerking met EZ en RWS, zijn er verschillen in focus?

<u>Samenwerking → geïntegreerd in andere vragen, zo niet:</u>

- Hoe verloopt de communicatie van IenM met de offshore wind sector
  - Waarover
  - Wanneer
  - Met wie (niet)?
  - Knelpunten
  - Proberen deze partijen het beleid te beïnvloeden en zo ja, op welke wijze? (wat zijn de belangrijkste belangen van deze partijen en hoe proberen ze die te behartigen?)

- Hoe verloopt de communicatie van IenM met andere sectoren met betrekking tot besluitvorming over offshore wind?
  - Waarover
  - Wanneer
  - Met wie (niet)?
  - Knelpunten
  - Proberen deze partijen het beleid te beïnvloeden en zo ja, op welke wijze?

- Hoe verloopt de samenwerking met RWS en EZ?
  - Waarover
  - Wanneer
  - Knelpunten
  - Hoe probeert IenM zijn belangen door te laten werken in het beleid m.b.t. RO en offshore wind?

Afsluiting: Dank u wel voor het interview

D. Interview guide independent expert

Datum: 5-10-2015
Amsterdam

Introductievragen:

- Mag het interview opgenomen worden?

Introductie onderzoek: relatie tussen ruimtelijke plannen voor de Noordzee en besluitvorming rond wind op zee

Kunt u een korte algemene samenvatting geven van uw werkzaamheden (op dit gebied)?

Algemene ervaring met ruimtelijke ordening op zee (in Nederland)

- In hoeverre bent u bekent met het concept ruimtelijke ordening op zee (in het Engels Marine Spatial Planning) en andere strategieën en vormen van governance en op zee?
  - Hoe verhoudt zicht dit tot planning op land (Wat zijn naar uw mening de verschillen met RO op land)?
  - Wat is uw mening over de Nederlandse ontwikkelingen op dit gebied? (positief, negatief)
  - Hoe zou het beter kunnen, wat zijn volgens u nog verbeterpunten?
- Wat weet u over het opstellen van deze plannen en wie hierbij betrokken zijn?
  - Wat zijn de verhoudingen tussen deze partijen?

Algemeen over de planning van wind op zee (in Nederland)

- Hoe vind besluitvorming over offshore wind plaats?
  - Wie zijn hierbij betrokken?
  - Hoe zijn de verhoudingen tussen de partijen?
- Hoe is dit veranderd over de tijd?
  - Wat vindt u van deze veranderingen?
  - Hoe zou het beter kunnen, wat zijn uw verwachtingen, wat is nodig

De invloed van ruimtelijke ordening op zee voor wind op zee (waarom, welke aspecten?)

- In hoeverre denkt u dat ruimtelijke ordening op zee belangrijk is voor wind op zee?
  - Welke aspecten zijn het meest van belang en waarom? (strategie of content)
  - Welke minder/zijn er ook negatieve effecten en waarom? (knelpunten, en hoe worden deze opgelost?)
    - ⇨ Kan scherpere/strakkere/andere MSP helpen/bijdragen aan OWF ontwikkeling?
- In hoeverre worden de ruimtelijke plannen gebruikt in besluitvorming over wind op zee?
- De besluiten rond de SDE lijken een belangrijke rol te hebben gespeelt in de tweede ronde (Gemini/Luchterduinen) na het afgeven van de Wbr vergunningen, wat vindt u hiervan?
  - In hoeverre speelden de inmiddels gepubliceerde ruimtelijke plannen (het NWP en PDNS) een rol hierin?
- Binnenkort worden de tenders uitgeschreven op basis van het nieuwe systeem. Het huisige systeem is gebaseerd op de aanwijzing van gebieden en dit beleid is in het eerste NWP reeds opgesteld. Kunt u inzicht geven in wat er in de tussenliggende periode is gebeurd en waarom het zo lang geduurd heeft?
- Wat is uw mening over het huidige systeem met de kavelbesluiten en de vergunning o.b.v. de Wet Windenergie op Zee? Wat is de rol van RWS bij de voorbereiding van kavelbesluiten en hoe verhoudt zich dit tot het ministerie van EZ?

Samenwerking:

- Wat is uw mening over de communicatie en verhoudingen tussen de verschillende partijen die betrokken zijn bij de planning van wind op zee (RWS, EZ, IenM, belangenorganisaties, de offshore wind sector)
  - Waarover
  - Wanneer
  - Met wie (niet)?
  - Knelpunten
  - Proberen deze partijen het beleid te beïnvloeden en zo ja, op welke wijze? (wat zijn de belangrijkste belangen van deze partijen en hoe proberen ze die te behartigen?)

