Towards Marine Protected Areas in the Netherlands

Linde Van Bets
870601-061-070
MSc Thesis Environmental Policy
August 2010
Supervisor Wageningen University: Judith van Leeuwen
Supervisor Centre for Marine Policy: David Goldsborough

Summary

The Convention on Biological Diversity (CBD) aims at a significant reduction of the biodiversity loss rate by 2010. Marine protected areas are designed to halt marine and coastal biodiversity loss. The process of the designation of marine protected areas in the Netherlands is examined with respect to legislation implementation and deliberative governance divided over a stakeholder analysis in terms of legitimacy, power, urgency and a discourse analysis. The Netherlands, as Contracting Party to the EU and OSPAR, can apply Natura 2000 and OSPAR to achieve the CBD target. Significant institutional and content differences are found between those two organisations. Natura 2000 is the European network of marine protected areas based on the Birds and Habitats Directives. OSPAR is a treaty organisation in which 15 countries and the European Commission cooperate to protect the marine environment of the North-East Atlantic. Natura 2000 as EU legislation is legally binding for its Member States, while the adoption of OSPAR's decisions, recommendations and agreements can not be enforced. Content differences between the two regimes regarding marine protected areas revolve around the following three aspects: the territory in which marine protected areas can be established, criteria for protection and the species and habitats that needs protection. OSPAR has a broader territory and more protection criteria resulting in more species and habitats that can be protected through means of marine protected areas. Natura 2000 is inadequate for the protection of marine species and habitats because it was originally designed for the terrestrial environment. The Netherlands decided to establish marine protected areas that fall under Natura 2000 as well as under OSPAR. Although the Birds and Habitats Directive are implemented in the Dutch Flora and Fauna Act and Nature Conservation Act, OSPAR is not yet legally implemented in the Netherlands.

In the Netherlands stakeholders' influence regarding the discussion on marine protected areas is analyzed in terms of legitimacy, power and urgency. Definitive actors are the Ministry of Agriculture, Nature and Food Quality (LNV), the Ministry of Transport, Public Works and Water Management (VenW) and environmental NGOs which have legitimacy, power and urgency. Dominant stakeholders are Fish Auction Den Helder and NOGEPA (oil and gas) which have power and legitimacy. Research institute IMARES and the Directorate General for Public Works and Water Management North Sea are dependent actors because they have legitimacy and urgency, but no direct power to carry out their vision. The least important actors are research institute Deltares and Pondera Consult (wind energy) which only have legitimacy. Environmental discourses marking the process of marine protected areas in the Netherlands are survivalism, short-term pragmatism, NIMBY, sustainable development and ecological modernisation. Greenpeace follows survivalism because they strive for an indispensable network of marine protected areas that protects at least 40 % of the Dutch North Sea. The government's discourse is called short-term pragmatism because they aim at marine protected areas complying with (inter)national legislation, stakeholder support, favourable status for protected habitats and species and at minimal cost. NIMBY characterizes the sectors in the North Sea because they do not oppose marine protected areas, as long as it does not compromise their work. Sustainable development combines marine protected areas with economic development by a zoning system in which some areas are entirely closed, while other areas allow certain activities. In the entire North Sea all human activities should become more sustainable. Environmental NGOs favour this approach because the ecosystem and precautionary principle are applied. Ecological modernisation is quite similar. In this context marine protected areas should be based on user functions, not on ecological values. Research institutes think this methodology will be beneficial for the North Sea.
Deliberative governance contains three characteristics: the focus on practical problems, interaction between state, economy and civil society and problem-solving through exchange

of argumentations and visions. Regarding practical-oriented problem-solving, three stages can be found: problem framing, the creation of different scenarios and the evaluation of the chosen scenario. The Netherlands is at the second stage in which formulation plans are being designed for protected areas. The process does not proceed fast because uncertainty about MPAs as relatively new concept dominates the discussion. The contribution of protected areas to marine protection, the goals of protection and the consequences for sectors that used to operate in those areas are not clear. This uncertainty can be dedicated to limited scientific input and LNV that lacks in a clear vision and in adequate leadership skills. Interaction between state, economy and civil society is not satisfactory. There was no stakeholder input from environmental NGOs and sectors in the designation phase of protected areas in the Netherlands. Both stakeholder categories are being involved only from the second stage of the formulation of management plans. All relevant stakeholders participate in decision-making, but feel not really involved. Stakeholder representativity differs not only per phase of decision-making, but as well per area and sector. In fact the process of stakeholder involvement started too late. Time necessary for stakeholder participation was underestimated, limiting opportunities for real stakeholder input. Currently stakeholder involvement consists of conversations that did not achieve 'faster and better' decision-making, intended by the Commission Elverding. Therefore the benefits of stakeholder interaction are being questioned. Regarding problem-solving through argumentations and visions, five different discourses in the discussion about marine protected areas are marked by the following two paradoxes of short-term versus long-term perspective and economy versus nature conservation. These conflicting aspects are illustrated in the discussion about whether marine protected areas should be entirely closed. The concept of completely closed areas originates from the precautionary principle used in situations of uncertainty. This approach is perceived as rigid by the sectors.

The Netherlands can come closed to the CBD target of 10 % protection of the marine environment by 2012 if the following recommendations are followed-up. The Netherlands decided to protect areas based on both Natura 2000 and OSPAR. Therefore OSPAR should as well be implemented in the Dutch Nature Conservation and Flora and Fauna Acts. Currently uncertainty about marine protected areas constrains stakeholder involvement and effective decision-making. This uncertainty can be solved by more research from different institutes and a clear vision and leadership of the responsible Ministry. Deltares is already involved concerning research about questions of the Marine Strategy Framework Directive for VenW and RWS NZ. Therefore more responsibility for research about marine protected areas regarding their goals, contribution to marine protection and consequences for sectors could be given to Deltares. LNV is compromised by its umbrella function for fisheries as well as for nature conservation. It could be better if those responsibilities were divided over two different Ministries. VenW, which is already involved in the decision-making process, could become the new responsible Ministry for nature conservation at sea. Its executive body of RWS NZ is already assigned to formulate management plans for marine protected areas. VenW could present their expectations for a shared vision. Another important factor for efficient decision-making is stakeholder input. All relevant stakeholders should already be involved in the designation phase. More time should be preserved for stakeholder participation. To have real and effective stakeholder involvement, a good chair of VenW is necessary. In the end more research, a responsible Ministry with adequate leadership skills and real stakeholder involvement will result in efficient and effective decision-making about marine protected areas in the Netherlands that will meet the CBD target.

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Abbreviations

CBD	Convention on Biological Diversity
CDA	Christian democratic political party (Christen Democratisch Appel)
CFP	Common Fisheries Policy
COP	Conference of the Parties
EC	European Commission
EEZ	Exclusive Economic Zone
EU	European Union
ICES	International Council for the Exploration of the Sea
IDON	Interdepartmental Directors Meeting North Sea (Interdepartementaal Directeuren Overleg Noordzee)
IMARES	Institute for Marine Resources and Ecosystem Studies
IMO	International Maritime Organisation
FIMPAS	Fisheries Measures in Protected AreaS
LEI	Agro-economical Institute (Landbouw Economisch Instituut)
LNV	The Ministry of Agriculture, Nature and Food Quality (Ministerie van Landbouw, Natuur en Voedselkwaliteit)
MPAs	Marine Protected Areas
MSFD	Marine Strategy Framework Directive
NGOs	Non-Governmental Organisations
NIMBY	Not In My Back Yard
NIOZ	Netherlands' Institute for Sea Research (Nederlands Instituut voor Onderzoek der Zee)
NITG	Netherlands' Institute for Applied Geosciences (Nederlands Instituut voor Toegepaste Geowetenschappen)
NOGEPA	Dutch Oil and Gas Exploration and Production Association (Nederlandse Olie en Gas Exploratie en Productie Associatie)
NWEA	Dutch Wind Energy Association (Nederlandse Wind Energie Associatie)
PvdA	Dutch Labour Party (Partij van de Arbeid)
PvdD	Party for the Animals (Partij van de Dieren)
RIKZ	National Institute for Coastal and Marine Management (RijksInstituut voor Kust en Zee)
RIVO	Netherlands' Institute for Fisheries Research (RijksInstituut voor VisserijOnderzoek)
RWS NZ	The Directorate General for Public Works and Water Management North Sea (Rijkswaterstaat Noordzee)
SCI	Sites of Community Importance
SP	Dutch Socialistic Party (Socialistische Partij)
SPAs	Special Protection Areas
SACs	Special Areas of Conservation
TNO	Technical Physical Research Centre (Technisch Natuurkundig Onderzoekscentrum)
UNCLOS	United Nations Convention on the Law of the Sea
UN	United Nations

VenW	The Ministry of Transport, Public Works and Water Management (Ministerie van Verkeer en Waterstaat)
VIBEG	Visserijmaatregelen in Beschermde Gebieden
WFD	Water Framework Directive
WWF NL	World Wildlife Fund the Netherlands (Wereld Natuur Fonds Nederland)

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1. Introduction

1.1 Integrated Marine and Coastal Management

About three milliard years ago, the ocean was formed. Currently it covers up to 70 % of the planet providing habitats for an abundant marine life. The ocean is not only an essential producer of water; moreover it is responsible for the production of a third of the oxygen the world breathes and for a considerable amount of protein. Concerning environmental problems, the ocean is a critical factor in moderating climate change, because its functions as a sink for a significant amount of CO_2. Obviously the ocean is of great value for life on earth, which makes its resources interesting for commercial use (CBD, accessed 3-02-2010).

In offshore waters multiple human activities are increasing (Krause et al., 2007). The last decades the ocean is used for fishing, oil, gas and sand extraction, transportation of goods by shipping, the production of wind energy… Attention is paid to the rapid development of increasing activities in the context of the "tragedy of the commons". This phenomenon describes the tragedy of freedom in an open access resource like the ocean. Each user will try to benefit as much as possible from the sea, without long-term thinking. This arrangement can work reasonable satisfactorily until the carrying capacity of this open access resource is reached. When this turning point is reached, escaping from the overexploitation of remaining resources is impossible (Hardin, 1986). Resources in the ocean will become scarce and eventually extinct.

To halt this "marine tragedy of the commons", the programme of work on marine and coastal biodiversity entered into force in 1998 as part of the Convention on Biological Diversity (CBD). One of the five elements within this programme is integrated marine and coastal area management. Its purpose is to regulate impacts of human activities to conserve and improve sustainable use of marine and coastal biodiversity. A crucial management tool to achieve this integrated management is a network of protected areas. 10 % of the world's ecological regions in the marine environment should be protected by 2012 (CBD, accessed 3-02-2010). In 2002 this commitment was strengthened by the World Summit on Sustainable Development in Johannesburg in which the states agreed to establish representative networks of marine protected areas (MPAs) by 2012.

1.2 Problem Statement

The Netherlands has taken significant steps to comply with global and regional targets of representative MPA networks. However the current MPA network in the Dutch part of the North Sea reveals a number of shortcomings. The Netherlands is a Contracting Party to a variety of global and regional treaties relevant for MPA networks (Dotinga, et al., 2009), but it is as well a Member State of the European Union (EU). On EU level a network of protected areas, called Natura 2000, shall be established by 2012 based on biodiversity conservation through the European Commission (EC) Birds (1979) and Habitats Directives (1992) (European Commission, 2007). Under the Birds Directives bird species listed in its Annex I and migratory species, occurring in national territory, are protected by the designation of Special Protection Areas (SPAs) by Member States (European Council, 2007). The same principle applies to natural habitat types and species listed in Annex I and II of the Habitats Directive. These habitats and species will be protected by Sites of Community Importance (SCI) on EU level and Special Areas of Conservation (SACs) on both EU and national level (European Council, 1992). Habitats and species protected within the Atlantic region are listed

in Appendix A of the Appendix. Together the SPAs and SACs form the ecologically coherent European network of protected sites, knows as Natura 2000 (European Commission, 2007).

The Netherlands is as well a Contracting Party to the Convention for the Protection of the Marine Environment of the North-East Atlantic, also known as the OSPAR Convention, a key instrument to establish MPAs in the North Sea. The Convention requires Contracting Parties to take necessary measures to protect and conserve marine ecosystems and biodiversity by restoring marine areas adversely affected by human activities. The OSPAR Commission is asked to develop means, consistent with international law, for instituting protective, conservation, restorative or precautionary measures related to specific areas or sites housing particular species or habitats. Therefore OSPAR aims to establish an ecologically coherent network of well-managed MPAs by 2010. Each Contracting Party is required to identify areas as MPAs based on the ecological and practical criteria in Appendix B.1 in the appendix (OSPAR, accessed 17-02-2010).

Comparing the Birds and Habitats Directive with the OSPAR criteria for MPAs reveals some inconsistencies. Although the Birds Directive takes into account a substantial number of marine birds, the Habitats Directive has a "limited focus on marine species and habitat types, especially concerning offshore marine environments (European Commission, 2007)". The marine gap within the Habitats Directive becomes even clearer comparing it to OSPAR's list of threatened or declining species and habitats, shown in Appendix B.2 in the Appendix (OSPAR, accessed 17-02-2010).

The Dutch Government reported the following four areas as possible MPAs in 2008, shown in Appendix D in the Appendix: the Coastal Sea (North Sea Coastal Zone, Voordelta and Vlakte van de Raan), the Dogger Bank, the Cleaver bank and the Frisian Front (IDON, 2005). The Dogger and Cleaver bank comply with the Habitats Directive and OSPAR, the Frisian Front with the Birds Directive and the Coastal Sea with both Directives and OSPAR (Lindeboom, et al., 2005). The Netherlands decided to protect marine protected areas that are based on Natura 2000 as well as on OSPAR criteria. The Central Oyster Ground, also situated in the Dutch North Sea, qualify as MPAs according to OSPAR criteria as habitat type *Ostrea Edulis* beds and due to the presence of the ocean quahog, but are not put forward by the Dutch Government. Without those areas, the Netherlands will not be able to meet the CBD target of a representative network of MPAs that protects 10 % protection of its marine environment by 2012. Apparently the Netherlands value EU requirements higher compared to treaty obligations. However the OSPAR criteria cover a wider range of species and habitats than those of the Birds and Habitats Directive, the Netherlands is satisfied with the compliance with the minimum requirements of the Habitats Directive. It is worth mentioning that the Netherlands is not an exemption. Almost all EU Member States which are Contracting Parties to the OSPAR Convention reported OSPAR sites, only if those areas were already part of the Natura 2000 network. Portugal is the only country that designated OSPAR MPAs outside Natura 2000 sites (Dotinga, et al., 2009).

Why Member States in the EU are more inclined to implement MPAs according to the Natura 2000 instead of OSPAR criteria could be explained by institutional differences of the EU versus the OSPAR treaty. However the OSPAR Convention is a legal instrument, meaning decisions made are binding to the Contracting Parties, it has no mean to enforce compliance. The supranational nature of the EU can enforce their Directives (Dotinga, et al., 2009). If a Member State does not comply with the Directive at the end of the implementation period, the European Commission has the following means to enforce compliance: the demand for

information, the complaint, the notice, the reasoned opinion and finally the procedure of the Court of Justice of the European Communities (European Commission, accessed 17-02-2010).

The establishment of a network of MPAs is not only an issue on international level, it is as well subject to political debate in the Netherlands. For the sake of this research proposal, different stakeholders will be characterized as government, research institutes, environmental non-governmental organisations (NGOs) and users, shown in Table 1. The different functions are regulation of ecological processes and life sustaining systems, production by the use of natural resources, information and carrier as substrate and medium for human activities and the distribution of goods (Vos, et al., 2006).

Table 1: Stakeholder's interest, functions, point of view on MPAs and expected point of view on Natura 2000 versus OSPAR

Stakeholder	**Interest**	**Functions**	**Point of view on MPAs**	**Expected point of view on Natura 2000/OSPAR**
Government	- Balance between economy and ecology - Meet deadlines	- Regulation - Information - Production - Carrier	Neutral	Natura 2000
Research institutes	- Scientific basis	- Information	Moderate supporter	OSPAR
Environmental NGOs	- Good status of nature	- Regulation	Supporter	Beyond Natura 2000 and OSPAR
Sectors	- Income	- Carrier - Information - Production	Varying from opponent to moderate supporter	Unknown

1.2.1 Government

The government is responsible for the implementation of a Dutch representative network of MPAs by 2012. So far only four areas are designated as protected areas. The reason that the Netherlands is not more pro-active in establishing Natura 2000 sites originates from economic concern. Former premier Jan Peter Balkenende, wrote by request from responsible minister Gerda Verburg from the Ministry of Agriculture, Nature and Food Quality (in Dutch: Ministerie voor Landbouw, Natuur en Voedselkwaliteit, LNV), a letter to José Manual Barrossa of the European Commission in which he asks for a better balance between ecological values and economic interests concerning Natura 2000. The Dutch Labour Party (In Dutch: Partij van de Arbeid, PvdA), GreenLeft (In Dutch: GroenLinks), the Dutch Socialistic Party (In Dutch: Socialistische Partij, SP) and Party for the Animals (In Dutch: Partij voor de Dieren, PvdD) were embarrassed about the letter, because those four parties are in favour of MPAs and with this letter Balkenende undermines nature protection (Janssen, et al., 2010). In the end the government in general is neutral, because opinions are divided about MPAs.

1.2.2 Research institutes

According to research institutes, fishing is the biggest threat to marine ecosystems. For example in Europe 88 % of the fish stock is overfished (European Commission, 2009). On request of the Minister from LNV, IMARES examined effects of MPAs on fishing activities and fish stocks. This report concluded that the proposed MPAS are too small to have impact on the fishing sector and fish stocks. To see a difference, one fourth of the North Sea should be closed for fishing, which will result in an increase of half of the fish stocks and doubling of the biomass. Bigger MPAs will lead to better results. Sand and gravel exploitation is a serious threat as well, because it causes severe damage to the bottom of the ocean (Dekker, et al., 2009). In general research institutes are requested by the government to provide scientific results about pros and cons of MPAs. Research institutes themselves are supporting MPAs if these areas are closed for fishing activities that harm the bottom of the ocean and if clear regulation and control, stakeholder participation and research about the effects of MPAs occur (Vos, et al., 2006).

1.2.3 Environmental NGOs

Civil society has a say as well in this discussion. Therefore environmental NGOs try to make people aware of the importance of MPAs in the North Sea. Greenpeace performed a public opinion poll on MPAs in the North Sea. 95 % of the Dutch people above the age of 18 regard the importance of the protection of the North Sea. Two thirds of the people ask for MPAs in the North Sea in which some parts are completely closed for harmful impacts, like from fishing (Greenpeace, accessed 10-03-2010).

Their influence is not only verbal, action-oriented campaigns on MPAs have been performed several times. In August 2008 Greenpeace started throwing big natural stones northeast of Groningen to protect the Sylt Buiten Rif, which habitats a diversity of bottom fauna, seals and porpoises. This area is mainly threatened by bottom trawling and sand and gravel exploitation. Greenpeace put as well effort in the protection of the Dogger Bank against harmful fishing activities. Their actions were not only limited by placing buoys to mark the boundaries of the protected area of the Dogger Bank. Moreover activists were lying in the water to halt beam trawling. In the summer of 2009 Greenpeace had designed a museum in a ship in the Wadden See to provide visitors with information about MPAs. Another recent action initiated by Greenpeace is the establishment of a virtual marine protected area in the North Sea. Every visitor of the website can claim one km² of the North Sea to be protected. With this action Greenpeace tries to convince the Minister of LNV to bring this virtual area to reality (Greenpeace, accessed 10-03-2010).

The Dutch environmental NGOs contributed as well constructively by their proposal of an ecologically coherent network of MPAs in the Dutch part of the North Sea, to express their disagreement with the limited designation of the MPAs of the government. This proposal, shown in Appendix E in the Appendix, is based on the precautionary approach. To achieve this ecological coherence, apart from the sites designated based on current Natura 2000 and OSPAR criteria, they want to establish complementary specially managed areas, called Blue Belts. These blue belts aim to bridge the gap between the selective conservation demands from the Habitats Directive and the generalistic picture of an ecological coherent, representative network of MPAs proposed by the OSPAR and CBD Conventions. These Blue Belts will function as buffer zones around designated MPAs, as priority areas for transboundary spatial planning and MPA management, best environmental practice zones and priority areas for good environmental status, required by the EU Marine Strategy Framework Directive, which entered into force in 2008 (Christiansen, 2009).

1.2.4 Sectors

The opinion of the different users on MPAs is divided: oil and gas exploiting companies and the recreation and tourism sector are pro MPAs, the shipping industry and wind energy are neutral and sand and grind exploiting companies and the fishing sector are contra. The shipping industry has no problem with MPAs, because their routes are regulated by the international maritime organisation (IMO) and they do not expect conflicts between IMO and the Birds and Habitats Directives (Hugenholtz, 2007). The wind energy sector wants to develop wind energy projects at sea, meaning they have to deal with nature conservation. They are not actively or directly involvement with MPAs, because they secured their activities in the North Sea. The contra position results from fear for lower income, longer administrative procedures and a transfer of the activities to other places which will face an increase in pressure in these areas. Areas will be entirely closed for the fisheries, because fish stocks need to recover. According to Visned those fish populations are not in danger anymore. Therefore they strive for fisheries to be able to legitimately use the North Sea for fishing activities (Visned, accessed 13-08-2010). All of them ask for clear regulation and monitoring of the protected areas. Moreover the fishing and shipping industry want financial compensation, continuation of some activities in particular areas and research about the effects of MPAs (Vos, et al., 2006).

1.2.5 Political debate

In the Netherlands there is political debate about the time gap between legislation and implementation of MPAs. Four main stakeholder categories are defined: the government, research institutes, environmental NGOs and users of the North Sea. Obviously this discussion does not revolve merely about MPAs but about the imbalance between nature conservation and economic interests. People in favour for MPAs want nature conservation on the long-term, while the stakeholders against these areas are afraid to lose economic benefits on the short-term. Below the position and interest of the four main stakeholders are summarized.

- The government has chosen to protect areas that fall under Natura 2000 and OSPAR. Therefore the minimal requirements of the EU to protect nature prevail. Even within Natura 2000 they question the balance between ecology and economy. Therefore they do not go beyond the necessary, meaning they do no adopt OSPAR MPAs outside previously designated Natura 2000 sites.

- Research institutes are necessary in the discussion about MPAs to be responsible for their scientific foundation. Their research has proven that 25 % of the North Sea should be closed to be beneficial for fisheries and nature protection.

- The environmental NGOs are for ultimate nature preservation by a Dutch network of MPAs they goes beyond Natura 2000 and OSPAR criteria for protected areas, by complementing it by additional blue belts. Environmental NGOs put nature ahead of economy.

- The sectors' vision about MPAs is divided. Some are pro, some are contra. The reasons for a negative opinion are fear for loss of income and longer administration procedures. The users of the Dutch North Sea put economy first, because their income directly depends on the decision about the designation of MPAs in the North Sea.

1.3 Objectives and research questions

The objective of this research is threefold:

- To find out how the Netherlands deals with Natura 2000 and OSPAR criteria to establish MPAs in the Dutch North Sea.
- To give an analysis of different stakeholders in terms of legitimacy, power, urgency and discourses on the discussion about MPAs in the Dutch North Sea.
- To give recommendations how the Netherlands can come closer to the CBD target aiming at 10 % protection of the marine environment by 2012, on paper as well by real protection measures.

To analyse the discussion about MPAs in the Dutch North Sea regarding Natura 2000 and OSPAR criteria and stakeholder influence, the following research questions will be dealt with during this report.

In order to analyze the adoption of a network of MPAs in the Netherlands regarding Natura 2000 and OSPAR, a content analysis must be performed to highlighten institutional and content differences between Natura 2000 and OSPAR.

1. *How do institutional differences between the EU and OSPAR treaty influence the Netherlands in the establishment of marine protected areas in the Dutch North Sea?*
2. *How do Natura 2000 and OSPAR criteria differ in the establishment of a representative network of marine protected areas?*

To give recommendations to approach the CBD target of 10 % protected area of the marine environment by 2012, insight should be gained in the perspective of different stakeholders by means of their legitimacy, power and urgency discourses on the discussion of MPAs in the Netherlands. The policy analysis will be performed from a deliberative governance perspective. Deliberative governance is defined in this report as a problem-solving approach by including different stakeholders and their discourses, legitimacy, power and urgency.

3. *What impact do different stakeholders have on the Dutch network of marine protected areas?*
    a. *Which stakeholders posses legitimacy, power and/or urgency and how do they use these attributes to influence the discussion about a Dutch network of marine protected areas?*
    b. *Which discourses are involved amongst the different stakeholders in the discussion about marine protected areas?*

1.4 Research methods

The analysis of this report consists mainly of policy documents and interviews. The policy documents include position papers from international regimes, the EU, OSPAR and NGOs important for the creation of MPAs. Concerning the interviews, in total 11 interviews were conducted covering four main stakeholders: the government, research institutes, environmental NGOs and users of the North Sea. The interviews cover questions about the regimes, (dis)advantages, requirements, consequences and the balance between nature and economy of MPAs. The detailed questions can be found in Appendix F. Based on this information, institutional and content differences between Natura 2000 and OSPAR and environmental discourses are discovered. The other section of the interview contains interactive questions about legitimacy, power and urgency in order to identify stakeholder influence.

The Dutch Ministry of Agriculture, Nature and Food Quality (LNV) is challenged to find balance between the following functions of the countryside: food production, nature, landscape and the basis for a green economy. Regarding nature LNV is responsible for nature conservation in the terrestrial as well as in the marine environment (LNV, accessed 14-08-2010). The Ministry of Transport, Public Works and Water Management (in Dutch: the Ministry of Transport, Public Works and Water Management, VenW) assists LNV in the designation of MPAs in the North Sea. With the motto 'Move fluently, life safely' VenW is concerned with the implementation and enforcement of accessibility, safety and liveability in the Netherlands (VenW, accessed 14-08-2010). Those two Ministries are accompanied by the Directorate General for Public Works and Water Management, the executive body of VenW. 10 regional Directorates exist, of which the one for the North Sea is important in the context of MPAs. The Directorate General for Public Works and Water Management North Sea (RWS NZ) makes sure the North Sea is a living sea with good waterways and safety for the shipping sector. RWS NZ is responsible for the management plans of MPAs (RWS NZ, accessed 14-08-2010). Those three actors represent the government in the interviews.

Research institutes are very important with respect to the information provisioning about MPAs. The key research institute is the Institute for Marine Resources and Ecosystem Studies (IMARES) which concentrates on research into strategic and applied marine ecology. The reports they provide are based on field research, experiments on a real-life scale, exploratory studies on a laboratory scale, data management and modelling (IMARES, accessed 6-08-2010). Another important research institute is Deltares which has a coast and sea department responsible for the integral management of the sea and coast affected by climate change, sea level rise and vulnerable dunes (Deltares, accessed 6-08-2010).

Of course environmental NGOs are important actors in the discussion about nature protection in the North Sea. Three NGOs are interviewed: North Sea Foundation, World Wildlife Fund the Netherlands (in Dutch: Wereld Natuur Fonds Nederland, WWF NL) and Greenpeace. North Sea Foundation is an independent nature and environmental organization that promotes sustainable use of the North Sea and a healthy ocean full of fish, dolphins and other life. Its key points are shipping, sustainable fisheries, marine spatial planning space, (green) energy and protected areas (North Sea Foundation, accessed 14-08-2010). Greenpeace is one of the biggest and most important environmental NGOs worldwide. They want to protect the earth by appealing and humoristic campaigns (Greenpeace, accessed 14-08-2010). World Wildlife Fund The Netherlands (WWF NL) has worked since 1962 successfully on nature conservation of a diversity of animal and plant species around the world. They aim at the creation of a world where man and nature live in harmony (WWF NL, accessed 14-08-2010). Deliberately those three were chosen, because North Sea Foundation is present at a lot of meetings concerning MPAs, WWF NL has provided an alternative proposal for MPAs in the North Sea in their report 'The Dutch case: A network of MPAs'. Greenpeace has a more action-oriented approach to strive for marine protection.

Last but not least, the users of the North Sea. They will face the consequences of the establishment of MPAs. To balance the amount of interviewees per category, three sectors are interviewed: oil and gas represented by the Dutch oil and gas exploration and production association (in Dutch: Nederlandse Olie en Gas Exploratie en Productie Associatie, NOGEPA), wind energy represented by Pondera consult and the fishing sector represented by Fish Auction Den Helder. Deliberately those three sectors are chosen. The fishing sector is crucial in the establishment of MPAs, because they will face the consequences of MPAs the

most. Therefore the fishing sector opposes the creation of MPAs. To balance the opposing position of the fishing industry, the oil and gas and the wind energy sectors are selected because they are pro or neutral about MPAs. NOGEPA, representing oil and gas producing companies in the Netherlands, aims to exploit oil and gas resources as efficiently, safely and environmentally conscious as possible (NOGEPA, accessed 14-08-2010). Pondera Consult is a consultancy agency faced with the enormous to shape a vigorous climate, energy and environmental policy for the future. In this regard the following issues should be addressed: the transition to new energy sources (wind, solar, biomass, as well as hydrogen storage media), source-oriented and impact-oriented actions (energy savings versus new dykes) to fight climate change (Pondera Consult, accessed 14-08-2010). The history of Cooperative Fish Auction Den Helder / Texel UA dates back to 100 years ago. Since 1990, the company is a cooperation of fishermen from Den Helder and Texel. With their fleet of nearly 40 modern ships, they play an important role in the landings of sole and plaice. Den Helder is centrally located in the North Sea. Therefore the Fish Auction Den Helder /Texel is an important landing place for fishermen from Denmark, Germany, Belgium and the United Kingdom (Fish Auction Den Helder/Texel, accessed 14-08-2010).

1.5 Outline

The second chapter explains the conceptual framework of this report. This framework will function as theoretical foundation for the analysis of MPAs in the Dutch part of the North Sea. The overall framework is deliberative governance which is subdivided in two sections: stakeholder salience and discourse analysis. Stakeholder salience identifies crucial actors based on the possession of the following three attributes: legitimacy, power and urgency. All of these attributes will be explained in detail. The discourse analysis provides nine environmental discourses which could be applied by different stakeholders regarding MPAs.

The third chapter provides the context of MPAs on international and national level. First an overview is given of all regimes that deal with MPAs on global, regional and national level for the Netherlands. Afterwards the Convention on Biological Diversity on global level and the EC Birds and Habitats Directives and OSPAR on regional level are elaborated. Moreover institutional and content differences between Natura 2000 and OSPAR are highlighted. At the end the current situation regarding MPAs in the Netherlands is shown.

The fourth chapter comprises empirical findings based on interviewees with relevant stakeholders in relation to the conceptual framework. First stakeholder salience will be analysed based on each stakeholder's individual legitimacy, power and urgency. Furthermore each actor's discourse will be analysed. Based on these two sections, results for system legitimacy and deliberative governance can be given.

In the last chapter the research questions will be answered. These conclusions will be translated to recommendations to come closer to achieving the CBD target of 10 % protection of the marine environment by 2012. At the end discussion points for this report will be given.

2. Stakeholder salience and discourse analysis in deliberative governance

2.1 Governance

A few decades ago government started shifting towards governance, influenced by societal processes of globalization, regionalization and the development of information technology. "Governance can be defined as a society-centred way of 'governing' or 'steering', accentuating coordination and self-governance, manifested in different types of policy arrangements, which are an expression of an increasing encroachment of state, civil society and market, with vague demarcation lines (Tatenhove, 2003)". This shift can be noticed in the focus (horizontally) and locus (vertically) of democratic politics. With regard to the focus, the expansion to new sites, actors and themes resulted in less formalized forms of governance based on mutual interdependence. Multi-actor and network governance are outcomes of this horizontal transformation. Multi-actor governance emphasizes governance in which different actors share responsibility for future direction of the problem domain (Dewulf, 2007). Network governance focuses on network and their rules which contain knowledge about actors involved, their perspectives and interests and the arenas in which policy making takes places through interactions between different stakeholders (Klijn, 2005). Considering the locus where policy making takes place, politics shifted from national to sub-national and supranational level, resulting in multi-level governance. Some of the competences of national states are transferred to an authority below or above national level, being either sub- or supranational (Tatenhove, 2003).

A key concept to understand governance is policy networks, which came in existence as reaction against rational models of policy making (Hajer, et al., 2004). Kickert defines policy networks as 'more or less stable patterns of social relations between interdependent actors, which take shape around policy problems and/or policy programmes'. Important features of policy networks are the amount of stakeholders depending on the problem framed, (in)formal relationships between different stakeholders, interaction based on deliberation and problem-solving, unequal power distribution and semi-open access for interested actors. In fact policy networks combine the informal, decentralized and horizontal aspects within policy arrangements (actors, resources, rules and discourses) with mutual interdependence of public and private actors in policy making and its implementation (Kickert, et al., 1997).

2.2 Deliberative democracy

From the 1990s the theory of democracy took a strong deliberative turn. Democratic idealism used to be realised by collective decision-making through mechanisms like voting and representation which were assumed to sum up all different preferences and interests of the public. Deliberative democracy takes collective decision-making to a next level in which individuals actively participate through means of deliberation. The decision can only be legitimate to the public if they are convinced about its justification. Concerning deliberative democracy, two different types exist: the liberal constitutionalist and discursive conception. According to the first type, deliberation could be used philosophically to support crucial concepts of liberal theory (like political equality and human rights) and to discuss different democratic practices (like elections, legislatures, courts and democratic constitutionalism). Unfortunately this approach does not come to the essence of deliberation, a method of communication which stimulates reflecting on preferences of different actors. Therefore the discursive type of democracy will be used in this report. The core of deliberation aims at

communication inducing reflection upon preferences without enforcing, which makes discourse a crucial concept. For now discourses will be defined as shared means of making sense of the world embedded in language (Dryzek, 2000). The hype of reflection in this era originates from reflexive modernity, formulated by Ulrich Beck, Anthony Giddens and Scott Lash (Beck, et al., 1994). They start questioning previously taken-for-granted forces to social control. In addition Beck stresses the importance of risk society regarding environmental problems. Risk society emphasizes how society organizes itself in response to risk (Beck, 1992). There is room for democracy in the organisation of society because broad participation takes place in the selection, allocation, distribution and amelioration of risks. Since 1970 already democratic innovations take place in the environmental area. Reflexive modernity as well as risk society is preoccupied with the future. In this context it means a future that is chosen and not a trajectory to which everyone must adjust. Therefore discourses are important to reveal factors that can prevent or distort political dialogue and collective decision-making (Dryzek, 2000).

Recent perspectives on deliberative democracy combine governance with practice-oriented problem solving. Simply stated it is only a matter of approaching problems with the appropriate people and policies. Practice-oriented policy analysis looks to ordinary people to address social problems in cooperation with other political, civic and economic actors. Democratic engagement is not enough to create a deliberative democracy. Lines of accountability and communication channels should be established ensuring that deliberative efforts of civil society reach the higher levels of politics (Fung, et al., 2001), broadening the effect from local until national level or beyond. If this is successfully reached, a pluralistic and reflexive deliberative democracy is born (Hajer, et al., 2003).

2.3 Deliberative governance

This governance type applies deliberative principles of argumentation, transparency, openness and reciprocity. Deliberation is different from other ways of communication because it can change judgments, preferences and views during interaction without coercion, manipulation or deception. The three attributes which define deliberative governance are: the focus on practical problems, the interaction between state and economical and civil society actors and the problem-solving approach through exchange of argumentation and visions.

In the context of governance, policy analysis was performed from the practical perspective. This analytical focus approached the problem by considering various aspects of the situation, objective as well as personal. To come to practical problem-solving, the interdependent relation between the agency and the world, activity, meaning, cognition, learning and knowing should be acknowledged (Lave, et al., 1991). In the end this practical policy analysis consists of three phases: assessing the conditions that led to the problem at stake, a summary of feasible scenarios which could solve the problem taking into account the means available and the legal procedures and an evaluation of the results of the chosen policy intervention.

Through means of inclusion of actors from civil society and market, policy makers try to build legitimacy for policy decisions which will probably affect these two sectors. By involving affected parties in the decision-making process, implementation and compliance with the decisions made are expected to increase. Nevertheless, deliberation still pays attention to power and interest, these new actors do not come alone, they bring along their own hidden agenda, their own power and interests. These additional actors will bring possibly new perspectives, knowledge and ideas which can generate new interests, reshape our

understanding of existing interests and influence political pathways marked by power and interest (Fischer, 2003).

Deliberation aims at the creation of a setting in which people can learn from one another. Therefore it requires two-way communication based on mutual trust. It focuses on how problems are framed, the possible range of solutions and who should be held responsible for solving them (Reich, 1990). To reach this, negotiating and argumentation techniques are used. In fact deliberation is more than negotiating; it is 'a way of (re-) creating new patterns of collaboration, of challenging practices or of conforming or consolidating existing political positioning (Hajer, et al., 2003)'.

Deliberative governance is an appropriate umbrella framework to address the discussion of a representative network of MPAs in the Dutch part of the North Sea by 2012. This issue fits with the three attributes that define deliberative governance. The focus on practical problems: the deadline is set by the CBD to establish a network of MPAs by 2012 which protects 10 % of the marine environment. The Netherlands, as Contracting Party, has to comply with this deadline. Although there is willingness to establish this network, there is fear for economic sacrifices. Therefore a practical solution must be found which balances environmental as well as economic values. To reach this deadline there is discussion between the government, environmental NGOs, users of the North Sea and research institutes, corresponding with the second attribute. This discussion will be analyzed by performing a stakeholder typology which is based on power, legitimacy and urgency of the actors towards the problem, in this case the establishment of MPAs. The last attribute concerns the (un)spoken language and its true revelation. Why this issue is not solved yet can be investigated through the argumentation and the interests of the different stakeholders involved. Once this is revealed, the underlying problems can be dealt with. To deepen this third characteristic a discourse analysis will be performed. The stakeholder typology and discourse analysis together will reflect on the deliberative governance perspective by addressing the first characteristic, how this practical problem can be solved. In the end recommendations will be given how the Netherlands can come closer to the realization of the target of 10 % marine protected area by 2012 of the CBD.

2.4 Stakeholder typology

One of the two sub frameworks within this thesis is the stakeholder typology. A common way to analyze different stakeholders is based on the salience analysis of legitimacy, power and urgency of the stakeholders of Jacques Chevalier (Mitchell, et al., 1997). Within this approach a stakeholder is defined as "any group or individual who can affect or is affected by the achievement of the organization's objectives (Freeman, 1984)". It is assumed that these three attributes define the identities of different stakeholders. The three attributes are explained below.

Legitimacy refers whether or not the interests and needs of the stakeholders are appropriate, desirable and valuable.
Power is defined as the relation between social actors in which one has the opportunity or means to convince other actors and to privilege them in the planning process.
Urgency means the extent to which the claim (of an area in which the stakeholder wants to pursue its activity) asks immediate attention from the stakeholder.

Based on these definitions a dynamic model is created in which stakeholders possess one, two or three of the attributes. Stakeholders with only one characteristic are discretionary (legitimacy), dormant (power) or demanding (urgency). Stakeholders which possess two of

the three attributes are dominant (power and legitimacy), dependent (legitimacy and urgency) and dangerous (power and urgency). Stakeholders who possess all three of these characteristics are important and their interests will probably be taken into account. These stakeholders are categorized as definitive actors (Mitchell, et al., 1997). The visualisation of this concept is shown in Figure 1.

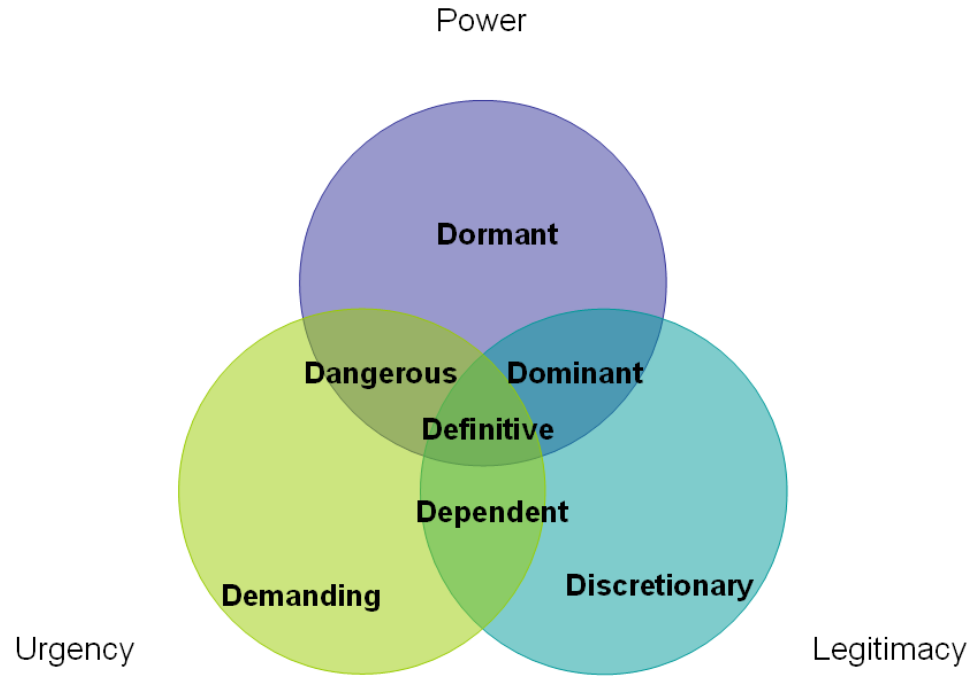

Figure 1: Stakeholder salience in terms of legitimacy, power and urgency (Mitchell, et al., 1997)

The definitive stakeholder possesses all three attributes: they can influence the outcome, other stakeholders consider their involvement important and the outcome is important to this stakeholder. The discretionary stakeholder is a stakeholder whose participation is desired by other stakeholders (Mitchell, et al., 1997). The three attributes of power, legitimacy and urgency have subdivisions as well. Below each of them will be explained.

2.4.1 Legitimacy

In the part of deliberative governance, legitimacy was an important issue to create carrying capacity for acceptance and implementation of the decisions made by policy makers. Scharpf defines three different types of legitimacy in the context of governance: input, throughput and output legitimacy (Scharpf, 1999).

Input legitimacy characterizes the motto ‘government by the people’. In fact input legitimacy focuses on the means by which stakeholders participate: representation, inclusiveness and process (Kelly, 2008). Organisations try to increase their legitimacy by developing norms in a representative manner. This means the formulation of politics and policy should reflect bottom-up participation. Participation can vary from the strict form (elections, public hearings and citizens forums) to more reflexive and deliberative forms (interactive policy making and authentic dialogue) (Scharpf, 1999). It is challenging to integrate the numerous actors, with their diverse and sometimes conflicting interests. Inclusion is similar to representation, because both attempt to provide accountability. However inclusion focuses as well on the participation of non-electoral bodies like experts or civil society. The last characteristic of input legitimacy concerns the process. This means norms, rules and standards can be legitimate only if they result from fair procedures, deliberations or discourses. Tools which

facilitate this are transparency rules, public participation mechanisms, controls against corruption and power sharing devices (Janet, et al., 2005).
Another important type of legitimacy is throughput legitimacy which is based on legality, transparency and quality of decision-making. With respect to quality of decision-making, deliberative democracy through means of arguing, reason-giving and mutual learning has a higher change of reaching better outcomes. This leads to the last legitimacy type, output legitimacy which favours 'government for the people'. The effectiveness and efficiency of policy-making is at the core of this approach. Politic choices are legitimate if they promote public welfare (Scharpf, 1999).
Output legitimacy takes place if problems can be solved only through collective solutions and not through individual actions, market exchange and voluntary cooperation of civil society (Scharpf, 1999). Output legitimacy is concerned with an organization's effectiveness in generating useful norms and ensuring their implementation. To assess what is a good outcome, a normative judgment is made determining whether a law, standard or rule is fair, just, well ordered, universally accepted or supportive of a particular goal. In the end the relation between legitimacy and compliance is a virtual circle. Norms which are perceived as legitimate will result in greater compliance. In turn effectiveness will lead to increased legitimacy (Kelly, 2008).
Deliberative governance has aspects of each of these types of legitimacy: the increased participation from input legitimacy corresponds with the inclusion of economical and civil societal actors, the deliberative quality from throughput legitimacy results in problem-solving through the exchange of argumentations and shared visions and the focus on the effectiveness of policy making from output legitimacy can be linked to practical oriented policy making. Therefore this legitimacy typology will be used to analyze the legitimacy of the process of the establishment of MPAs in the North Sea.