Afsluiting: Dank u wel voor het interview

APPENDIX II – CODE BOOK

Table 1 Code book	
Code family: content of the message (which norms and boundaries are set)	
Code name	*Description*
General substantive norms	General norms/goals regarding content that apply to all locations
General procedural norms	General norms determining how decisions need to be made regarding development
Area-specific norms	Specific norms determining where development needs to occur and/or how decisions need to be made with regards to a certain area
Activity-specific norms	Specific norms determining where development needs to occur and/or how decisions need to be made with regards to development of a certain activity
Type of change	Statements about the purpose or proposed change, e.g. development versus conservation
Ecosystem-based	Statements about how the ecosystem is taken into account with regards to offshore wind energy
Monitoring and evaluation	Statements about monitoring and evaluation
Code family: Status of the message (who is addressed and in what manner do they need to use the message)	
Code name	*Description*
Addressed to subject	The planning subject is addressed (organization or agency who developed the message) e.g. as a preparation for future action
Addressed to other parties	Other parties (private, other government agencies) are addressed e.g. to influence their decisions or actions or to inform the public
Binding/discretionary	The message binds what the subject or other parties can or cannot do or determines outcomes (look for words like always, never, not)
Indicative	More broad brush approach: Message indicates what subject or other parties would be preferred to (not) do or preferred outcomes (look for words like maybe, please, preferred)
Flexibility/adaptive	Statements added to the message too include options for flexibility
Time scale	How long is the message valid (duration)
Code family: Drafting the message (how is the message drafted and by whom)	
Code name	*Description*
Politicians/politics	Statements about the involvement of politicians and their role in drafting the message
Role of professionals	Statements about the role of professionals in drafting the message and how are they guided
Coordination	Coordination with other (sectoral) government agencies or ministries (samenwerking) and between tasks of these agencies and ministries (stroomlijning)
Agenda setting	Who determines which issues are addressed in the message
Connection to other plans	Which (aspects) of other plans are mentioned and incorporated (or not)
Consensus within government	If all parties within the government agree upon the message or action, it will be a stronger compared to when there is much discussion and disagreement (e.g. 45 against 55%), this also includes continuity in

	power, finance and policy.
Consensus between stakeholders	Statements about the level of consensus between stakeholders (government agencies and private parties) regarding the means, ends and discourses
Supercode: stakeholder involvement	
Who: stakeholder involvement	Statements about who (which stakeholders) was involved in drafting message
When: stakeholder involvement	When were stakeholders involved (which phases)
How: stakeholder involvement	How are stakeholders chosen and by whom?
Code family: Context of the message (contextual factors that influence the message)	
Code name	*Description*
Urgency	Statements about the urgency of issues addressed (look for words like important, quickly)
Routine	Statements about (obligatory) routine revisions
Authority	Statements about (changes in) responsibilities and capabilities (e.g. who is responsible for what on the basis of which rules) of actors. This influences the power of the planning subject over issues it aims to influence (in relation to other parties)
Legislation	Statements about (changes in) legislative basis for plans or actions
Discourses	Which terms are used to discuss certain issues and who sets this discourse
Integration	Statements about integration ambitions in the documents
Resources	Extent to which planning subject has control over resources needed to realize proposed outcomes or changes
Uncertainty	Statements about the degree of uncertainty and complexity, because this influences behavior of actors (e.g. high levels of complexity and uncertainty will let investors be more hesitant)

Table 2 Connection of the codes to the 'rules of the game' by Klijn & Koppenjan (2006)			
Rules		*Description*	*Related to codes*
Inter-action rules	Access rules	relate to the exclusiveness of networks, who is permitted to participate and how to exit	Supercode stakeholder involvement
	Inter-action rules	relate to when (not) to intervene, how conflicts are solved, which information is shared	Coordination
Arena rules	Reality rules	determine which arguments are accepted or not (and by whom) by setting e.g. product standards or because of the identity of an actor	Discourses, general, area- and activity- specific norms
	Position rules	are related to the power and status of an actor in relation to other actors	Agenda setting, authority
	Pay-off rules	are related to benefits of certain choices and standards for evaluation of outcomes of choices and can be financial or non-material	Activity-specific norms

Table 3 Connection between the codes and the MSP characteristics			
Characteristics		*Codes*	
Area-based		General substantive norms General procedural norms Area-specific norms	
Integrated	cross-sectoral integration	Integration	Activity-specific norms
	organizational integration		Resources Consensus within government Coordination Authority Legislation
Strategic		Validity Urgency Routine Strategic/visionary	
Participative		Politicians/politics Professionals Supercode: stakeholder involvement Consensus between stakeholders	
Ecosystem-based		Type of change Ecosystem-based	
Adaptive		Flexibility/adaptive Monitoring and evaluation Uncertainty	
Needs to be incorporated in every chapter		Addressed to subject Addressed to other parties Binding/discretionary Indicative Connection to other plans Discourses	