Scharpf's legitimacy typology looks at the legitimacy of the system and as well at the individual legitimacy through input legitimacy based on representativity. However another legitimacy typology is necessary to look closely at the stakeholder's legitimacy with respect to the issue at stake, in this case the creation of MPAs in the North Sea. Therefore the stakeholder legitimacy of Robert Phillips will be used (Phillips, 2003). In this analysis Phillips make the link between legitimacy and power, two of the three attributes of stakeholder salience. It is assumed that some of the stakeholders merit greater moral consideration that others when it comes to decision-making. In the past it was argued that stakeholders should be based on normative features. Phillips continued this trend and distinguishes normative and derivative legitimacy.
Normative legitimacy is based on stakeholder fairness. The organization has a moral obligation towards these stakeholders, by virtue of their being human. Vice versa, those stakeholders have normative claims on the organisation. This illustrates a cooperative situation from which both parties can benefit. This means both participants will have to make contributions and/or sacrifices. This will not prevent from free-riding to take place. To identify normative stakeholders, the question 'For whose benefit … should the organization be managed?' provides the answer.
Derivative legitimacy is concerned with actors who have the power to affect the institution and its normative stakeholders. This can even take place when these derivative stakeholders do not have normative legitimacy towards the institution. Therefore this category is perceived as the secondary form of legitimacy. In this context derivative stakeholders bear resemblance with dangerous or dormant stakeholders, defined in stakeholder salience. The effects of derivative stakeholders could be either beneficial or harmful to the organization. Favourable

media attention is an example of beneficial effects, while competitors and terrorists fall under the harmful category.
In the end normative stakeholders will receive different treatment and managerial attention compared to derivative stakeholders (Phillips, 2003). Therefore only actors which possess normative legitimacy are defined as legitimate stakeholders in this report.

2.4.2 Power

Power is a complex and contested concept. Over the years it has been defined in distinctive ways. In the past, three different faces of power have been noticed. Dahl started the first face by defining "A has power over B to the extent that A can get B to do something that B would not do otherwise (Dahl, 1957)". From this statement two important characteristics can be derived. First A has intentionally power over B. Secondly, power is visible. Apparently there is a conflict between the desires of A and B. A wins and B looses and as a consequence B has to change its behaviour. Pluralists did not agree with this conceptualization of power and defined the second and the third face of power. Bachrach & Baratz reacted on the intention factor within Dahl's definition of power (Bachrach, et al., 1962). Behaviour or actions of the dominators of the process can have unintended effects, of which the initiators are not aware. However this can still be called power. Examples which show this face of power are the mobilization of bias and non-decision-making. Bias can result in decision-making which leaves points of conflict unintentionally out of the discussion. In extreme situations this could lead to non-decision-making when nothing is reached. Lukes, who marks the third face of power, takes into account the behaviour and interests of the people involved in power relations (Lukes, 1974). He says power is exercised to shape people's preferences so that neither overt (Dahl) nor covert (Bachrach & Baratz) conflicts exist. A problem with this approach is how to define true interest of people.

With the transformation from government to governance, power is put in another perspective. Within this context, different approaches to understand power came into existence. Ian Hurd talks about the problem of social control, how to make actors comply with the implementation of society's rules (Hurd, 1999). He distinguishes three ideal type mechanisms which correspond with three currencies of power: coercion, self-interest and legitimacy. This approach will not be applied in this report because it is too action-oriented, while the stakeholder analysis focuses on how power is exercised by different actors to convince each other through means of interaction. Arts and van Tatenhove relate three different types of power to three interconnected levels in policy making: relational power at the level of policy innovation, dispositional power at the level of policy arrangements and structural power at the level of political modernization (Arts, et al., 2005).

The power taxonomy in this conceptual framework goes one step further than Arts and van Tatenhove's typology. For this report the power distinction of Barnett and Duvall will be used (Barnett, et al., 2005). This approach is based on two analytical dimensions: the kind of social relations through which power works and the specificity of social relation through which effects on actors' capacities are produced. This power typology is suitable to analyze the discussion between different stakeholders about MPAs in the North Sea, because it bases different types of power on the type and degree of interaction of the actors. Interaction between different actors is important in the stakeholder analysis of this report. Through looking at the relations between different stakeholders not only types of power, but also different discourses will be revealed. The concept of discourse will be explained further in this chapter.

The first dimension distinguishes positions of social relations of interaction ('power over') and social relations of constitution ('power to'). In relations of interaction, power is a resource used to determine actions and conditions of other actors. On the other hand in relations of constitution power is entangled in the process of shaping actors as social beings which empower social identities and capacities. The second dimensions concerns the degree of social relations through which power works, which can either be direct and socially specific or indirect and socially diffuse. Relations can be called specific if there is a direct causal or constitutive connection between the actors which are in physical, historical or social positional proximity. In the opposite situation power works through indirect and socially diffuse relations even if connections are detached or mediated by another actor or if they operate at a physical, temporal or social distance (Barnett, et al., 2005). Figure 2 below shows the four types of power generated by this taxonomy.

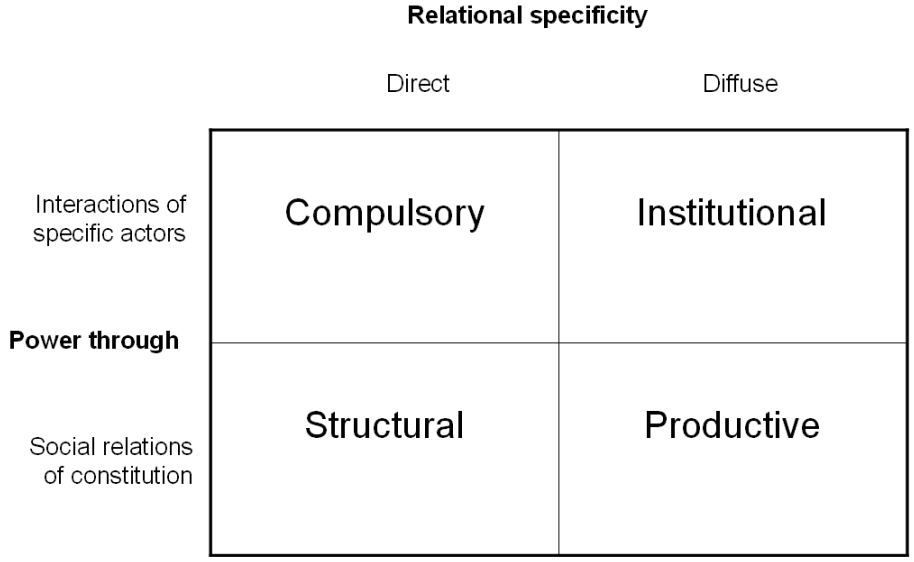

Figure 2: Power taxonomy (Barnett, et al., 2005)

Compulsory power can simply be defined as direct control over another. This type of power focuses on relations between actors that shape directly the circumstances or actions of other stakeholders. This does not mean compulsory power is only limited to material resources. Symbolic and normative resources can contribute to compulsory power as well. Dahl's definition of power contains the characteristics of compulsory power: A possesses power over B, the desires of both actors conflict and A has resources, either material or not, to change B's actions. However on one thing compulsory power exceeds Dahl's approach, the actor possessing power does not only act intentionally. Unintentional actions can as well be part of compulsory power. Therefore compulsory power is best understood from the perspective of the recipient (Barnett, et al., 2005).

Institutional power works similarly to compulsory power, only it broadens it scope by controlling actors indirectly. The indirect path is created by (in)formal institutions that mediate between the two actors at stake. The characteristics of institutional power will be revealed by highlighting differences between compulsory and institutional power. Those two types of power differ in three ways. First, actors with compulsory power have direct access over resources to change other's actions, while actors with institutional power do not posses the institution that determines B's behaviour. Secondly, institutional power works in indirect ways, which means that both actors are socially removed, either in time or space. Temporally,

institutions established at one point in time can have ongoing and unintended effects later. Spatially, institutional arrangements (decisional rules, formalized lines of responsibility, divisions of labour and structures of dispersed dependence) influence the behaviour or conditions of others. Third, institutional power focuses on the decisions which were not made. Bachrach & Baratz are important in this context, because they speak about unintentional power which can lead to bias or non-decision-making (Barnett, et al., 2005).

Shifting towards the other dimension of relations of constitution, structural power can be summarized as constitution of subjects' capacities in direct structural relation to one another. This relation of constitution is mutually, because social beings and their relational capacities, subjectivities and interests are directly shaped by the structural positions they occupy and these structural positions on their turn determine the social beings and their existence. Obviously structural and institutional differ, while the former determines social capacities and interests, the latter is more action-oriented. Another difference with institutional power encompasses its definition of structure. Institutions' structures are interchangeable, while structural power perceives structure as an internal relation which is able to exist due to its relation with the structural position of another stakeholder. In fact structural power shapes the fates and conditions of actors in two critical ways. One, structural positions do not necessarily create equal relations; in stead structures dedicate different capacities and different advantages to different positions. Two, these social structures determine not only actors and their capacities, but also their self-understanding and subjective interests (Barnett, et al., 2005).

Productive power is the other type of power based on relations of constitution. Therefore there are some similarities between structural and productive power: both rely on social constitutive processes which are affected by practices of actors, both contribute to shaping self-understanding and subjective interests of actors and in both situations no visible conflict should occur for power to exist. Of course there are as well differences that mark the boundaries between structural and productive power. Productive power takes places through social diffuse relations and not through direct contact like structural power. This difference has two implications for the concept of productive power. Power is derived from systems of knowledge and discursive practices of broad and general social scope. Therefore this type of power is associated with discourses. In this context discourses are understood as "in defining the (im)possible, (im)probable, the natural, the normal, what counts as a problem…" These discursive processes produce social identities and capacities to which they give meaning. This makes the degree of subjectivity another difference between structural and productive power. Structural power is based on hierarchical and binary relations who determine structurally empowered and weak beings. Productive power is concerned with all social identities with their capacity and initiative to take action for socially advantaged and disadvantaged. As result this type of power does not limit to binary hierarchical relations (Barnett, et al., 2005).

For the identification of stakeholder salience, only actors which possess compulsory or/and structural power are defined as powerful actors.

2.4.3 Urgency

Power and legitimacy are perceived as independent variables in stakeholder salience theory. To make this model more dynamic, urgency is added as third attribute. In the dictionary urgent is defined as 'calling for immediate attention'. Urgency can be measured on two criteria: time sensitivity and criticality. Time sensitivity focuses on the degree of managerial delay in attending to the claim of relation that is unacceptable to the stakeholder. Criticality deals with the importance of the claim or relation of the stakeholder to the issue at stake. This

criticality can occur for the following reasons: ownership which makes it very expensive for the stakeholder to leave the organisation, sentimental value towards the organisation, high expectations in the future for the organization's performance and exposure. To be perceived as urgent, it is important to comply with the two criteria of time sensitivity and criticality (Mitchell, et al., 1997).

2.5 Discourse analysis

Discourse originates from the Latin 'discursus' which means 'running to and from'. Nowadays discourse is interpreted as 'written or spoken communication or debate' or 'a formal discussion of debate' (Compaxt Oxford Dictionary, 2001). In the meanwhile different definitions are created for discourse analysis of which the most important ones are explained below.

It all dates back to 1929 when Jurgen Habermas, a German sociologist and philosopher, was born. During his career Habermas wanted to combine social science with philosophical analysis and pursued three goals to reach this: it must be explanatory, practical and normative. Based on these three characteristics, Habermas reaches legitimacy through morally justified procedures which directly confront the most difficult obstacles. According to Habermas practical discourse is 'a procedure for testing the validity of norms that are being proposed and hypothetically considered for adoption'. The ultimate result of Habermas' discourse ethics would be powerless and based on the best argumentation techniques. Habermas' discourse approach contains similarities with Michel Foucault's definition of discourse analysis. This French philosopher, summarized discourse as 'systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices that systematically construct the subjects and the worlds of which they speak' (Lessa, 2006). According to Foucault power is an important concept that decides what can be said. Moreover he combines power with knowledge which is the reason and the result of power (Foucault, 1980). Both approaches deal with language and communication, concern power to be crucial and accentuate context-dependency. While Habermas focuses on the normative side, Foucault provides an analytical approach. In his discourse analysis Foucault does not pursue to judge about what should be done, he only reveals the current developments of social discourses. Therefore it is limited to give policy recommendations and not really appropriate for the purpose of this thesis report.

Another perspective on discourses is given by Maarten Hajer. He perceives discourse analysis as a tool to examine trust relations in societal issues. To come to a solution actors have to develop a shared understanding of the core of the problem. Following this line of thinking Hajer defines a discourse as "an ensemble of ideas, concepts and categorizations through which meaning is allocated to social and physical phenomena, and which is produced and reproduced in an identifiable set of practices". This means language does not float through society but is guided through operational routines. The focus is on how and where actors speak and not on what they say. Hajer's discourse analysis focuses on the agency and the individual level expressed through discourse coalitions. A discourse analysis is a group of agents which share a social construction based on historical discourses which contain knowledge about similar problems that happened in the past (Hajer, et al., 2003).

John Dryzek is as well known for his contribution to discourse theory (Dryzek, 1997). Dryzek's perception of discourse builds on Habermas' normative approach. According to Dryzek discourses are understood as "shared, structured ways of speaking, thinking, interpreting and representing things in the world. Synonyms are frames, speech genres or interpretive repertoires". Each discourse rests on assumptions, judgments, debates,

agreements and disagreements in the environmental area no less than elsewhere. They are stories built from specific kinds of structural elements. Dryzek defines four structural elements which he uses to define each of the environmental discourses in more detail. They are:

1. Basic entities whose existence is recognized or constructed
2. Assumptions about natural relationships
3. Agents and their motives
4. Key metaphors and other rhetorical devices

Dryzek develops a taxonomy for organizing conflicting environmental discourses. Eight discourses are defined as arguments against industrialism, "the long-dominant discourse of industrial society", and its commitment to unlimited growth in goods and services as part of the "good" life, which is the ninth discourse. The taxonomy is defined according to two dimensions. The first dimension concerns the degree to which alternatives wish to move away from the conditions created by industrialism: reformist or radical. The second dimension further defines the character of the alternative proposed: prosaic or imaginative. Prosaic alternatives take the "political-economic chessboard set by industrial society pretty much as a given". On the other hand, imaginative alternatives "seek to redefine the chessboard". These two dimensions give four categories of environmental discourses, shown in Figure 3.

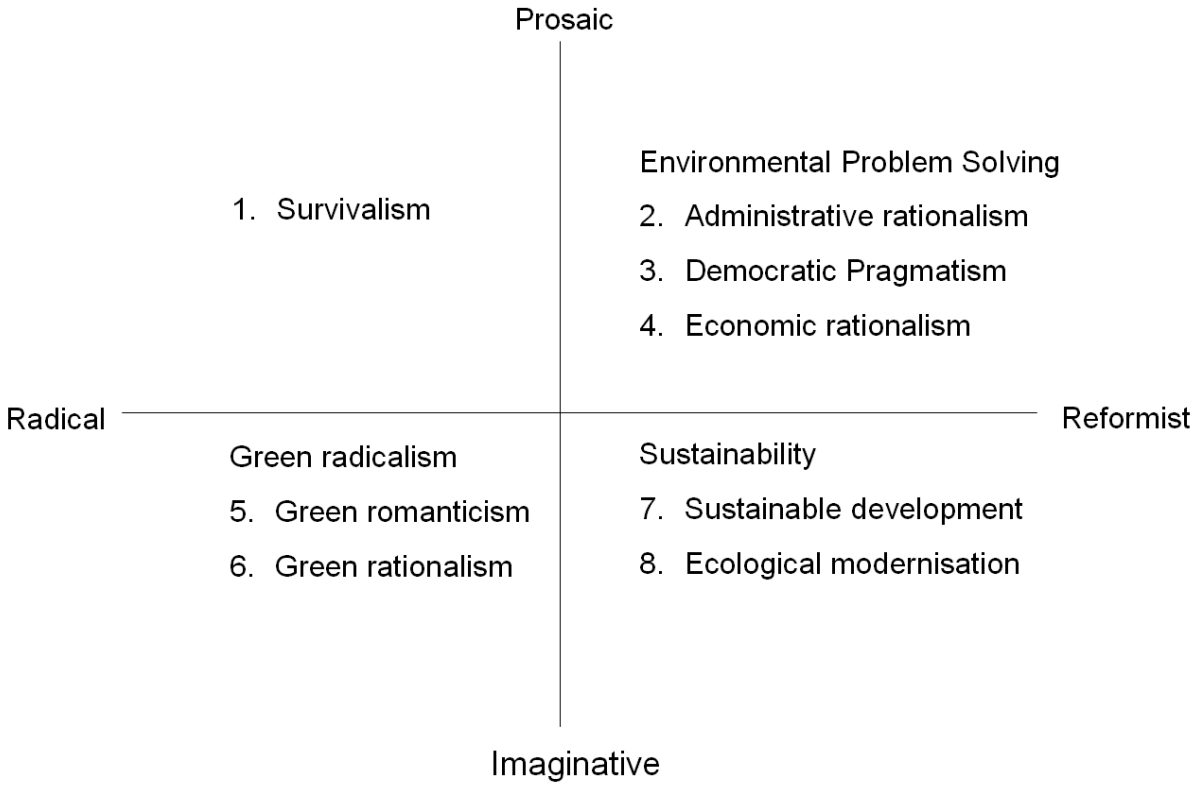

Figure 3: Environmental discourses defined by Dryzek's taxonomy

The radical and prosaic category is called survivalism, which is characterized due to its attention to limits and carrying capacities. This discourse was very popular in the 1970s, stimulated by The Club of Rome, a global think tank that deals with a variety of international political issues. In 1972 they published 'The Limits to Growth', in which they modelled the consequences of a rapidly growing world population and finite resource supplies. The core of this discourse consists of the idea that continued economic and population growth will eventually reach the limits of the carrying capacity of the Earth and its resources. Survivalism

can be called radical because it wants to redistribute power within the industrial political economy and reorientate away from perpetual economic growth. It is also defined as prosaic because it seeks solutions in the opportunities provided by industrialism: greater control of existing systems by administrative control, more science-based decision-making and enforcement by other responsible elites.

The combination of reformist and prosaic gives the discourse environmental problem solving. It devotes it prosaic character due to the fact that it takes the economic-political stable situation of industrialism for granted. On the contrary they recognize tat the political-economic status quo needs to be readjusted to cope with environmental problems, especially via public policy. Three sub discourses exist within environmental problem solving: administrative rationalism, democratic pragmatism and economic rationalism. The distinction is based on three critical stakeholders that will be involved: experts, people or the market.
Administrative rationalism aims at environmental problem solving through increased involvement of experts, because environmental issues are quite complex and involve systems which have been subjected to studies of natural scientists for the last decades. Moreover it stresses hierarchical structures more than equality or competition.
Democratic pragmatism can be perceived as interactive problem solving within the structure of the liberal capitalist democracy. In this context pragmatism has two definitions: a practical, realistic orientation to the world and a more philosophic interpretation of a problem solving lifestyle in a world full of uncertainty. The ultimate goal is a flexible process involving many voices and cooperation across a plurality of perspectives in order to secure legitimacy for decision-making.
Economic rationalism is defined as such by its commitment to the intelligent deployment of market mechanisms to achieve public ends. The rise of this discourse in environmental problems has to do with the broader ascendancy of market-oriented thinking, within a shared context of economic slowdown and budget deficits.

Reformist and imaginative together fulfil the request for sustainability. The era of sustainability started in 1987 with the publication of the Brundtland report by the World Commission on Environment and Development. Sustainable development was defined in this publication as development that 'meets the needs of the present without compromising the ability of future generations to meet their own needs' (United Nations, 1987). The imaginative approach wants to solve imbalance between environmental and economic values. It is reform because it does not contain limits. Sustainability can be divided in the discourses of sustainable development and ecological modernization.
Sustainable development starts from the recognition that development of world's people can not be met following the growth rate of industrialized countries. However economic growth is necessary to satisfy the needs of the world's poor. Therefore economic growth should be promoted and guided in ways that reflect environmental benignity and social justice for present as well as for future generations.
Ecological modernization refers to a restructuring of the capitalist political economy in a more environmental sound direction making it possible for economic development and environmental protection to go hand-in-hand. The 'pollution prevention pays principle' is a popular slogan for this discourse. There is a strong and weak version of ecological modernization. The strong or reflexive ecological modernization predicts that environmental affaires will be coupled to the kind of risk in Beck's risk society, previously described in this chapter. But as long as environmental affaires are treated by pollution control and management of material resources, a weak or techno-corporatist ecological modernization will prevail. In this weak case the state, corporate capitalism and the scientific establishment

will be able to oversee and manage the transition to a more environmentally sensitive economic system.

The last category, green radicalism, includes imaginative and radicalism. This discourse rejects the basis structure of industrial society and consists of radically different understandings of the environment, human-environmental interactions and human society. This category subdivides two streams: green rationalism and green romantism, corresponding with the two axes on which this discourse is based.
Green rationalism points to multi-faceted social and ecological crises which can only be solved through radical political action and structural change. This discourse takes over some ideas from the Enlightenment. The rationality of the Enlightenment stands for open-ended and critical questioning of predefined values, principles and ways of life. Green rationalism applies this type of rationality in environmentally defensible direction.
Green romantism is convinced that industrial society induces a wrong conception of persons and their place in the world. Therefore they want to create new kinds of human sensibilities that are less destructive to nature.

One of the three characteristics of deliberative governance is problem-solving based on argumentations and visions. Discourse analysis is the appropriate tool to address this characteristic. Discourse analysis is a variable concept, looking at the above mentioned definitions. To analyze the stakeholder discussion about MPAs in the Dutch part of the North Sea, Dryzek's discourse analysis will be used to reveal the true interests of the different actors. It is a practical approach to discourse analysis because it consists of nine predefined discourses. Moreover Dryzek makes the link between discourse analysis and deliberative democracy, because he takes not the liberal constitutionalist, but the discursive conception of deliberative democracy which stresses reflection for deliberation. Reflection through means of discourses is important to reveal factors that can prevent or distort political dialogue and collective decision-making.

3. Marine protected areas on international and national level

3.1 International framework of marine protected areas

About two decades ago the concept of MPAs came into existence. Until now it has been defined in many different ways. This report will define MPAs according to the World Conservation Union: "Any area of intertidal or subtidal terrain together with their overlying waters and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment (Kelleher, et al., 1995 & IUCN, 1988)."

The ecosystem approach is important regarding marine and coastal biodiversity. Specifically for the European Marine Strategy the Ecosystem Approach is described as 'a comprehensive integrated management of human activities based on best available scientific knowledge about the ecosystem and its dynamics, in order to identify and take action on influences which are critical to the health of the marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem integrity'. This definition puts human beings in the centre of the natural ecosystem. This involves that human activities in ecosystems should be managed in order that they do not compromise components which contribute to the structural and functional integrity of the ecosystem. MPAs are designed to regulate or forbid human activities in order to restore the marine ecosystem and its components. Therefore the ecosystem approach must be considered in the creation of MPAs (CBD, accessed 3-02-2010).

Before deepening in the legislation about MPAs, a broad perspective will be given of regimes on international, regional and national level related to the demarcation of MPAs.

3.1.1 Global

United Nations Convention on the Law of the Sea (1982)

It all dates back to 1982, when the Law of the Sea Convention was adopted. This Convention defined the rights and obligations for coastal and other states in the marine zone. The most important outcome of this Convention with respect to MPAs is the distinction between territorial sea, in which coastal states have sovereignty, and the Exclusive Economic Zone (EEZ) and the Continental Shelf, in which states can exercise sovereign rights. A country's territorial sea ends at 12 nautical miles from the coast and the Exclusive Economic zone extends to 200 nautical miles. The national continental shelf reaches even 350 nautical miles from land. In those three types of areas coastal states have the right to designate MPAs (UNCLOS, accessed 8-01-2010). The Netherlands sovereignty over the North Sea includes an area of more than 57000 km² (Dotinga, et al., 2009).

Convention on Biological Diversity (1992)

The Convention on Biological Diversity (CBD) entered into force at the Rio Earth Summit in 1992. This Convention functions as a tool to implement the principles of Agenda 21, the blueprint for sustainable development. This Convention aims at three goals: biological diversity, sustainable use of its components and a fair and equitable sharing of the benefits from the use of genetic resources. To address these objectives the Conference of the Parties

(COP) has established seven thematic programmes of work corresponding with seven types of biodiversity present in the world. One of them is marine and coastal biodiversity.

The programme of work on marine and coastal biodiversity consists of five elements: integrated marine and coastal area management, marine and coastal living resources, marine and coastal protected areas, mariculture and invasive alien species. This thesis will focus on the third one, marine and coastal protected areas as a management tool for the conservation and sustainable use of marine and coastal biological diversity. In fact the COP adopted the decision VII/5 in 2004 to develop a global network of marine and coastal protected areas by 2012, consistent with international law and including a range of levels of protection. The establishment of these areas should not be limited to areas within national jurisdiction. The levels of protection could be sustainable use, extractive use or no take zones. Moreover decision VII/30 aims at the effective conservation of at least 10 % of each of the world's ecological regions by 2012 (CBD, accessed 3-01-2010).

Ramsar Convention on Wetlands of International Importance (1971)

This Convention is important because it is the first one aiming at habitat protection. Similar to the CBD, the Ramsar Convention aims at a network of wetlands which are important for global biological diversity and for the sustenance of human life through ecological and hydrological they perform. The Ramsar Convention protects as well marine wetlands if the water should not exceed six meters depth at low tide. Of all Ramsar sites more than a third has a marine or coastal component. Therefore these wetlands can be designated as MPAs as well. 159 countries are Contracting Party to this Convention. The Netherlands is as well a Contracting Party and has 49 protected areas under the Ramsar Convention. An example of a marine wetland protected by the Ramsar Convention in the Netherlands is the Wadden Sea (Ramsar, accessed 8-06-2010).

World Heritage Convention (UNESCO, 1972)

The Convention concerning the Protection of the World cultural and Natural Heritage was adopted to protect natural and cultural areas of outstanding value. In April 2009 890 areas were protected by this Convention, of which 689 are cultural, 176 natural and 25 mixed. To qualify as natural site the area should be of sufficient size and ensure the integrity of ongoing ecological and biological processes. Although this Convention is as well suitable to conserve marine ecosystems, less than 7 % of them have coastal or marine features. To designate a marine area it should be situated within the territorial sea of the Contracting Party. The Netherlands has eight sites on the World Heritage list, only one of them, the Wadden Sea, is a natural and as well a marine site (World Heritage Convention, accessed 8-06-2010).

Man and Biosphere Programme (UNESCO, 1971)

This Programme was established at the UNESCO Biosphere Conference in 1968 at which government and NGOs gathered together to decide how to solve threats occurring to the biosphere. A Council was formed from different experts from the Member States which launched 'the biosphere reserve project' emphasizing the importance of the establishment of reserves which meet scientific, educational, cultural and recreational needs. Originally this Programme aimed at creating protected areas reflecting the important ecosystems of the planet in which the resources could be protected and in which research and monitoring could be conducted. Over the years the MAB had been reviewed. Nowadays it is a cluster of scientific research projects with three focuses: minimizing biological diversity loss, creating awareness about how cultural diversity and biological diversity affect each other and promoting environmental sustainability through the World Network of Biosphere Reserves.

Worldwide 564 sites are designated in 106 countries. For the Netherlands, only one area is defined, the Wadden Sea (Man and Biosphere Programme, accessed 8-06-2010).

World Summit on Sustainable Development (2002)

Chapter 17 of the World Summit on Sustainable Development held in Johannesburg in 2002 aims at sustainable development and integrated management of oceans, coastal areas and seas, including the exclusive economic zones. Moreover this Summit stresses the implementation of the work programme of marine and coastal biological diversity of the CBD and its joint work programme with the Ramsar Convention. The CBD sees Ramsar as the leading implementation partner on wetlands for the CBD and developed a Joint Work Plan for 2002-2006. With respect to the ecosystem approach a representative network of MPAs should be established by 2012 consistent with international law and based on scientific information (UN, accessed 7-04-2010)

Bonn Convention on Migratory Species (1979)

The Convention on the Conservation of Migratory Species of Wild Animals, also knows as the Bonn Convention, aims at the conservation of terrestrial as well as marine and avian migratory species throughout their range. It is an intergovernmental treaty under the UN Environment Programme. The 1st of January at least 113 countries from Africa, Central and South America, Asia, Europe and Oceania have adopted this treaty. Two types of migratory species are distinguished: migratory species threatened with extinction and migratory species that need or would benefit from international cooperation. The extinct species are protected by restoring their habitats, decreasing the obstacles to migration and controlling other factors that could harm them. International cooperation with respect to migratory species is facilitated through global or regional agreements. For example fall the small cetaceans in the North Sea and the seals in the Wadden Sea under an agreement of this Convention (Convention on Migratory Species, accessed 14-06-2010).

International Maritime Organization (1948)

In 1948 the International Maritime Organization (IMO) was created in Geneva. In 1959 the first meeting of IMO took place. Nowadays 169 countries are Member of IMO to which three associate Members could be added. Interested intergovernmental and non-governmental organizations can attend the meetings as well. IMO's statement is safe, secure and efficient shipping on clean oceans. IMO is constantly updating existing legislation or developing new regulations for the marine zone. Under IMO Particularly Sensitive Areas can be established. They require special protection because of recognized ecological (unique or rare ecosystem, diversity of the ecosystem or vulnerability to degradation by natural events or human activities) or socio-economic (significant area for recreation or tourism) or scientific reasons (biological research pr historical value) which could be vulnerable to damage by international maritime activities. In the Netherlands the Wadden Sea is adopted as such a particular sensitive area (IMO, accessed 11-06-2010).

MARPOL (IMO, 1973/1978)

MARPOL is the International Convention for the Prevention of Pollution from ships and came into existence 1973 and was modified in 1978. It total it consists of 6 Annexes occupied with pollution from oil, noxious liquid substances, harmful substances in packaged form, sewage, garbage and air pollution from ships. Under MARPOL certain sea areas are defined as 'Special Areas' which require mandatory methods for the prevention of sea pollution due to technical reasons associated with their oceanographical and ecological conditions and the

sea traffic taking place in these areas. The North Sea qualifies as a 'Special Area' for garbage and prevention of air pollution by ships (MARPOL, accessed 10-6-2010)

Conclusion

On global level different international regimes have to be considered in the context of MPAs. UNCLOS is important to define the different maritime zones being the continental shelf, the exclusive economic zone and the territorial sea. The Ramsar Convention covers only a part of the marine zone, namely wetlands. The World Heritage Convention considers areas of outstanding natural and cultural value, while the Man and Biosphere Programme focus on scientific research projects to limit biological diversity loss. Unfortunately those regimes lack marine areas. The Bonn Convention looks merely at species. IMO and MARPOL are established for the sake of shipping. Despite those different regimes, the Wadden Sea qualifies as protected area almost under each regime.

With respect to MPAs in the Dutch North Sea, the Convention on Biological Diversity's approach to establish a network of MPAs will be pursued. The Netherlands is a Contracting Party to this Convention and it is the only global regime that has a clear vision and guidelines to achieve about MPAs. Its deadline of establishing a representative network of MPAs that covers at least 10 % of the marine environment by 2012 is followed up by OSPAR on regional level and Natura 2000 on EU level, which will be explained in the regional section below.

3.1.2 Regional

Birds Directive (EU, 1979)

In 1979 the first piece of nature legislation was developed, the Birds Directive, a comprehensive scheme of protection for all wild bird species naturally occurring in the EU. This Directive was adopted unanimously by all Member States as a response to the increasing concern about the declines in Europe's wild bird populations resulting from pollution, loss of habitats as well as unsustainable use. Therefore this Directive focused on the protection of habitats for endangered as well as migratory species through the establishment of a coherent network of Special Protection Areas (SPAs) comprising all the most suitable territories for these species. Since 1994 all SPAs form an integral part of the Natura 2000 ecological network, which is as well based on the Habitats Directive (European Commission, accessed 10-06-2010). The Natura 2000 network should be established by 2012 in the marine environment, which means the marine network of SPAs should be completed by 2008.

Bern Convention of European Wildlife and Natural Habitats (Bern Convention, 1982)

The Convention on the Conservation of European Wildlife and Natural Habitats, also known as the Bern Convention, entered into force in 1982. Until now it covers the natural heritage of 46 countries at the European continent and extends to some countries in Africa. This Convention aims at four objectives:

1. Conserve wild flora and fauna and their natural habitats
2. Monitor and control of endangered and vulnerable species
3. Assist with the provision of assistance concerning legal and scientific issues
4. Promote co-operation between countries

It distinguishes strictly protected species and protected species listed in the Convention's Appendix II and III. A variety of marine species can be found on those two lists of which some of them, like the whitebeakened dolphin, occur in the North Sea. As result areas important for the migratory species of Appendix II and III are protected, called Areas of

Special Conservation Interest, forming the Emerald network in 1998. This ecological network operates alongside the EU's Natura 2000 programme. In fact it is based on the same principles as the Natura 2000 network, but it represents the extension to non-EU countries (Europa, accessed 9-08-2010). The Natura 2000 network will be explained in the next section of this chapter.

Habitats Directive (EU, 1992)

In 1992, the Council Directive on the Conservation of natural habitats and of wild fauna and flora, shortly the Habitats Directive, was adopted as EU response to the Bern Convention. It aims at the protection of 220 habitats and approximately 1000 species. Based on the protected habitats and species Special Areas of Conservation (SACs) are established. Together the Special Areas of Conservation, protected under the Habitats Directive, and the Special Protection Areas, protected under the Birds Directive, form the cornerstones of the European ecological coherent Natura 2000 network (European Council, 1992).

Water Framework Directive (EU, 2000)

In 2000 the EU established a framework aiming at Community action in water policy, commonly referred to as the Water Framework Directive (WFD). The Directive wants to protect the bodies of surface water (river, lakes, transitional and coastal) and groundwater of the European Union by achieving 'Good Ecological Status' and 'Good Chemical Status' by 2015 for them.

With respect to the marine environment, the WFD covers transitional and coastal waters up to one nautical mile from the territorial baseline of a Member State for Good Ecological Status and up to 12 nautical miles for a Good Chemical Status. Concerning MPAs, the WFD provides additional measures in Article 6 of this Directive including areas designated for the protection of economically significant aquatic species, in addition to protected areas established under other EU legislation such as the Habitats Directive (Graaf, de, et al., 2007).

Common Fisheries Policy (EU, 2002)

In 2002 the Common Fisheries Policy (CFP) of the EU was established. This Policy sets quota for which Member States are allowed to catch what amounts of each type of fish, as well as encouraging the fishing sector by various market interventions. Worldwide 24 % of the fish stocks are overexploited. In the EU it is even worse; two-thirds of its fisheries are overexploited. Several measures are taken for better fisheries management and ecosystem conservation. The CFP recognizes the importance of MPAs in this context. MPAs' application in the fisheries sector could vary from offshore fishing closures to coastal MPAs in temperate waters. Attention is paid to the ecological effects on MPAs, its effect on fisheries and other sectors, its performance, its planning and its design. MPAs could function as tool for both fisheries management and nature conservation (Hoffmann, et al., 2009).

Marine Strategy Framework Directive (EU, 2008)

The Marine Strategy Framework Directive (MSFD) came to live to fill the gaps in EU environmental policy, which focuses mainly on terrestrial areas. This framework is proposed to develop and implement national strategies to achieve good environmental status in the marine environmental by 2020. Research has shown that areas protected from human impacts result in long-lasting and rapid increase in marine productivity, populations and diversity. Therefore the MSFD acknowledges the importance of MPAs (European Commission, accessed 9-08-2010).

OSPAR

OSPAR is the mechanism which gathers 15 Governments of West-Europe together with the European Community to strive for the protection of the marine environment within the North-East Atlantic Ocean. In fact it is based on the Oslo Convention against dumping established in 1972, which was broadened by the Paris Convention in 1974 to cover as well land-based sources as offshore industry. In 1998 OSPAR was extended by an Annex about biodiversity and ecosystems to cope with non-polluting human activities that can adversely affect the sea. Since this Annex has a broad scope, it is subdivided in four elements, of which one is MPAs. In 1998 OSPAR Ministers decided to establish an ecological coherent network of well-managed MPAs in the North-East Atlantic by 2010. A small difference with the Natura 2000 network is that OSPAR encourages more explicitly as well areas beyond national jurisdiction to establish MPAs. But the biggest difference between those two is that OSPAR's list of endangered and/or declining habitats and species is broader and more suitable to the marine environment, compared to the Habitats Directive (OSPAR, accessed 10-06-2010).

Conclusion

On regional level the EU and OSPAR are the most important organisations that follow-up the Convention on Biological Diversity. The Birds and Habitats Directives as well as OSPAR's list of threatened and/or endangered species and habitats provide criteria for protection of species and habitats which form the cornerstones of MPAs.

3.1.3 The Netherlands

Interdepartmental Directors Meeting North Sea
(in Dutch: Interdepartementaal DirecteurenOverleg Noordzee)

This coordinated organ is developed to create a congruent policy for the North Sea and to communicate this clearly to the outside world. Within this organ the following Ministries are represented: VenW, the Ministry of Housing, Spatial Planning and Environment, LNV, the Ministry of Economic Affairs, the Ministry of Foreigner Affairs, the Ministry of Defence and the Ministry of Finance. Meetings of IDON are chaired by VenW. As a result the integral management plan of the North Sea for 2015 was formulated by this organ. This plan aims at strengthening the economic value of the North Sea without harming its nature and landscape by striving for sustainable marine spatial planning (IDON, 2005).

Nature Conservation Act (in Dutch: Natuurbeschermingswet, 1998)

Protected areas will be designated under the Dutch legislation dealing with area protection, the Nature Conservation Act. Areas that can be protected under this Act are Natura 2000 areas divided in Habitats and Birds Directive areas, protected natural monuments and wetlands. Currently this Act only applies to the territorial sea, but in the future its geographical scope is expected to be extended to the EEZ. Under these circumstances The Dutch Government only proposed the North Sea Coast area and the Voordelta as protected areas to the EU because those do not exceed the 12 nautical miles of the Dutch territorial sea (LNV, accessed 9-08-2010).

Flora and Fauna Act (in Dutch: Flora en fauna wet, 1998)

Concerning measures to protect wild plant and animal species, the Flora and Fauna Act was established in 1998. With respect to MPAs, this Act as well is only applicable within the 12 nautical miles zone. It is important for the protection of species occurring in the North Sea like dolphins, porpoises, grey seals and numerous bird species (LNV, accessed 9-08-2010).

3.2 Convention on Biological Diversity

As explained in the previous, the Convention on Biological Diversity is the global regime that is the cornerstone in the international legislation on MPAs. COP decisions VII/5 and VII/30 result in the target of establishing a global representative network of effectively managed protected areas by 2012 which should at least cover 10 % of each of the world's ecological regions. To reach this target, the following four steps are outlined to come to a representative network of MPAs (CBD, accessed 9-08-2010).

1. Scientific identification of an initial set of ecologically or biologically significant areas.
   The best available scientific information and the precautionary principle will be used to identify these initial sites. The following scientific criteria are used to identify ecologically or biologically significant marine areas which need protection in open-ocean waters and deep-sea habitats are:
   a. *Uniqueness or rarity*
   b. *Special importance for life history stages of species*
   c. *Importance for threatened, endangered or declining species and/or habitats*
   d. *Vulnerability, fragility, sensitivity or slow recovery*
   e. *Biological productivity*
   f. *Biological diversity*
   g. *Naturalness*
2. Develop a biogeographic, habitat and/or community classification system.
   This step is important to reflect the scale of the application and the ecological characteristics of the area.
3. Use qualitative and/or quantitative techniques to identify sites to include in the network.
   These techniques should focus on recognized ecological importance or vulnerability and on ecological coherence through representativity, connectivity and replication.
4. Assess the adequacy and viability of the selected sites.
   The size, shape, boundaries, buffering and appropriateness of the site-management regime matter are taken into account to define the adequacy and viability of sites.

Those four steps are guidelines which will be applied by the EU and OSPAR to establish a network of MPAs.

3.3 EU

On the first of November 1993 the Treaty of Maastricht established the European Union, based on the foundations of the European Communities. The European Union (EU) aims at cooperation on political, economical and juridical issues. Nowadays this organisation consists of 27 Member States. A brief overview of the structure of the EU is given below, shown by the Trias Politica in Figure 4.

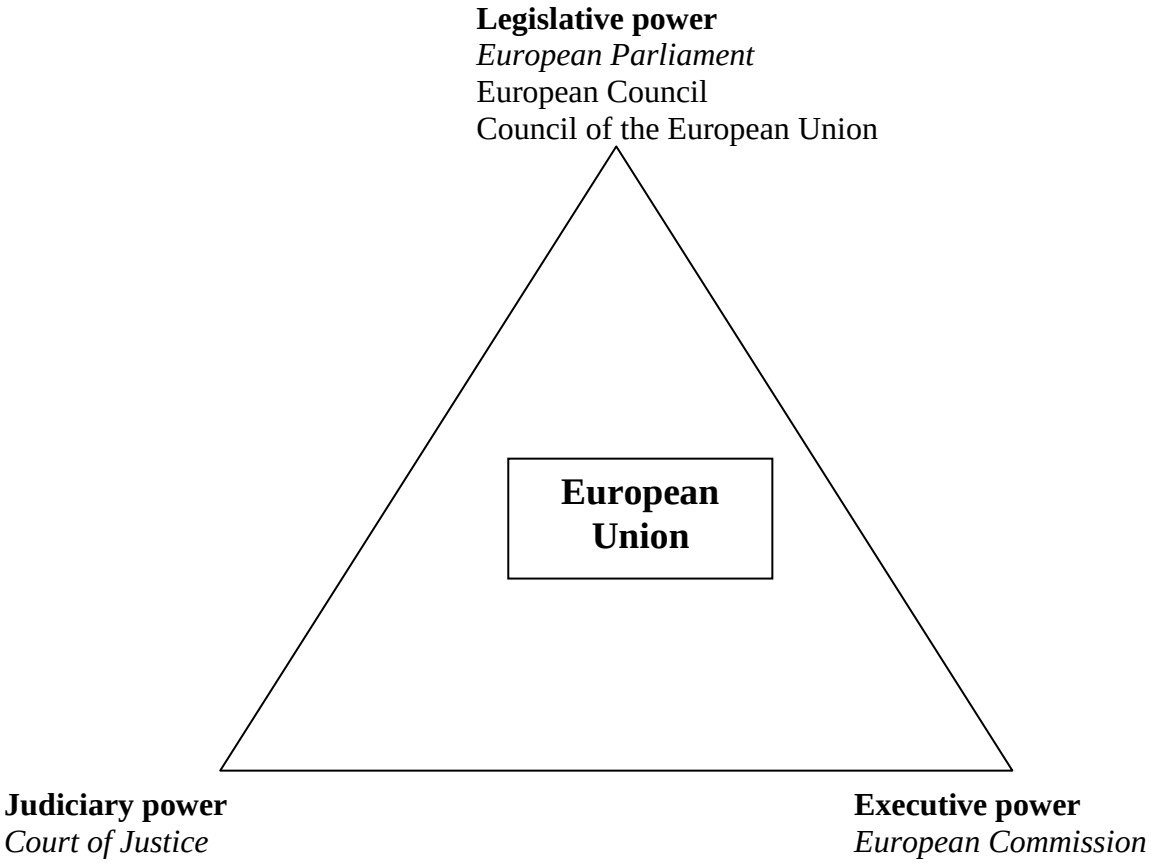

Figure 4: Structure of the organs of the European Union

The triangle of the European Union consists of the European Parliament, the European Commission and the Court of Justice representing the legislative, executive and judiciary bodies within this organisation. The European Commission consists of 27 Ministers, one from each Member State. This is the only organ within the EU which can initiate new legislation. The Parliament consists of 736 Members of Parliament which are elected every five years. Those Members of Parliament elect all Members of the European Commission. The European Parliament is accompanied by the European Council and the Council of the European Union to decide about legislation and about the budget of the European Union. They can accept, amend or reject European legislation. While the European Council consists of 27 representatives of the government of all the countries within the EU, the participation within the Council of the European Union varies per subject and requires the presence of the responsible ministers for the topic at stake of all 27 Member States. Once a Directive or Regulation is accepted the European Commission and the Court of Justice will check for compliance of the Member States. In case of non-compliance, the supranational nature of the EU has means to enforce their legislation (Dotinga, et al., 2009). If a Member State does not comply with the Directive at the end of the implementation period, the European Union has the following means to enforce compliance: the demand for information, the complaint, the notice, the reasoned opinion and finally the procedure of the Court of Justice of the European Communities (European Commission, accessed 17-02-2010).

Decision-making within the EU is characterized as supranational and intergovernmental. Supranationalism means that some of the competences of national states are transferred to an authority above national level, called supranational. Decision-making is done by majority voting, meaning not every country has to agree with the decision taken (Europa Nu, accessed

16-0-2010 a). Intergovernmentalism on the other hand stands for distribution of power among the sovereign Member States, which makes them in theory only legally bound to their own decisions. A prerequisite for this type of decision- making is that decisions must be taken unanimously (Europa NU, accessed 16-08-2010 b).

Obviously these two concepts conflict with each other. The institutional and political diversity of the Member States causes problems with regard to the adoption of policies established by the EU to harmonize and centralize legislation and implementation in the EU. This results in a time lag between the decisions made and their implementation by the Member States. Every country faces its own problems to implement EU legislation. EU policies and Directives are implemented on different times in countries, delaying harmonisation within the EU (Teague, 2001).

As mentioned previously in the chapter, two EU Directives were created, the Birds and Habitats Directive, which contain criteria to establish MPAs according to European legislation. Together they form the Natura 2000 network. All of them will be explained in detail below.

3.3.1 Birds Directive

A rapid decrease in the natural occurrence of wild birds in Europe was noticed. This decline represents a serious threat to the conservation of the natural environment, as well as to the underlying biological balances. Therefore the European Council declared in 1979 a Directive aiming at the conservation of all wild birds naturally occurring in European territory, known as the Birds Directive. The main criteria of this Directive are:

1. The frequent recurrence of at least 1 % of the individuals of the geographical (or European) population of one or more species (the so-called 1% criterion)
2. The prevention of threatened and vulnerable species listed in the Annex I list of the European Birds Directive.

With respect to the species and birds falling under this Directive, the following measurements will be taken concerning their living environment:

a) Creation of protected areas
b) Management corresponding with the ecological needs of habitats inside and outside protected zones
c) Re-establishment of destroyed biotopes
d) Creation of biotopes

For the species listed in Annex I special conservation measures concerning their habitat will be taken in order to ensure their survival and reproduction in their area of distribution. With regard to this, the following species will be considered:

a) Species in danger of extinction
b) Species vulnerable to specific changes in their habitat
c) Species considered rare because of small populations or restricted local distribution
d) Other species requiring particular attention for reasons of the specific nature of their habitat.

Member States should identify by 2008 the most suitable territories in number and size as Special Protection Areas (SPAs) for the conservation of these species, considering their protection requirements in the geographical sea and land area where this Directive applies (European Council, 2007).

With respect to the Netherlands, in The North Sea Coast north of the Wadden Sea, areas should be designated based not on seabird community level, but on species level. In the North Sea the following species of Annex I of the Birds Directive are subject to special protection measures: pearl diver, red-throated diver, loon, diver crest, storm petrels, storm petrels pale, pale shearwater, little gull, sandwich tern, common tern, arctic tern, little tern and black tern (Lindeboom, et al, 2005).

3.3.2 Habitats Directive

According to the marine and coastal biodiversity programme, critical habitats for marine living resources should be an important criterion for the selection of marine and coastal protected areas, within the framework of integrated marine and coastal area management. Conservation measures should emphasize the protection of ecosystem functioning, in addition to protecting specific stocks (CBD, accessed 3-01-2010).

In 1992 a Directive was born aiming at the conservation of natural habitats and of wild fauna and flora, also called the Habitats Directive. In total this Directive protects over 1000 animals and plant species and over 200 habitat types (including priority species and natural habitat types), which are of European importance according to the following criteria:

Site assessment criteria for a given natural habitat type in Annex I

a) *Degree of representativity* of the natural habitat type on the site.
b) *Area of the site* covered by the natural habitat type in relation to the total area covered by that natural habitat type within national territory.
c) *Degree of conservation* of the structure and functions of the natural habitat type concerned and restoration possibilities.
d) *Global assessment* of the *value* of *the site* for conservation of the natural habitat type concerned.

Site assessment criteria for a given species in Annex II

a) *Size and density* of the population of the species present on the site in relation to the populations present within national territory.
b) *Degree of conservation* of the features of the habitat which are important for the species concerned and restoration possibilities.
c) *Degree of isolation* of the population present on the site in relation to the natural range of the species.
d) *Global assessment* of the *value* of the *site* for conservation of the species concerned.

Member States carry out assessments of each of the habitat and species types in their country. Based on these national lists the Commission, in agreement with the Member States, chooses "Sites of Community Importance" by 2008. Once the list of "Sites of Community Importance" is finished, Member States designate these sites as "Special Areas of Protection" by 2012 (European Council, 1992).

Applying these criteria on the Atlantic bio-geographical region, which is the geographic boundary of this report, the following marine habitat types and species can be characterized.

The important habitat types are sand banks permanently flooded by sea water, rifts and subtidal structures formed by leaking gases. The two species types are marine mammals and fishes. The marine mammals' category covers gray and common seal, bottlenose dolphin and the porpoise, while river and sea lamprey, shad, fint and sturgeon fall under the fish species (Lindeboom, et al., 2005).

3.3.3 Natura 2000

These two Directives together form the basis for the Natura 2000 European ecological network aiming at the conservation of threatened and/or outstanding species and habitats in Europe, within an overall framework of sustainable development. This network is made up of two types of natural zones, namely Special Protection Areas (SPAs) classified under the Birds Directive and Special Areas of Conservation (SACs) classified under the Habitats Directive (Lindeboom, et al., 2005), shown in Figure 5 below. Management priorities and necessary conservation measures for SPAs and SACs should be taken in order to have a safeguarded, designated and effectively conserved Natura 2000 network by 2012.

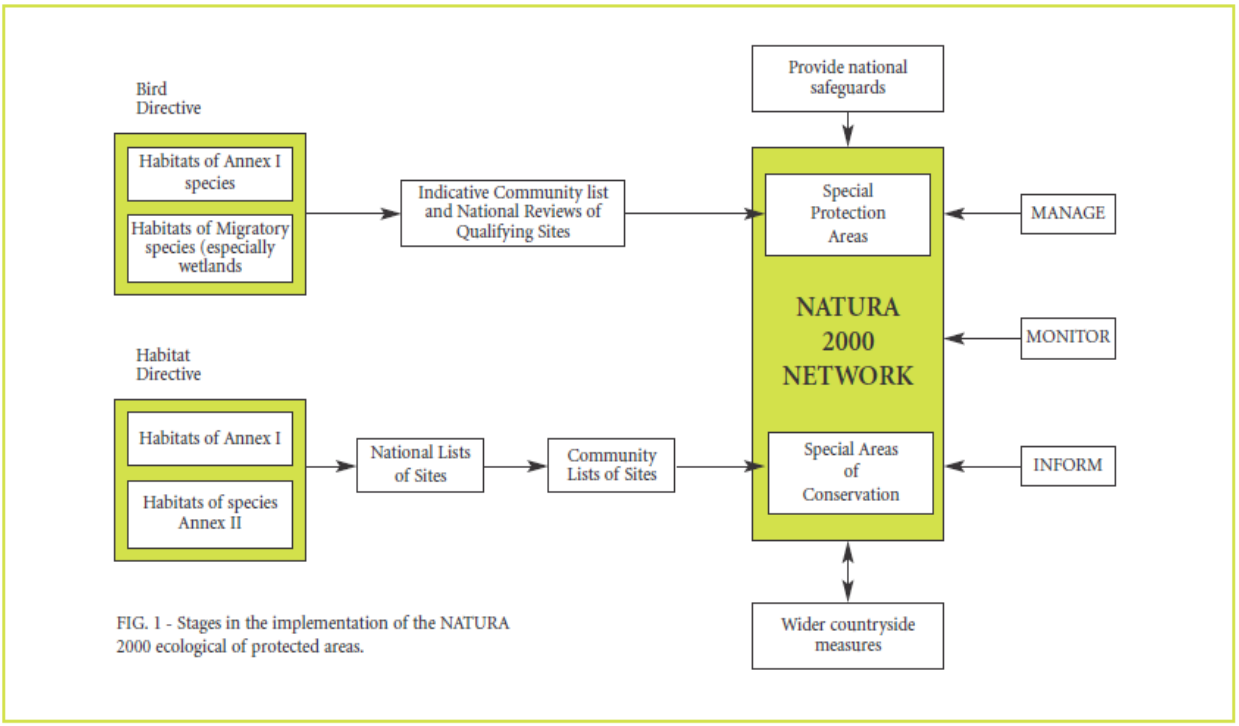

Figure 5: Criteria from the Birds and Habitats Directive which can be used for the designation of areas and how national laws and regulations on selected special protection zones can be applied (O'Brian, 1998)

After the Birds and Habitats Directive entered into force, respectively in 1979 and 1992, it was not clear for a long time whether these Directive could be applied for the same purpose in the marine environment. When it was made clear these Directives apply as well in the marine zone, there was still discussion about to which extent in the marine environment areas could be established based on these criteria. In 2007 the European Commission declared that the Birds and Habitats Directive could as well be applied outside territorial waters, for the EEZ. The European Environmental Council decided that each country should assign Natura 2000 areas for the marine zone by 2008.

The process to designate protected areas to be part of the European Natura 2000 network consists has three different phases: designation, the formulation of management plans and the licensing requesting.

3.4 OSPAR

OSPAR's history dates back to 1972, when the Oslo Convention against dumping was established. This convention was followed-up by the Paris Convention which had a broader scope, because it covered land-based sources as well as the offshore industry. These two conventions were combined in 1992 in the OSPAR Convention, which guides international cooperation on the protection of the marine environmental of the North-East Atlantic Ocean. Work under this Convention is performed by the OSPAR Commission, consisting of representatives of 15 Governments and the European Commission. The EU is a contracting party to this convention. The work of OSPAR covers six thematic strategies coping with impacts that could adversely affect the quality of the North-East Atlantic, shown in Figure 6. Every strategy has its own working group.

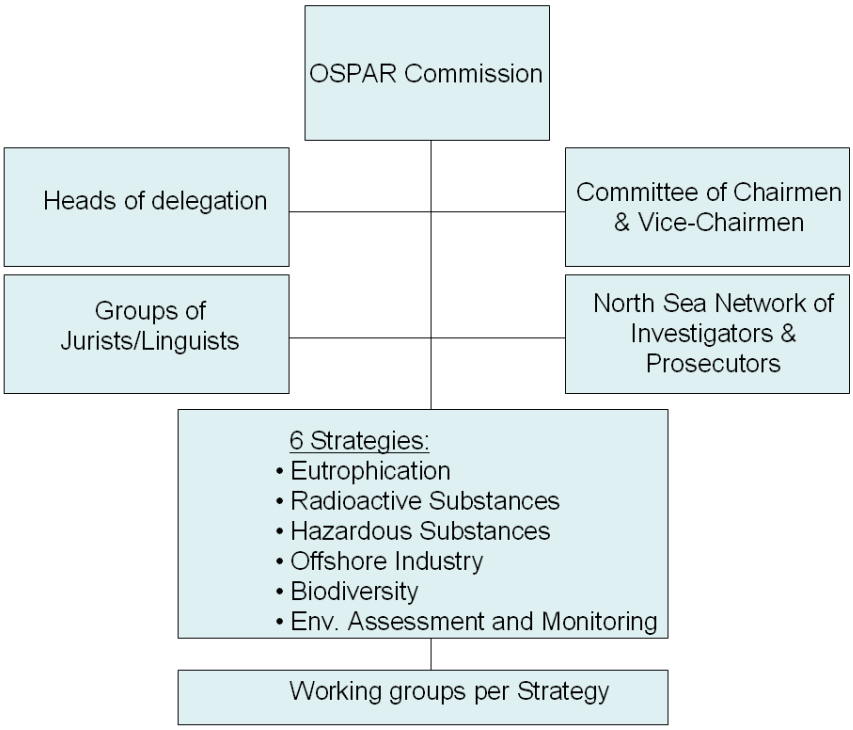

Figure 6: OSPAR Structure (OSPAR, accessed 16-08-2010)

The strategy relevant for this research proposal is the Biodiversity and Ecosystem Strategy. This strategy has a broad scope, since it covers all human activities, except those which may cause pollution, which can have adverse effects on the protection and conservation of the ecosystems and the biological diversity in the North-East Atlantic Ocean. A special committee is developed to deal with this strategy, called the Biodiversity Committee. One of the four elements within this strategy is an ecologically coherent network of well-managed MPAs. OSPAR's definition of MPAs are "areas for which protective, conservation, restorative or precautionary measures have been instituted for the purpose of protecting and conserving species, habitats, ecosystems or ecological processes of the marine environment" (OSPAR, accessed 10-06-2010).

OSPAR strategies and measures are adopted by means of a decision, a recommendation and an agreement. The decision is legally binding in that aspect that the Ministry is summoned by the Secretariat of OSPAR in a situation of non compliance. No penalties can be given by the Secretariat, only a 'blaming and shaming' tactic can be applied. A recommendation is not juridical obligatory, but the Netherlands and other countries consider it as legally binding.

Recommendation 2003/3 of the OSPAR Convention approved that by 2010 an ecologically coherent OSPAR network of well-managed MPAs will be established. An agreement is a working method. An example is the OSPAR List of Threatened and/or Declining Species and Habitats for the North Sea.

OSPAR's definition of MPAs is areas which contain measures for the protection, conservation, restoration or precaution of species, habitats, ecosystems or ecological processes of the marine environment. In 2003 the OSPAR Ministries adopted the recommendation to establish an ecologically coherent network of well-managed MPAs in the North-East Atlantic by 2010. This network aims:

- to protect, conserve and restore species, habitats and ecological processes which have been adversely affected by human activities;
- to prevent degradation of, and damage to, species, habitats and ecological processes, following the precautionary principle;
- to protect and conserve areas that best represent the range of species, habitats and ecological processes in the maritime area

An area qualifies as marine protected area when several, but not necessarily all of the criteria, listed in Table 2, are met. The detailed criteria are listed in Appendix B.1. The qualification must be based on best available scientific expertise and knowledge.

Table 2: OSPAR's ecological and practical criteria for the establishment of MPAs

Ecological criteria	**Practical criteria**
Threatened or declining species & habitats/biotopes	Size
Important species & habitats/biotopes	Potential for restoration
Ecological significance	Degree of acceptance
High natural biological diversity	Potential for success of management measures
Representativity	Potential damage to the area by human activities
Sensitivity	Scientific value
Naturalness	

3.5 Comparison Natura 2000 versus OSPAR

In the OSPAR nomination database, used by Contracting Parties to report on MPAs selected as components of the OSPAR network, references are made to the sites of bio-geographic regions, sites of Natura 2000 birds and sites Natura 2000 habitats. The initial OSPAR MPAs reported from EU countries largely overlap existing Natura 2000 sites. Most of the submitted areas for OSPAR EU Member States are already designated as Natura 2000 sites. Generally, the boundaries are the same as for the OSPAR sites (OSPAR Commission, 2007). However four differences can be noticed between Natura 2000 and OSPAR legislation.

Obviously there are institutional differences between Natura 2000 and OSPAR legislation. Natura 2000 is EU legislation divided over the Birds and Habitats Directives. Member States must comply with those Directives, if not, penalties will follow. As result Natura 2000 is legally rooted in the Dutch Nature Conservation Act (LNV, accessed 30-07-2010). OSPAR is a treaty organisation that looks for coherent regulation between neighbouring countries of the North-East Atlantic Ocean. So far it does not yet have legal foundation in the Netherlands.

Perhaps in the context of the European Marine Strategy Framework Directive OSPAR could be integrated in the Dutch Water Act (LNV, interview, 17-06-2010). Non-compliance with the OSPAR decisions, recommendations and agreement could not be legally enforced. Countries could only be subjected to 'naming and shaming' (RWS NZ, interview, 22-06-2010).

Regarding the content of Natura 2000 and OSPAR, three content differences can be found: different geographical scopes, different criteria for MPA selection and different habitats and species that need protection measures.

The geographical scope of the OSPAR network is larger compared to Natura 2000, because it includes Areas Beyond National Jurisdiction (OSPAR, accessed 10-06-2010). Although there was uncertainty about the boundaries of the Birds and Habitats Directives, the European Commission said that these Directives as well apply to areas outside territorial waters ("As far as Member States have competence, it applies to the exclusive economic zones. However, the marine species and habitats concerned generally have their main range inside territorial waters (E-3529/96, OJ C138, 5.5.97)", but how this happened resulted in a lot of confusion (Lindeboom, et al., 2005).

A more relevant difference for the purpose of this report is a different set of criteria for MPA selection within OSPAR compared to Natura 2000 because they include a different list of threatened and endangered species and habitats and an additional list of practical criteria that should be taken into account when establishing MPAs. This difference can be dedicated to the limitations of the Habitats Directive regarding the protection of the marine environment. Initially Natura 2000 was developed to establish protected areas on land. Afterwards it was extended to the marine environment, but the list of habitats and species in the Annex of the Habitats Directive is not complete to cover the marine zone. As result there is a specific focus on the species and habitats listed in the Directive, which results in an inflexible regime (RWS NZ, interview, 22-06-2010; Deltares, interview, 24-06-2010). Another reason for the minimum requirements within Natura 2000 is that EU Directives result in average measures because all Member States should be able to comply with them (Deltares, interview, 24-06-2010). OSPAR is a long existing organisation (Deltares, interview, 24-06-2010) which is specifically designed for the protection for the marine environment of the North-East Atlantic Ocean (Greenpeace, interview, 16-06-2010). Additionally OSPAR is more ambitious (Deltares, interview, 24-06-2010) and starts from an ecosystem perspective (Greenpeace, interview, 16-06-2010).

Looking at the site assessment criteria for habitats and species under the Habitats Directive and the ecological and practical criteria for OSPAR MPAs, other criteria are used for the establishment of MPAs. Representativity of the area, the structure and functions of the natural habitat and restoration possibilities can be found on both lists. The Habitats Directive adds size, density and degree of isolation for species selection and global assessment of the value of the site for habitats as well as for species. The criterion of global assessment of the value of the site is not further specified in the Habitats Directive, which leaves it open for interpretation and hard to compare in this case. As ecological criteria, high productivity, high natural biological diversity, sensitivity and naturalness are taken into consideration under OSPAR. Moreover practical criteria of size of the application, degree of acceptance by stakeholders and the political environment, potential for success of the management measures, potential damage to the area by human activities and the scientific value are applied. This comparison reveals that OSPAR has not only more ecological criteria, but takes

into account as well the practical side of the establishment of MPAs. A lot of the OSPAR criteria reflect the guidelines for MPAs established by the CBD as well, namely threatened, endangered or declining species/habitats, sensitivity, high biological productivity and diversity, naturalness and the size of the application.

The third difference is a consequence of the different criteria applied by Natura 2000 and OSPAR to establish MPAs. As a result different habitat types and species need to be protected. A comparison is given for habitats and species protected under Natura 2000 versus OSPAR. However a remark should be made about the geographical boundaries of Natura 2000 and OSPAR applied for this comparison. For Natura 2000 the Dutch Continental Shelf is used as boundary, while OSPAR looks at the Greater North Sea, shown in Figure 7a and 7b. This involves that OSPAR could protect habitats and species that can not be found on the Dutch Continental Shelf. The tables comparing Natura 2000 and OSPAR habitats and species can be found in the Appendix C.

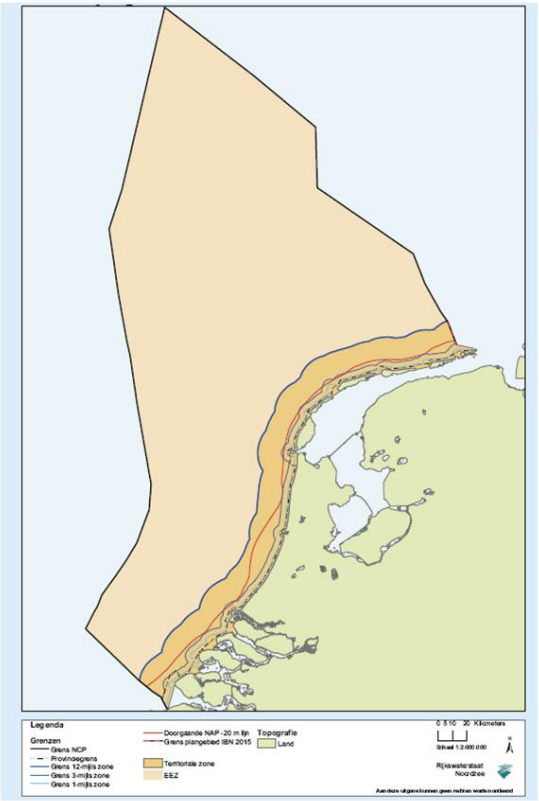

Figure 7a: Boundaries Natura 2000 habitats and species, Dutch Continental Shelf (IDON, 2005)
Figure 7b: Boundaries OSPAR habitats and species, Greater North Sea (OSPAR, accessed 15-08-2010)

Natura 2000 has only three habitat types in the Habitats Directive that exist in the Dutch Continental Shelf (Lindeboom, et al., 2005): sandbanks which are slightly covered by sea water all the time (habitat type 1110), reefs (habitat type 1170) and submarine structures made by leaking gases (habitat type 1180). OSPAR has 11 habitat types on its list of threatened and/or declining species and habitats for the North Sea. The sandbanks slightly covered by sea water all the time shows similarities with OSPAR's habitat type of intertidal mudflats. Concerning reefs, OSPAR divides these in *Lophelia Pertusa* (cold water coral) and *Sabellaria Spinulosa* (ross worm) reefs. Additionally OSPAR has habitat types for *Modiolus Modiolus* (horse mussel), *Mytulis Edulis* (mussel), O*strea Edulis* (oyster), *Maerl* (red algae)

and *Zostera* (sea grass) beds. As well coral gardens, chalk and sea-pen and burrowing mega fauna communities are habitats to be protected under OSPAR.

Birds are protected under the Birds Directive within Natura 2000 and OSPAR. The Birds Directive protects 13 species relevant for the Dutch North Sea. OSPAR's list has only three bird species occurring in the North Sea that needs protection. One species can be found on both lists, namely the *Balearic Shearwater*. Although the Birds Directive protects already five *Tern* types, OSPAR adds the *Roseate tern*. Three *Diver* species, two *Storm-Petrel* types, the *Loon* and the *Little Gull* can be found as well in the Appendix of the Birds Directive. OSPAR's last and third bird to be protected in the North Sea is the *Black-Legged Kittiwake*.

Concerning fish species that needs protection all fish under the Habitats Directive can as well be found on the OSPAR list of threatened and/or declining species, namely the *Sea Lamprey, Atlantic Sturgeon, Allis Shad* and *Houting*. The Habitats Directive adds the R*iver Lamprey* which is not put in the OSPAR list, because it is a freshwater species which will not be observed often in the marine environment. OSPAR extends its list with 15 more species covering *Eel, Dogfish, Shark, Ray, Cod, Skate, Seahorse, Porbeagle, Salmon* and *Spurdog* species.

With respect to mammals, reptiles and invertebrates, a lot of differences can be noticed between the Habitats Directive of Natura 2000 and the OSPAR list of threatened and/or declining species and habitats. In the mammal category, both share only the *Harbour Porpoise*. The Habitats Directive adds the *Bottlenose Dolphin, the Grey and Harbour/Common Seal,* while OSPAR puts *Blue and Northern Right Whale* as well on its list. Qua reptiles both regimes protect the *Sea Turtles*, only different sub categories. Natura 2000 protects the L*oggerhead Sea Turtle,* OSPAR on the other hand the L*eatherhead Turtle*. Concerning invertebrates the Habitats Directive lacks protection for this category. OSPAR protects three species within invertebrates: the O*cean Quahog*, the *Flat Oyster* and *Dog Whelk.*

3.6 The Netherlands

The Netherlands is a Member State of the EU and as well a Contracting Party to the CBD and OSPAR. Therefore it has to establish a representative network of MPAs by 2012 which covers 10 % of its marine environment. The Netherlands as one of the neighbouring countries of the North Sea exercises jurisdiction in the Dutch part of this sea which covers roughly 57000 km^2. Because the Netherlands is as well a Contracting Party to UNCLOS, it has coastal rights in its marine zones of which the most important ones are the territorial sea and the exclusive economic zone. The Dutch territorial sea extends to 12 nautical miles from the coastline, defined in the 1985 Act on the Limits of the Territorial Sea. In 2000 the Dutch EEZ was established to enhance the designation of MPAs.

Lindeboom et al. defined the following areas with important ecological values which could be possible MPAs in 2005.

1. Coastal Sea (Kustzee)
2. Dogger Bank (Doggersbank)
3. Cleaver Bank (Klaverbank)
4. Frisian Front (Friese Front)
5. Central Oyster Grounds (Centrale Oestergronden)
6. Borkumse Stones (Borkumse Stenen)

7. Zeeuwse Banks (Zeeuwse Banken)
8. Brown Bank (Bruine Bank)
9. Gas Seeps (Gasfonteinen)
10. Arctica Area (Noordkrompgebied)

With respect to the marine zone, are the Coastal Sea, the Zeeuwse Banks and part of the Borkumse Stones are situated in the territorial sea, while the other areas are located in the Dutch EEZ. The first five areas have a better scientific basis compared to the next five areas.

The **Coastal Sea** extends from the Voordelta and the Vlakte van de Raan in the South to the Wadden Sea in the North. This area owns its important ecological values to the high natural and experience values. This area has a high primary production and high benthos diversity in the neighbourhood of the Schierminnikoog. The fish populations are characterized by high species diversity. Under the Habitat Directive the sturgeon, fint, shad and lamprey are possible species which could be protected, as well as the existence of common and grey seals in the Wadden Sea and the Delta area and harbour porpoises across the entire area. Moreover this area functions as habitat for black sea ducks and eider ducks due to its shallowness and the presence of shellfish. Therefore the Voordelta and the Vlakte van de Raan are protected under both the Habitats and Birds Directive.

The **Dogger Bank** which crosses national boundaries qualifies under the Habitats Directive as habitat type 1110 sandbanks which are slightly covered by sea water all the time. In the western part increased macrobenthos diversity is noticed, while the southern part consists of fronts in summertime which results in increased concentrations of fish and bird species. Therefore the Dutch government designated this area to be protected according to the Habitats Directive.

The **Cleaver Bank** is valuable because it is the only area on the Dutch continental shelf which contains significant amounts of gravel. Moreover calcareous red algal are noticed on the surface. From the entire continental shelf the Cleaver Bank houses the highest bottom fauna diversity. Potentially this area is important for the propagation of fish species like ray and herring which both need hard substrates. Birds and harbour porpoises are observed in numbers that exceed natural occurrence.

The **Frisian Front** is part of the physical front along the south side of the central North Sea which is subject to summer stratification. This process imports silt and nutrients from the English coast which results in increased primary productivity. In the deeper part the Dutch coast river, consisting of slowly flowing water, stimulates sinking of this silt and nutrients. As result part of the bottom habitats a higher benthos biomass and diversity. Next to increased numbers of fish and bird species, the arctica is noticed several times in this area. Especially guillemots search for the Frisian Front in late summertime and autumn to forage there.

The **Central Oyster Grounds** owe their name to the extended oyster banks which existed here until the 19th century. Unfortunately they disappeared due to overfishing, climate change and maybe illness. Still this area is ecological valuable because its silty and deep characteristics have increased the benthos diversity. The Arctica, which is part of the species list of OSPAR, is as well observed in this area. This area can only be designated as marine protected area under OSPAR. Therefore this area is not yet nominated as protected area under Natura 2000.

The **Borkumse Stones**, situated on the border with the coast and in the neighbourhood of the Schiermonnikoog island, is special for the following three reasons: special zoobenthos, provisioning of above-surface resting places and prey for seals.

The **Zeeuwse Banks**, located at the opposite site of the coast, consists mainly of submerged, continuously shifting sandbanks as habitat type.

In the **Brown Bank** increased amounts of seabirds and harbour porpoises have been noticed. More research is necessary to reveal whether it is naturally occurring or by coincidence.

The **Gas Seeps** has several fountains or seeps where gas escapes through the sediment. Moreover research is going on to discover the presence of micro-flora and biogenic structures linked with seeps. If those are found, this area could be protected as habitat type under OSPAR.

Another valuable area is the **Arctica Area**, between the Central Oyster Grounds and the Dogger Bank. This relatively undisturbed part of the North Sea has a high variety of shellfish. The Arctica Area is called after the presence of the ocean quahog.

Based on this information Table 3 gives an overview of the different areas protected under the Habitats and/or Birds Directive and/or OSPAR. The surface coverage of all areas is summed up to see how much of the Dutch marine environment is protected.

Table 3: Areas protected under Birds -, Habitats Directive and OSPAR

Area	**Protection under Natura 2000**	**Surface protected under Natura 2000 (ha)**[1]	**Protection under OSPAR**	**Surface protected under OSPAR (ha)**[2]
North Sea Coast Area	Birds and Habitats Directives	140,000	Yes	141,605
Voordelta	Birds and Habitats Directives	90,000	Yes	81,888
Vlakte van de Raan	Habitats Directive	22,639	Yes	19,893
Dogger Bank	Habitats Directive	471,772	Yes	463,938
Cleaver Bank	Habitats Directive	123,764	Yes	124,012
Frisian Front	Birds Directive	288,061	Not yet	-
Total		1,136,236		831,336
Percentage		**17.76%**[3]		**13 %**[4]

Regarding the total percentage that will be protected under Natura 2000 and OSPAR, this will be sufficient to achieve the 10 % required by the CBD by 2012. The designation of those areas is not sufficient. By 2012 management plans should be finished that explain how the conservation objectives should be met. The protection measures listed in the management plans should be taken as well by that time. The process about MPAs is just getting started. IMARES, requested by LNV, is investigating whether other areas than those listed in Table 3

[1] Email communication with VenW
[2] OSPAR Commission, 2010
[3] Calculated with 6,394,892 ha for the Dutch Continental Shelf from OSPAR Commission, 2010
[4] The Directorate General for Public Works and Water Management has 14.5 %. The difference can be dedicated to the inclusion of the Wadden Sea. (RWS NZ, interview, 22-06-2010)

need specific protection under the Birds and Habitats Directive and in the context of the Marine Strategy Framework Directive. In addition research is being conduct to find out whether still other areas qualify for protection measures. By 2012 the Minister of LNV will inform the Second Chamber whether other areas in the North Sea need to be protected as well. In Table 4 the remaining six areas that qualified as ecologically valuable are listed with their surface and their potential status of protection.

Table 4: Additional potential areas that could be protected under the Birds- and Habitats Directive and OSPAR

Area	Protection under Natura 2000	Protection under OSPAR	Surface (ha)
Central Oyster Grounds	-	Yes	34,530
Borkumste Stones	Habitats Directive	Yes	47,900
Zeeuwse Banks	Habitats Directive	-	65,000
Brown Bank	Birds Directive	-	129,200
Gas Seeps	Possibly Habitats Directive	-	59,300
Arctica Area	-	Yes	100,000

As explained before, the Natura 2000 process to establish protected areas consists of three different phases: the designation, the formulation of management plans and the request for licenses. Based on those three stages, it will be clear where each of the six MPAs of Table 3 is situated in the Netherlands.

3.6.1 Designation

In the Netherlands the Minister of LNV is responsible to designate Natura 2000 protected areas. In the preparation phase the colleague Ministries, the Second Chamber, the European Commission, provinces and societal organisations are approached for advice. Based on this information a proposal for designation acts is made, accessible for the public. When the feedback is taken into account, the final designation acts can be made. Interested parties could appeal against this final designation to six weeks after its publication at the Court of States (LNV, accessed 27-07-2010).

The process of establishing MPAs in the Dutch North Sea started with the publication of the report 'Areas with special ecological values on the Dutch Continental Shelf' in 2005 (Lindeboom, et al., 2005). In this early phase only the Ministries of LNV and VenW and research institutes 'the National Institute for Coastal and Marine Management (in Dutch: RijksInstituut voor Kust en Zee, RIKZ) (currently Deltares) and Alterra Texel (currently part of IMARES) were directly involved. Scientists from other institutes like the Netherlands' Institute for Sea Research (in Dutch: Nederlands Instituut voor Onderzoek der Zee, NIOZ), the Netherlands Institute for Fisheries Research (in Dutch: RijksInstituut voor Visserijonderzoek, RIVO) (currently IMARES), WL/Delft Hydraulics (currently Deltares) and the Netherlands Institute for Applied Geosciences (in Dutch: Nederlands Instituut voor Toegepaste Geowetenschappen ,NITG) and Technical Physical Research Centre (in Dutch: Technisch Natuurkundig Onderzoekscentrum, TNO) contributed as well. Based on this report, LNV and VenW decided which areas should be designated to become MPAs (IMARES, interview, 24-06-2010).

Although Member States should have designated protected areas before September the 1st of 2008 at the EC, only one area, the Voordelta, was designated on February, the 19th of 2008 as Natura 2000 area. On December the 22nd 2008 the Minister of LNV proposed as well the

Dogger Bank, the Cleaver Bank, the Vlakte van de Raan and the part northern of Bergen of the North Sea Coastal Area to be protected under the Habitats Directive. The Frisian Front will be protected under the Birds Directive, but no application for designation is required for protected areas under the Birds Directive. From November the 14th until December the 12th 2008 the documents of those four areas regarding the protected habitat types and species, their maps and background information were publicly accessible (LNV, accessed 27-07-2010). All those areas were expected to be designated by the summer of 2010. February, the 25th of 2009 a part of the North Sea Coastal Area between Petten and Rottumeroog is designated as SAC according to the Habitats Directive and therefore this area is proposed as Natura 2000 area. April, the 13th of April, the Minister of LNV adopted a proposal for an amendment act for the North Sea Coastal Area and a proposal for a designation act for the Vlakte van de Raan. Both Acts contain the conservation objectives for both areas. From May the 6th until June the 16th 2010 feedback can be given on both Acts.

3.6.2 Management plans

For every Natura 2000 area a management plan should be formulated, at the latest three years after its designation. Those management plans contain measures and deadlines for the level of protection. Moreover activities in and around this protected area which affect possibly the conservation goals negatively should be regulated through means of this management plan. Those plans operate from an interactive perspective. Every six years the management plans are revised. In the North Sea, RWS NZ is responsible for the creation of the management plans (LNV, accessed 27-07-2010).

From the start of this phase environmental NGOs and sectors were invited to join decision-making. The reason behind the efforts for stakeholder involvement is the 'Faster and Better' advice of the Commission Elverding, responsible for accelerated decision-making of infrastructural projects. This method should contribute to efficient decision-making through involvement of inhabitants, decentralised authorities and societal organisations early in the process. This method resulted in the 'Code of Conduct for participation of the public' (Rijksoverheid, accessed 12-07-2010). It is as well in the Ministries' self-interest to involve all relevant stakeholders, because a broad-based process will result in carrying capacity for compliance. It is not worth the effort to make legislation which will not be followed up from start by civil society and economic actors (VenW, interview, 17-06-2010).

As result a lot of different covenants and discussion groups exist in which management plans for MPAs are being formulated. Special attention is paid to fisheries measures in protected areas, because those should as well be arranged under the Common Fisheries Policy and that takes time (LNV, interview, 17-06-2010). Different meetings exist for MPAs in the territorial sea and in the EEZ. In the territorial sea meetings are chaired by Jan Heijkoop, while the International Council for the Exploration of the Sea (ICES) is responsible for meetings about MPAs in the EEZ. The societal covenant North Sea fisheries, the Voordelta Covenant and the Heijkoop process are set up to discuss MPAs in the territorial sea, while Fisheries Measures in Protected Areas (FIMPAS) is meant for the EEZ.

The societal covenant North Sea fisheries consists of members of the cutter sector, LNV, WWF NL, North Sea Foundation, Dutch Product Board Fish (in Dutch: Productschap Vis), the Dutch Fishermen Association (in Dutch: Nederlandse vissersbond) and the Federation of Fisheries Associations (in Dutch: Federatie van Visserijverenigingen). The ultimate goal of the covenant is an agreement to achieve sustainable and societal accepted North Sea (cutter)

fisheries through means of certification, communication, education, protected areas in the North Sea and the management of stocks (MSC, accessed 14-07-2010).

The societal covenant Sustainable Voordelta gathers together the Ministries of LNV and VenW, Natural Monuments (in Dutch: Natuurmonumenten), North Sea Foundation, the Dutch Product Board Fish and the port authority of Rotterdam. They aim at congruency between the Natura 2000 marine protected area, nature compensation for the expansion of the harbour in Rotterdam and the commercial fisheries in the Voordelta. Therefore a management plan is being established which will be published the latest in 2011 (Product Board Fish, accessed 14-7-2010).

For the protected areas to be designated at the coast the Heijkoop process is developed named after the chairman Jan Heijkoop. This process looks how fisheries, amongst others the shrimp sector, can be continued. This process looks at measures that achieve the conservation objectives, which are supported by carrying capacity of the involved parties, which cause minimal problems with the fishing sector and which are scientific and juridical based.

In the Netherlands the Dogger Bank, Cleaver Bank and the Frisian Front are protected areas that fall in the EEZ, meaning they are discusses in FIMPAS led by ICES. At the last meeting of FIMPAS 35 participants containing scientists, fishermen, environmental NGOs and civil servants from several North Sea states cooperated (Noordzee Bloki, accessed 12-08-2010).

The management group of Visserijmaatregelen in Beschermde Gebieden (VIBEG) is created by the Minister of LNV to inform and support the development of national and international policy. In VIBEG representatives of WWF NL, North Sea Foundation, the Dutch Product Board Fish, the Federation of Fisheries Associations, IMARES and diverse directorates of the LNV and VenW are present. The Ministries have as well contact with contact with Sportvisserij Nederland, Greenpeace, port authorities and offshore oil, gas and wind energy production, which do not discuss along in the VIBEG composition (Noordzee Natura 2000, accessed 14-07-2010) .

3.6.3 Licenses

Projects or other operations that possibly have a deteriorative or clearly disruptive effect on the protected ecological values in a Natura 2000 area are subject to authorization. Licenses are usually provided by the Provincial Executives, but for areas at sea LNV is responsible for granting licenses (LNV, accessed 27-07-2010). Currently the process of creating a network of MPAs is not yet at the last stage of license procedures.

3.6.4 Current situation

The Netherlands will reach 10 % protection level of the marine environment on paper without a doubt. As mentioned before, those areas are still being designated. By 2012 all those areas should be designated and should contain management plans explaining how the conservation objectives will be met. Actual protection measures should be taken by 2012 as well. Environmental NGOs are waiting for real protection measures to be taken for the Dutch North Sea. The core of the discussion of protected areas in the Dutch North Sea is not about the areas proposed, but about the protection level of these areas. In the designation phase there was no stakeholder input from environmental NGOs and sectors. In the formulation phase they can influence how conservation objectives are met. The discussion is about whether some areas should be completely closed for all activities. Environmental NGOs and research institutes are in favour of some areas to be entirely closed. The users of the North Sea

perceive the concept of completely closed areas as too rigid. Therefore LNV is challenged to solve the imbalance between economy and nature regarding MPAs in the North Sea.

4. Empirical findings

4.1 Stakeholder salience

Stakeholder salience identifies whether stakeholders have legitimacy, urgency and power towards MPAs in the Dutch North Sea. The legitimacy, urgency and power of each actor will be analysed individually before adding them up to reveal which stakeholders are crucial in the discussion about protected areas in the Netherlands.

4.1.1 Legitimacy

With respect to each stakeholder's individual legitimacy, attention is paid to the question 'Do all these stakeholders have the right to claim legitimacy to the discussion of the establishment of MPAs? Do they possess normative or derivative legitimacy?' In general all stakeholders are in the position to claim legitimacy to this issue. It is the government's responsibility to take a decision about MPAs that complies with national and international level. For environmental NGOs the same argument applies, their aim is to strive for nature conservation. Logically economic users of the Dutch North Sea are not in favour of MPAs if they will be established in their operating area. Research institutes have provided scientific information to base decision-making about MPAs on. When MPAs will be designated, more research in these areas will be necessary.

True legitimacy goes further than just performing their work.
April, the 21st of 2008 the Commission Accelerated Decision-Making of Infrastructural Projects (In Dutch: Commissie Versnelling Besluitvorming Infrastructurele Projecten), shortly known as Commission Elverding, named after its chairman, presented its advice 'faster and better'. This advice results from cooperation between the Ministry of Housing, Spatial Planning and the Environment and VenW. Projects are delayed due to bad preparation, unclear decision-making and juridical struggles. According to 'faster and better', projects could be realised twice as fast as it used to be. Crucial in this advice is the intensive and early involvement of stakeholders, which avoids frustration, insecurity and unnecessary costs which results in a better quality of decision-making, acceleration of projects and more carrying-capacity (VenW, accessed 3-08-2010).

Regarding decision-making about MPAs, the 'Faster and Better' method of the Commission Elverding is applied. LNV, in cooperation with VenW has chosen for this participative setting to take decisions about MPAs in the Netherlands. All interested parties were invited to join decision-making. This means the government finds the participating stakeholders legitimate. In addition all participating stakeholders were satisfied with the relevant stakeholders being present at discussions. RWS NZ assists in the formulation of management plans for protected areas. A lot of effort is put in good decision-making; therefore all governmental bodies have legitimate claims.

Research institutes provide important scientific information to facilitate decision-making. The European Commission requests that MPAs are based on scientific information (European Commission, 2007). LNV hired IMARES to conduct research which will form the scientific foundation for the designation of protected areas and their management plans. VenW hired Deltares to perform research for their Directorate General of Water as well as for RWS NZ (Deltares, interview, 24-06-2010). Since LNV is in charge of the designation of MPAs, IMARES is more directly involved in comparison with Deltares. However both have normative claims regarding the discussion of MPAs.

All environmental NGOs possess to a more or lesser extent normative legitimacy. Normative legitimacy answers the question 'for whose benefit should the organisation be managed?' In this case it is legitimacy concerning a problem and not an organisation. The environmental NGOs will definitely benefit from the creation of protected areas in the Dutch North Sea. North Sea Foundation and WWF NL are present at discussion rounds, Greenpeace not, but they are as well approached by the Government. In the end all of them have normative legitimacy.

The users have as well legitimacy regarding the establishment of protected areas. Those measures could possibly affect the sectors operating in that area negatively. Therefore sectors are present at meetings about this topic. Fish Auction Den Helder participates through different channels with diverse Ministries and societal organisations. Moreover they are well represented in the political environment. The fishing sector will probably face the consequences of the creation of protected areas the most, because this sector has a continuous and prolonged effect on the ecosystem of the North Sea (IMARES, interview, 24-06-2010). NOGEPA feels less pressure, because they have proven their impact on the ecosystem is limited and they are important revenue for the Dutch Government. One third of the gas production of the Netherlands takes place offshore (NOGEPA, interview, 9-06-2010). Pondera Consult represents the Dutch Association of Wind Energy (in Dutch: Nederlandse Wind Energie Associatie, NWEA) in discussions. The construction of wind turbines offshore has less impact compared with fishing. However Pondera Consult does not mind protected areas will be established in the Dutch North Sea, as long as it does not jeopardize their activities (Pondera Consult, interview, 25-06-2010). All users have normative legitimacy because there is a chance they will have to change their management or even cope with economic loss due to the establishment of protected areas.

In the end all stakeholders have normative legitimacy. Those stakeholders are legitimate in the discussion on MPAs in the Dutch North Sea for three reasons. In the decision-making of MPAs a variety of stakeholders is important. The government, environmental NGOs, research institutes and sectors in the North Sea are necessary to take part in decision-making. All participating stakeholders were invited by the government, because each of them has an important function or position towards the establishment of MPAs. All participants agreed that all relevant stakeholders were present in decision-making. Overall legitimacy is satisfactory.

4.1.2 Power

LNV and VenW are subjected to structural power, because they are legally bound to EU Directives which require compliance from Member States. This relationship can be characterized as structural powerful, because the EU has a direct relation with the Dutch government. Moreover power works through constitution because the EU is able to exercise power over its Member States through its structural position as supranational body.

In the national process of establishing MPAs, both Ministries and specifically LNV, are able to exercise compulsory power, especially. Compulsory power is shown by Dahl's definition of power: 'the ability of A to get B to do what B otherwise would do not' (Dahl, 1957). To posses this type of power three conditions must be met. There should be conflicting desires between A and B. The Government has a different opinion on MPAs compared to other actors. While the users of the North Sea are not looking forward for MPAs to be established in their territory, the environmental NGOs and research institutes strive for more and bigger

protected areas. In fact the Ministries wants to satisfy the needs of both; the economic operators which do not want MPAs in areas where they operate and environmental NGOs and research institutes which ask for a more ambitious approach towards MPAs. Secondly, A must have material and ideational resources to fulfil its mission successful. LNV has 2.2 million Euros available to invest in the decision-making process about MPAs. This money is meant to facilitate a participative process by hiring IMARES, the Agro-economical Institute (in Dutch: Landbouw Economisch Instituut, LEI) and sometimes other agencies to conduct research, to communicate through newsletters and websites to raise awareness about the invisible nature of the North Sea, to organise meetings and to have people within the Ministry available to work on this topic (LNV, interview, 17-06-2010). The last condition is that there is intentionality on the part of A to change B's actions or behaviour in a certain direction. Bachrach and Baratz questioned this intentionality because power can produce unintended effects even when the dominators are not aware of it. The economic users and research institutes complain about the juridical character of the decision-making process in which protected areas are discussed (Fish Auction Den Helder, interview, 16-06-2010). The regime is rigid and the Ministries do not always realize how severe the consequences of measures taken by them could be for the sectors operating in the area discussed (Pondera Consult, interview, 25-06-2010). Barnett and Duvall indicated that compulsory power can be best understood from the perspective of the recipient of the direct action. Especially the users, but as well research institutes and environmental NGOs feel sometimes decisions are made by the Government without a clear reasoning behind it (WWF NL, interview, 29-06-2010) and with possible unreasonable consequences for the economic activities that take place in the North Sea (Deltares, interview, 24-06-2010). The operators are not looking forward to possible extra licensing procedures or areas to be completely closed for any activity (NOGEPA, interview, 9-06-2010). Therefore it can be concluded that both Ministries are subjected to structural power on European level, but are able to exercise compulsory power on national level on other stakeholders in the discussion about MPAs in the Dutch North Sea.

With respect to power, LNV hired IMARES to conduct research that will be the scientific foundation for the designation of MPAs required by the European Union. VenW's Directorate General for Water Management assigned The Directorate North Sea to formulate the management plans for protected areas. This relationship between a Ministry and a research institute or executive body contains mutual institutional power. The Ministries have money to invest in organisations to perform research which will scientifically support their decisions. The research institutes have valuable knowledge necessary for decision-making about MPAs.
Deltares works for the Directorate General Water of VenW as well as for RWS NZ. The difference with IMARES originates from Deltares' relationship indirect relation towards the topic of MPAs. Deltares has to deal with questions about the impact of human activities of both current and new activities on the North Sea in the context of the Marine Strategy Framework Directive. MPAs could contribute to resolve this uncertainty (Deltares, interview, 24-06-2010). Deltares' power can be characterized as productive because it works indirectly and it is busy with problem framing and distinguishing the natural and human effects on the sea. This inclines to the definition of discourse used in productive power. Discourses are social relations of power that support the way of life and it distinguished whether actions are imaginable or possible (Barnett, e al., 2005).

Another actor that possesses compulsory power is Greenpeace. Although Greenpeace does not participate in consultation rounds about protected areas, it tries to influence the process by negotiating with different actors outside those meetings. Moreover it conducts research and it lobbies with individuals from the Second Chamber. If the previous tools to do not achieve the

intended result, as last resource Greenpeace takes action (Greenpeace, interview, 16-06-2010). Examples are the stones Greenpeace dropped at the bottom of the sea to mark the boundaries of the symbolic protected area Sylter Buiten Rif which qualifies as ecologically valuable. With respect to fisheries, some activists of Greenpeace attached themselves to the chains of beam trawling to prevent this type of fishery from further destroying the bottom of the ocean (Greenpeace, accessed 10-03-2010). Attention is paid to these actions attention in the media, making the problem more visible to the public. With these actions Greenpeace tries to make clear the Dutch Government can not get away with non decision-making about protected areas, which are necessary for the restoration of the destroyed North Sea. The symbolic tools of this NGO reflect the 'naming and shaming' approach to get the Dutch Government to comply with legislation and to take further steps (Greenpeace, interview, 16-06-2010).
When environmental NGOs do not agree with the decision taken, juridical procedures are used to express their disapproval and to make the Government comply with the rules and norms. This happens only if all previous resources did not work out. This is another form of compulsory power to increase pressure to take decisions.
From the NGOs North Sea Foundation attends meetings and discussions frequently (North Sea Foundation, interview, 7-07-2010). Greenpeace does not participate in those meetings for the reason that the conditions bounded to these meetings are not acceptable for them (Greenpeace, interview, 16-06-2010). Therefore North Sea Foundation represents sometimes Greenpeace as well in those discussions. The same arrangement is made with WWF NL. In terms of members and funding, WWF NL is much bigger compared to North Sea Foundation (Fish Auction Den Helder, interview, 16-06-2010). WWF NL does not always have people available to join discussions, but they have financial means to facilitate other NGOs to perform research (WWF NL, interview, 29-06-2010). In fact North Sea Foundation functions as messenger between WWF NL, North Sea Foundation and other stakeholders present at meetings, most of the times being research institutes, the Government and the fishing sector. In this context institutional power can be identified. Those three environmental NGOs together form a powerful coalition that is able to influence decision-making. Moreover North Sea Foundation together with WWF NL and Birdlife contributed to a constructive approach to establish MPAs though the publication of the report called 'The Dutch Case, a Network of MPAs'. This report shows aspects of productive power. Although the NGOs force the Government's hand from time to time by means of juridical procedures and actions, they provide a solution to the discussion of MPAs in the Dutch North Sea by writing their own report that visualises their interests and vision.

The fishing sector is quite good represented within the Government as well as within the political environment. LNV has both responsibilities of nature conservation and the Common Fisheries Policy under its umbrella. The CFP is preceded by a long history which makes the fishing sector a powerful coalition. On national level the Dutch Christian democratic political party (in Dutch: Christen Democratisch Appel, CDA) in favour of the fishing sector (Greenpeace, interview, 16-06-2010). Moreover interests of fishermen are represented as well in different associations like Visned, the Fishermen Association and the Dutch Product Board Fish (Product Board Fish, accessed 14-07-2010). Obviously the fishing sector benefits from structural power on EU and national level due to its relation with structural positions of governmental as well as political bodies.
NOGEPA has power over the Dutch Government, because this sector provides important revenues for the Dutch State Treasury (NOGEPA, interview, 9-06-2010). Therefore NOGEPA benefits from compulsory power that safeguards them to a certain extent to be

affected by protected areas. This makes the Government a dependent actor of a resource-laden organisation as NOGEPA.
Pondera Consult is another actor that benefits from institutional power. Pondera Consult represents NWEA in discussions. Members of NWEA are operator, manufacturers, wind developers, consultants, energy companies, wind energy associations and corporations, research centres, maintenance providers, suppliers and members personally. Moreover are members from the associations of the owners of wind turbines in Friesland, Groningen and the Ijsselmeerpolders as well direct members of the NWEA (NWEA, accessed 3-08-2010). This coalition can exercise some indirect power.

In fact everyone has productive power, whether they do research themselves or whether they hire a research institute to perform it for them. With this research everybody tries to prove they have no harmful effects on the North Sea or why their opinion on MPAs is right. Those reports are used to justify the self-interest of different actors. Accompanied with productive power, actors can have compulsory, institutional and structural power. In the end each stakeholder has different types of power to influence the process of designating of MPAs during different phases of decision-making and on European as well as on national level. Only compulsory and structural power entitles stakeholders to possess direct power. This means all stakeholders except RWS NZ, research institutes IMARES and Deltares and Pondera Consult as economic user are powerful.

4.1.3 Urgency

Concerning urgency, there are differences between the different stakeholders. For each actor time sensitivity is applicable. Time sensitivity focuses on the degree of managerial delay which is unacceptable to the stakeholder (Mitchell, et al., 1997). Nobody wants managerial delay. The three organs of the government certainly not, because their work methodology will be questioned in case of managerial delay. The EU puts pressure of the Governments of Member States to reach 10 % coverage of protected areas by 2012. They are not only obliged to designate areas, the European Commission enforces Member States as well to design management plans explaining how the conservation objectives will be met. If the deadline is not met, the Minister will be summoned by the European Commission and penalties will be handed out. On the other hand VenW and RWS NZ do acknowledge that the process proceeds slowly. Reasons for this slow progress are the underestimation of time management concerning decision-making aiming at consensus between the different stakeholders involved (VenW, interview, 17-06-2010; RWS NZ, interview, 22-06-2010). VenW wonders whether the process of gathering all stakeholders with their individual interests should not have started earlier (VenW, interview, 17-06-2010).

Another important category of stakeholders that do not like managerial delay are the environmental NGOs. It is their job and interest to strive for nature conservation. Greenpeace claims it is indispensable to establish entirely closed areas, taking into account the destroyed status of the North Sea and the rapid decline of fish stocks. In the end the creation of protected areas is beneficial for everyone. Especially the fishing sector will benefit on the long term from more, bigger and an increased variety of fish populations (Greenpeace, interview, 16-06-2010). Moreover they claim it is urgent to have clarity about what is allowed and under which conditions (North Sea Foundation, interview, 7-07-2010).
With this remark, the sectors agree. For them the actual designation of protected areas is not urgent, because they are afraid those areas will prohibit them to operate as they used to do. On the other hand they ask for clarity about the consequences of protected areas for sectors operating in those areas (Pondera Consult, interview, 25-06-2010). Once they know, they can

take measures to adapt their management (NOGEPA, interview, 9-06-2010). In this context the time sensitivity is important out of self-interest, not for the public interest in nature protection.
The research institutes as well want clarity about what level of protection in which areas (Deltares, interview, 24-06-2010). Moreover they complain about the slow progress of decision-making. In the beginning a participative model of decision-making aimed at the achievement of consensus looked promising. A few years later much talking has happened, but no real decisions are made. It is time to move beyond talking to action-oriented policy making (IMARES, interview, 24-06-2010).

Actors that call for immediate attention will only be defined as urgent if they also meet the second characteristic of urgency, criticality. This aspect deals with the importance of the claim or relation to the stakeholder. The Government complies with this criterion of criticality since it is their performance that is at stake. They do not want to be exposed as incapable of taking decisions regarding the designation of MPAs. For environmental NGOs the criticality is the highest. For them the creation of a network of MPAs is crucial (Greenpeace, interview, 16-06-2010). They will keep striving for its implementation. For IMARES it is as well critical. The first report about the advantages of MPAs was published in 1991 by NIOZ (Bergman, et al., 1991). Now, 20 years later, a lot of talking rather than decision-making took place (IMARES, interview, 24-06-2010). For Deltares the decision about MPAs is less urgent. They have more faith in regulation of human activities taking place in the North Sea in stead of protected areas (Deltares, interview, 24-06-2010). The users only want the decision to be made soon to know what consequences it will imply for them. The decision about MPAs for the sake of nature conservation is not critical to them. They want to keep operating in the North Sea without economic loss and extra measurements.

In the end the designation of MPAs is only urgent for governmental bodies, IMARES and environmental NGOs. Deltares prefers other methods concerning nature conservation that MPAs. The users do not perceive this issue urgent, because they do not want MPAs to be established in their working environment. NOGEPA and Pondera Consult have reasons to not perceive the urgency of this decision-making process. NOGEPA is an important revenue source for the Dutch Government, which should be taken into account when deciding about the areas which needs protection. Pondera Consult has not an enormous impact on the ecosystem of the North Sea, assuming the consequences for this sector will be reasonable. The fishing sector on the other hand will be the most subjected to measures concerning MPAs. More stakeholders acknowledged the urgency about MPAs for fisheries on the long term (RWS NZ, interview, 22-06-2010; Greenpeace, interview, 16-06-2010 and Deltares, interview, 24-06-2010). However the fishing sector perceives this issue not urgent for them selves, only for environmental NGOs (Fish Auction Den Helder, interview, 16-06-2010). This contradiction reveals the short-term perspective of the fishing sector.

4.1.4 Stakeholder typology

The individual legitimacy, power and urgency of each stakeholder are shown in Table 5. Whether stakeholders possess one, two or all attributes of stakeholder salience theory distributes a ranking system for stakeholder positions. As explained in the second chapter, only actors which possess normative legitimacy and compulsory or structural power are defined as legitimate and powerful stakeholders.

Table 5: Stakeholder salience of each stakeholder based on legitimacy, power and urgency

	Legitimacy	Power	Urgency	Stakeholder Typology
GOVERNMENT				
LNV	Normative	- Compulsory - Structural - Institutional	Yes	Definitive
VenW	Normative	- Compulsory - Institutional	Yes	Definitive
RWS NZ	Normative	- Institutional - Productive	Yes	Dependent
RESEARCH INSTITUTES				
IMARES	Normative	- Institutional - Productive	Yes	Dependent
Deltares	Derivative	- Productive	No	Discretionary
ENVIRONMENTAL NGOs				
North Sea Foundation	Normative	- Institutional - Productive - Compulsory	Yes	Definitive
Greenpeace	Normative	- Institutional - Compulsory - Productive	Yes	Definitive
WWF NL	Normative	- Institutional - Productive - Compulsory	Yes	Definitive
SECTORS				
Fish Auction Den Helder	Normative	- Structural	No	Dominant
NOGEPA	Normative	- Productive - Compulsory	No	Dominant
Pondera Consult	Normative	- Institutional - Productive	No	Discretionary

In the discussion on MPAs in the Netherlands, there is no actor which does not possess one of those three stakeholder salience attributes. All stakeholders have legitimacy, which makes them at least discretionary stakeholders. This means discretionary stakeholders do neither have power nor urgent claims to influence the process. Therefore the managers do not feel pressured to engage in active relationship with discretionary stakeholders. Deltares and Pondera Consult are divided in this category. Although they have normative legitimacy, they have only indirect institutional and productive power and no urgent claim. Compared to the other users in the North Sea (the fishing and oil and gas industries) wind energy exercises less influence.

Dependent stakeholders have urgent and legitimate claims, but lack power necessary to carry out their will. Power is not mutual and therefore those stakeholders rely on other powerful actors. IMARES and RWS NZ fall within this category because they possess normative legitimacy as well as urgency. Both institutes possess institutional as well as productive power. In the power section in the empirical findings mutual institutional power was identified between LNV and IMARES and between VenW and its executive organ RWS NZ. In fact this mutual power is not proportional, because the ultimate decision will be taken by

LNV in cooperation with VenW. Both Ministries provide funding for research to be conducted by IMARES and RWS NZ. Research can not be conducted without proper funding, which makes both institutes dependent on their Ministry. The Ministries can in fact take the decision without the proper scientific basis. Probably they will not do this, because a proper scientific basis for the decision about MPAs is required by the European Commission (European Commission, 2007). In the end IMARES and RWS NZ depend on LNV and VenW.

Dominant stakeholders are as well powerful as legitimate which make them able to exercise influence. Although they receive considerable managerial attention, they are certainly not the only stakeholder category relevant in the discussion. Two of the three users, Fish Auction Den Helder and NOGEPA, have dominant characteristics. Both have normative legitimacy concerning the issue of MPAs, because they could face possible negative consequences of these areas. The two industries have power as well, only in different types. The fishing sector benefits from structural power because it is already for a long time good represented through the Common Fisheries Policy on European level and LNV and political party CDA on national level. As well in civil society it is good represented by the fishermen associations, Visned and Fish Agency. NOGEPA on the other hand possesses compulsory power because it provides big revenues for the State Treasury. None of them claim urgency towards the discussion of MPAs.

When a legitimate and powerful stakeholder‘s claim is in addition urgent, managers will give priority to this stakeholder’s interests and arguments. Therefore those stakeholders are called definitive stakeholders, because they determine decision-making by exercising power which is legitimate and urgent at the same time. Both Ministries and the three environmental NGOs qualify as definitive stakeholders. The Ministries are pressured by the EU to establish a network of MPAs by 2012 that protects 10 % of the Dutch marine environment. Due to their position as decision-making body they exercise compulsory power over the other actors. Additionally they have institutional power to hire IMARES and RWS NZ to lay the scientific and managerial foundation for MPAs. The deadline of 2012 makes MPAs an urgent matter for them. All environmental NGOs have institutional, productive and compulsory power to enforce the Government to take a decision about MPAs. North Sea Foundation represents Greenpeace and WWF NL from time to time in discussions. Together they form a powerful coalition. Greenpeace’s action-oriented approach gives them compulsory power to make clear authorities can not get away with slow or non-decision-making. NGOs invoke as well juridical procedures to increase pressure on the government. They have legitimate claims to strive for nature conservation, because that is the reason why they came into existence. Moreover MPAs is an urgent topic, because the destroyed status of the North Sea needs to be restored today and not tomorrow.

In Figure 8 different types of stakeholders are shown. Legitimacy is not an issue. All actors are situated in the legitimacy corner. The discussion would be tenser if the different stakeholder were more divided over this diagram. This would mean that not all stakeholders would have legitimate claims. Discretionary stakeholders are Deltares and Pondera Consult because they have only a legitimate claim on the discussion. Stakeholders that possess two attributes are IMARES, RWS NZ, the fishing and oil and gas sector. For dependent and dominant stakeholders it is not difficult to become a definitive stakeholder, because only one of the three attributes is missing. The fishing and oil and gas sectors could become definitive stakeholders if they perceived the establishment of MPAs urgent. Both sectors find the decision about MPAs time-sensitive because managerial delay is unacceptable. The sectors

want clarity about MPAs to know whether they should adapt their management. The issue of MPAs for the sake of nature conservation is not critical for both sectors, because they want to keep operating as they used to as long as possible. IMARES and RWS NZ should become powerful to be a definitive stakeholder. Currently they have indirect institutional and productive power. Therefore they depend on the Ministries of LNV and VenW.

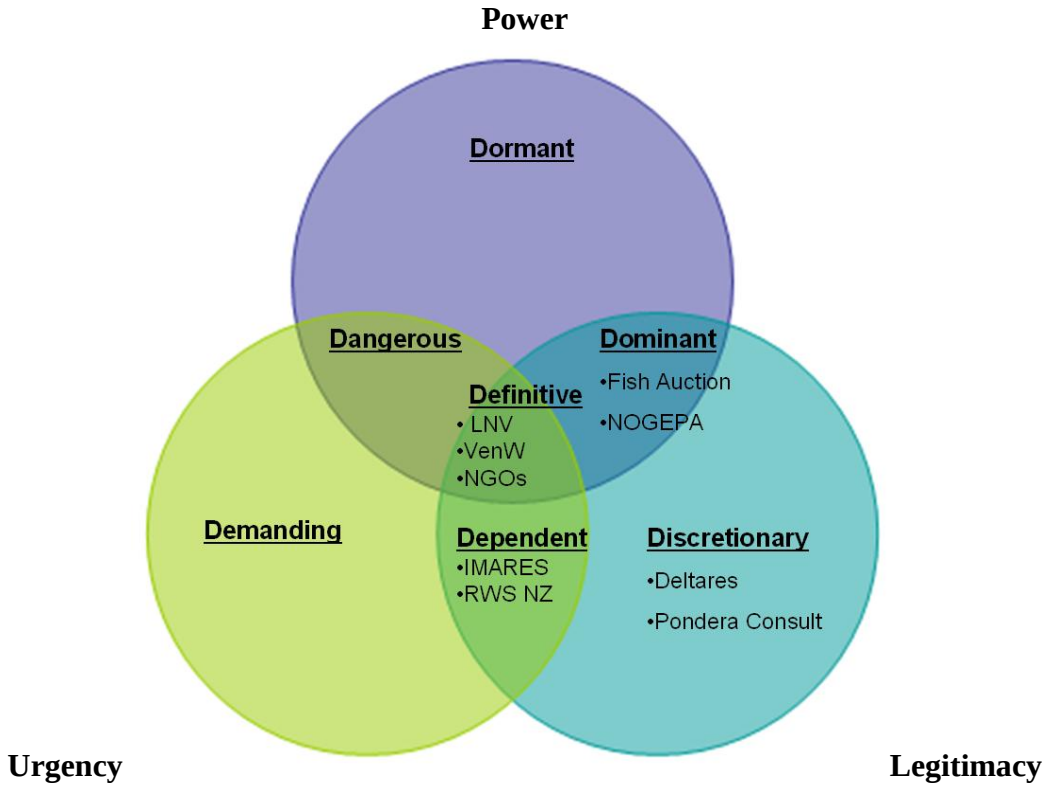

Figure 8: Stakeholder Salience of stakeholders regarding MPAs in the Netherlands

4.2 Discourse analysis

Amongst the stakeholders, different discourses can be noticed which reveal a variety of perspectives on the discussion on MPAs in the Netherlands. As a starting point the environmental discourses defined by Dryzek are taken. His taxonomy is based on two axes: from radical to reformist alternatives that wish to move away from the conditions created by industrialism and from prosaic, which takes the political-economic chessboard set by industrial society as a given, to more imaginative solutions. In the end four categories are identified: survivalism (radical and prosaic), environmental problem solving (prosaic and reformist), sustainability (reformist and imaginative) and green radicalism (imaginative and radical).

4.2.1 Survivalism

The first discourse identified in the discussion about MPAs is survivalism. This discourse is quite radical because it assumes the limits of the carrying capacity of the earth are reached. Therefore immediate and drastic measures should be taken to reverse this situation if possible. On the other hand it is identified as prosaic because it believes in solutions provided by industrialism. Examples of solutions are greater administrative control, science-based decision-making and enforcements by elites. In the context of marine protection, survivalism is characterised by strong measures like entirely closed areas for human activities and the prohibition of beam trawling in the entire North Sea. This method of protection is

indispensable to restore the destroyed status of the sea. A factor that accelerates the deterioration of the North Sea is the prevalence of economy over nature conservation. The protection of the marine environment will only be fruitful if at least 40 % of the Dutch North Sea is entirely isolated from human activities. Not completely closed areas are not protective enough, because no conclusions can be drawn about their contribution to the protection of the marine environment due to the fact that monitoring and enforcement of those areas will cause problems. Greenpeace supports this discourse in the discussion about MPAs.
Regarding fisheries, MPAs are as well a management tool that can assist in decreasing the overcapacity of fisheries (Greenpeace, 2010). According to the European Commission at least 88 % of the European fish stocks are overfished of which one third can probably not recover from this loss (European Commission, 2009). Entirely closed areas will not only contribute to more and diverse benthos, but as well to fish populations. On the long term fisheries will benefit from protected areas because they will result in bigger, more and a higher diversity of commercial as well as mobile fish species. Regarding fisheries, additional measures should be taken to make fishing methods outside protected areas more selective. In the end the entire food web will benefit from closed areas. These protected areas will provide valuable scientific information as well, which could be referred to for new protected areas (Greenpeace, interview, 16-06-2010).

4.2.2 Short-term pragmatism

The second discourse combines democratic pragmatism with economic rationalism and is called short-term pragmatism. This discourse is concerned with reaching the deadline of a representative network of MPAs by 2012 that protects 10 % of the Dutch marine environment. The short-term perspective stresses the fact that the future does not go any further than 2012 so far. Moreover this discourse qualifies as pragmatic because it designs different scenarios to solve the destroyed status of the North Sea by means of protected areas. The best scenario is selected based on compliance with (inter)national legislation, achievement of favourable status for protected species and habitats, stakeholder support and minimal costs (VenW, interview, 17-06-2010; LNV, interview, 17-06-2010 and RWS NZ, interview, 22-06-2010). The governmental stakeholders pursue this short-term pragmatism discourse when taking decisions about MPAs.
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In this discourse MPAs are meant to restore an ecosystem damaged by human activities (VenW, interview, 17-06-2010). Those areas do not only protect spatially oriented ecological values, but as well fish stocks (LNV, interview, 17-06-2010). In fact a reservoir function for the entire North Sea is created through this management tool (RWS NZ, interview, 22-06-2010). However some disadvantages of protected areas are acknowledged as well. It is a relatively new concept which brings uncertainty along (VenW, interview, 17-06-2010). Therefore the discussion about whether areas will be entirely closed arose. It is a misunderstanding that all those areas will be entirely closed (RWS NZ, interview, 22-06-2010). Some actors are afraid that the sea on the borders of protected areas will suffer from intensive activities which shifted outside the protected territory. Looking at marine mammals, protected areas will not be the appropriate method to protect those species. Another difficulty associated with MPAs is the regulation of fisheries within those areas. Therefore sector innovation is pursued as well for the fishing sector (LNV, interview, 17-06-2010).
This discourse does not see economy and ecology as contrasting values; the ‘people, plant and prosperity’ motto is pursued. A lot depends on how the problem is framed and solved (VenW, interview, 17-06-2010), reflecting pragmatism. To achieve the intended conservation goals, different measures packages are composed. The different packages are subjected to cost-benefit analysis and the package at minimal costs is selected (LNV, interview, 17-06-2010). A

disadvantage of this method is the difficulty of valuing nature in economic terms (VenW, interview, 17-06-2010).

4.2.3 Not In My Back Yard

The next discourse is called Not In My Back Yard (NIMBY) and combines elements of administrative and economic rationalism with ecological modernisation. In fact this discourse is situated in between prosaic alternatives of environmental problem solving and imaginative alternatives of sustainability. The users are characterised by this discourse. At the same time they want MPAs to be established, but as well to be able to operate as they used to in the North Sea. This means they will not oppose protected areas as long as they are not created in their working environment.

The fishing sector wants to invest in sustainable fisheries through innovative fishing methods which are less harmful to the environment, like for example more selective nets (Fish Auction Den Helder, interview, 16-06-2010). The oil and gas sector is willing to contribute to the environment by minimizing their impacts and by the creation of a code of conduct for oil and gas exploiters in protected areas (NOGEPA, interview, 9-06-2010). Offshore wind energy contributes already to the environment by combating the greenhouse effect and climate change (Pondera Consult, interview, 25-06-2010). The idea that economy and ecology can go hand in hand reflects the discourse of ecological modernization. However in the end economy will be prior to nature protection and users operate mainly motivated by self-interest. The fisheries motivation to invest in sustainable activities is merely for economic reasons; ecology is an extra less important benefit (Fish Auction Den Helder, interview, 16-06-2010). The oil and gas sector provides important revenues for the Netherlands; therefore they feel safeguarded (NOGEPA, interview, 9-06-2010). If protected areas will be established in a place where wind energy companies are operating, this will create tension. Pondera Consult acknowledges that nowadays the economy slows down nature conservation (Pondera Consult, interview, 25-06-2010). In the end the users are willing to contribute to the environment by means of protected areas and sustainable activities, as long as these areas do not fall together with parts in the North Sea where they operate.

Although they acknowledge MPAs are good management tools because they protect vulnerable areas and species (Pondera Consult, interview, 25-06-2010) and pay attention to negative effects of human actions in the sea (Fish Auction Den Helder, interview, 16-06-2010), a considerable amount of comments regarding the process of designating such areas are made. First of all the protection regime is perceived as rigid (Pondera Consult, interview, 25-06-2010), juridical and regulatory (Fish Auction Den Helder, interview, 16-06-2010). The reason behind this rigid regime is the significant uncertainty about the marine environment of the North Sea. Nowadays the precautionary approach is applied in case of uncertainty. Precautionary measures could have severe consequences for sectors operating in the North Sea (Pondera Consult, interview, 25-06-2010). Unfortunately the effects of those protection measures are not yet known. As a result sectors fear for the worst case scenario which involves economic loss and extra administrative procedures. To deal with this uncertainty sectors hide behind the request for more scientific expertise, revealing the administrative pragmatism discourse. Scientific research should prove how MPAs contribute to the protection of species and habitats taking into account the ecological dynamic of the marine environment (NOGEPA, interview, 9-06-2010 and Pondera Consult, interview, 25-06-2010). Moreover the economic impact of protection measures should be analysed for the sectors operating in these areas. Based on this information reasonable and realistic conservation goals and management plans should be formulated to which sectors can adapt their activities if

necessary (Fish Auction Den Helder, interview, 16-06-2010; NOGEPA, interview, 9-06-2010 and Pondera Consult, interview, 25-06-2010).

4.2.4 Sustainable development

Sustainable development is pursued by the environmental NGOs North Sea Foundation and WWF NL. This discourse wants to solve the imbalance between ecology and economy by reform and imaginative solutions. Economic growth is promoted in an environmentally benign and socially justice manner for present as well as future generations. MPAs are good tools to protect the entire North Sea. A disadvantage of this relatively new concept is that the marine environment is quite invisible to the public. By means of protected areas this beautiful nature can be made clear to civil society. On the other hand economic values should be taken into account, which can create tension with future MPAs. In the discourse of sustainable development a zoning system should be established for MPAs (North Sea Foundation, interview, 7-07-2010). Part of them should be entirely closed, meaning valuable conclusions can be drawn about their contribution to nature conservation. Next to those key areas a buffer zone should be created for certain activities that have proven they have minimal or no impact on the North Sea. In the remaining part of the entire North Sea users should operate sustainably (WWF NL, interview, 29-06-2010). Although individual activities have proven to have limited or zero effects on the ecosystem, still the overall amount of activities taking place in the same area should be decreased. In fact incentive is given to the sectors to become sustainable. Depending on how sustainable the sectors become, less entirely closed areas should be created. The precautionary and ecosystem approach are principles founding the concept of sustainable development (North Sea Foundation, interview, 7-07-2010). The restoration of the ecosystem of the North Sea is prior. Therefore in case of conflict the strength and capacity of the ecosystem should be taken as perspective. However there should be room to manoeuvre for economic operators (WWF NL, interview, 29-06-2010). In the end nature conservation and economic development are not seen as separate goals, they could be combined in a sustainable manner taking ecology, economy and people into account (North Sea Foundation, interview, 7-07-2010).

4.2.5 Ecological modernisation

The discourse of ecological modernisation can be found within research institutes IMARES and Deltares. The main benefits of MPAs are increased biodiversity and an increase in age of bottom fauna and fish species (IMARES, interview, 24-06-2010). Additionally it will be an important experiment to gain knowledge currently lacking about the North Sea ecosystem. This discourse as well highlights the uncertainty about the effects of MPAs regarding its contribution to marine protection and the consequences brought along for sectors which used to operate in protected areas (Deltares, interview, 24-06-2010). The deterioration is caused by human activities which should be regulated in the entire North Sea (Deltares, interview, 24-06-2010). Therefore MPAs should be based on user functions in stead of ecological values (IMARES, interview, 24-06-2010). The economic operators should prove they cause no harm on the ecosystem (IMARES, interview, 24-06-2010). More research about the contribution of MPAs should be conducted to take away the current uncertainty (Deltares, interview, 24-06-2010). Based on this information clear and ambitious goals should be formulated (IMARES, interview, 24-06-2010). These arguments can be characterised as following the ecological modernisation theory because ecology and economy can be reasonably combined. This discourse is different from sustainable development because it aims at restructuring of the capitalist political economy along more environmental defensible lines. In this context the state is an important actor. It recognizes as well the complexity of ecosystems. With respect to MPAs ecological modernisation deals with this complexity by conducting more research and

establishing MPAs based on user functions in stead of ecological values. While environmental NGOs take the ecosystem perspective, research institutes think the key to protection of the marine environment is changing human activities. Some activities will have to be prohibited, while other activities offshore should become more sustainable according to the Marine Strategy Framework Directive. In fact economic activities should change towards sustainability (Deltares, interview, 24-06-2010).

The five environmental discourses identified amongst the stakeholders involved in the designation of MPAs in the Dutch part of the North Sea are shown in Figure 9. The axes from Dryzek's discourse typology are used as framework.

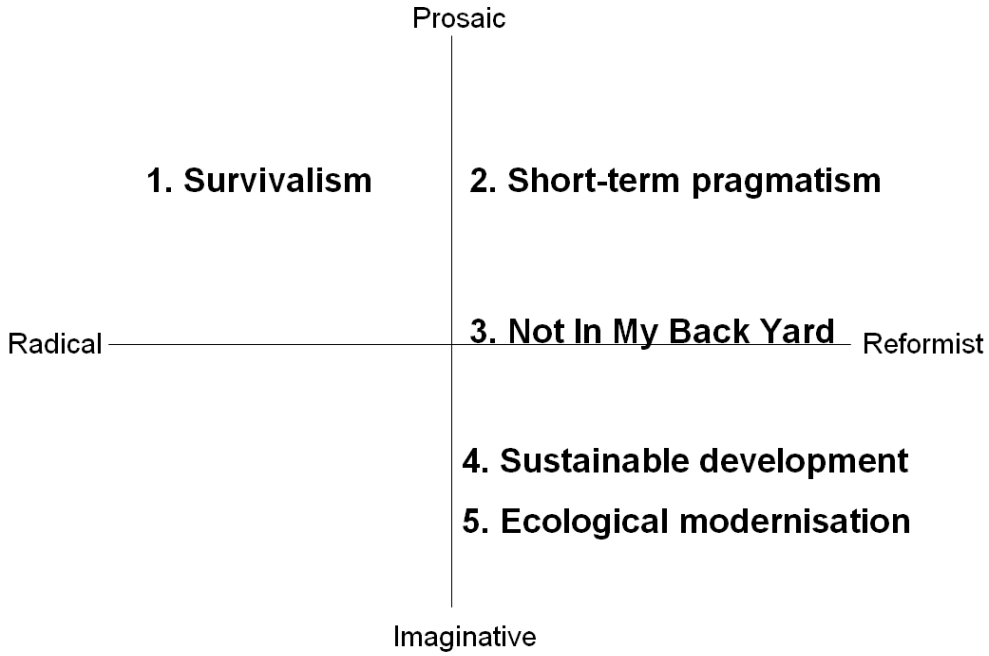

Figure 9: Environmental discourses identified in the discussion about MPAs in the Netherlands

The most significant differences between the different discourses are the short-time versus long-time thinking and whether economy or nature conservation prevails. Short-term pragmatism and NIMBY think short-term, while the other three discourses take into account the long-term perspective. Economy is important in short-term pragmatism, but especially in the NIMBY discourse. Nature conservation prevails in survivalism and sustainable development. Ecological modernisation is different because it starts by changing economy to result in nature conservation. Within sustainable development there is as well room for economic development, because the zoning system for MPAs allows different activities in certain areas.

In the different discourses different advantages and disadvantages prevail. An overview of all pro's and con's of MPAs as management tools in the Netherlands according to the variety of Dutch stakeholders are listed in Table 6.

Table 6: Advantages and disadvantages of MPAs according to 11 interviewees

Advantages MPAs	**Disadvantages MPAs**
Protection of the marine environment damaged by human activities which functions as a reservoir function for the entire North Sea	MPAs are not appropriate to protect marine mammals
MPAs as experiment that increases knowledge about the system of the North Sea	Uncertainty about MPAs' contribution to the protection of the marine environment through habitats and species which results in the precautionary principle
Clear regime	Rigid regime
	Uncertainty about the consequences of MPAs for the sectors
	Too juridical and regulatory process
	More political than scientific discussion
	Unrealistic goals
Entirely closed MPAs contribute to the increased amount and biodiversity of benthos, fish populations and ecological values	Enforceability and monitoring not entirely closed areas
Benefits for fisheries on the long term	Fear for extra administration
	Increased fishing pressure on the borders of MPAs

For effective decision-making, the different parties will have to find synergies between those different discourses. The following similarities are found comparing the advantages, disadvantages and requirements regarding MPAs and the imbalance between economy and ecology.

Regarding positive effects, six similarities are found amongst at least two or more discourses. All discourses agree it is good that the impact of human activities on the ecosystem is stressed by means of MPAs. NIMBY stresses the protection of vulnerable areas, while short-term pragmatism, survivalism and ecological modernisation acknowledge as well the contribution of MPAs to the protection of nature, increased amount and biodiversity of benthos, commercial as well as mobile fish species and fauna. Obviously survivalism and short-term pragmatism see benefits for the fishing sector on the long-term. In the end those protected areas will be a reservoir function for the entire North Sea according to short-term pragmatism and ecological modernisation. In addition those areas will provide valuable knowledge for future areas to be protected. MPAs as scientific reference areas are acknowledged by survivalism and ecological modernisation.

On the contrary MPAs are not only perceived as beneficial. The two main problems are the relative new concept of MPAs which brings along a lot of uncertainty and the economic values of sectors that used to operate in those areas that should be taken into account. Uncertainty is perceived as disadvantage by short-term pragmatism, ecological modernisation and NIMBY. In the positive effects of MPAs survivalism and ecological modernisation did not only see the negative side of uncertainty, they turned it in a positive effect by perceiving MPAs as reference areas containing useful scientific information for future areas. Sustainable

development finds it hard to take economic development into account. Short-term pragmatism as well, but specifically for the fishing sector that should become more sustainable.

All discourses acknowledge the imbalance between nature conservation and economic development. In survivalism and NIMBY it is stressed that currently economy slows down nature conservation. None of the discourses sees economy and ecology as separate things. Short-term pragmatism even states people, planet and prosperity. The solution put forward by all discourses in sector innovation to become more sustainable. Especially for the fishing industry this solution is highlighted. Survivalism, NIMBY and short-term pragmatism want the fishing sector to improve their catch methodology by, for example, more selective nets. Within sustainable development a zoning system is proposed which allows different types of fisheries in different areas. Ecological modernisation and sustainable development want sustainable sectors which prove their activities have limited or no impact on the North Sea. Marine spatial planning is another solution suggested by ecological modernisation and short-term pragmatism.

Even within the requirements for MPAs to be acceptable according to different discourses, similarities can be found. Regarding entirely closed areas, sustainable development, ecological modernisation and survivalism are in favour of areas to be completely closed for any human activity. The range is between 20 until 50 % of the entire North Sea, depending how harmful activities are in the remaining parts in the North Sea. As explained in the imbalance between nature and economy, activities should show they have no or limited impact on the ecosystem, according to sustainable development and ecological modernisation. NIMBY and ecological modernisation share requirements about the uncertainty that should be solved. Both aim at clear goals of protection and clarity about MPAs contribution to the protection of the marine environment.

4.3 System legitimacy

With respect to system legitimacy three subtypes are defined: input, throughput and output legitimacy.

4.3.1 Input legitimacy

Input legitimacy reflects the representativity and inclusiveness of the process. By means of stakeholder involvement policy makers try to increase legitimacy and compliance with decision-making. Regarding this type of legitimacy different consultative meetings are taking place, explained in the current situation of MPAs in the Netherlands. LNV outsourced the lead of the process of marine protected areas to Jan Heijkoop. Regarding fisheries measures in MPAs ICES is responsible. LNV still remains an important stakeholder.

Regarding the very first beginning of MPAs in the Netherlands, scientists together with LNV and VenW formulated areas with special ecological values on the Dutch Continental Shelf (Lindeboom, et al., 2005). Based on this scientific information, LNV and VenW designated the areas shown in Appendix D. The Ministries of Economic Affaires and the Ministry of Housing, Spatial Planning and the Environment were indirect involved (IMARES, interview, 24-06-2010). In this first phase there was no stakeholder input from environmental NGOs and sectors operating in the North Sea. Stakeholders would like to have input on which areas should be protected. This would not influence the level of protection. Different configurations of a network of MPAs for the Netherlands could achieve the intended level of protection (WWF NL, interview, 29-06-2010).

The next phase in the process of establishing MPAs is the formulation of management plans which explains how the intended conservation goals will be met. In this phase stakeholder involvement was broadened by the presence of environmental NGOs and sectors. LNV invited all relevant stakeholders to join decision-making. Stakeholders they know are invited personally. People that are not yet involved are approached by advertisements in newspapers. Interested stakeholders get enough opportunities to participate. Whether they actually want to be part of the process is their own choice. Even if actors are not present at meetings, but are still important regarding the issue at stake, the Ministry will contact the missing actor to know its opinion (RWS NZ, interview, 22-06-2010). All relevant stakeholders accepted the invitation to join decision-making and attended several meetings. Therefore the government is satisfied with the representativity of the process (LNV, interview, 17-06-2010).

The only actor that rejected this invitation to participate is Greenpeace. Participants are bound to secrecy and to the results of the process. These preconditions are not acceptable for Greenpeace and therefore they decided not to join discussions (Greenpeace, interview, 16-06-2010). Input legitimacy in terms of relevant stakeholders being present is satisfactory according to the majority of the stakeholders. Looking at each actor's representativity, it is not always possible to have money and people available to invest in several discussions about MPAs in the Netherlands. Especially the fishing sector remarks this. Regarding environmental NGOs, huge differences can be noticed. While Greenpeace and WWF NL have members that fund them, North Sea Foundation is only a small organisation with limited donations. Different actors remarked that always the same people participate in discussions and workshops (Greenpeace, interview, 16-06-2010; NOGEPA, interview, 9-06-2010). The representativity is not only different within each sector, but as well within each area. Looking at the meetings concerning the Wadden Sea and the North Sea, environmental NGOs are better represented in the Wadden Sea (Fish Auction Den Helder, interview, 16-06-2010).

Input legitimacy in terms of real involvement in the process is a different question. As explained before the designation of MPAs took place without stakeholder input from environmental NGOs and sectors. Even in the phase of formulating management plans, stakeholders question whether their interests and arguments are taken into account in decision-making (WWF NL, interview, 29-06-2010; NOGEPA, interview, 9-06-2010; Pondera Consult, interview, 25-06-2010). On the other hand research institutes IMARES and Deltares start questioning the benefits of stakeholder participation which aims at consensus. At start it looked a good idea, but in course of time it does not yet achieved effective decision-making (IMARES, interview, 24-06-2010). Perhaps it even constrains decision-making. It is time to move beyond talking to real protection measures (Deltares, interview, 24-06-2010). The government acknowledges - with hindsight - that they could have started earlier to gather all relevant parties together (VenW, interview, 17-06-2010). WWF NL adds that the process of stakeholder participation could be more productive by means of stakeholder involvement already in the designation phase (WWF NL, interview, 29-06-2010).

Input legitimacy is satisfactory when looking at whether relevant stakeholders participate in decision-making. Although representativity differs per phase of decision-making, area or sector, all relevant stakeholders participate in the discussion about MPAs in the Netherlands. Real stakeholder involvement, in the sense of stakeholders' interests and arguments taken into account in every phase of decision-making, does not yet occur. The most significant example is the designations phase of MPAs that took place without any stakeholder input from environmental NGOs and sectors. The creation of management plans is neither characterized by real inclusion of stakeholders. The process does not move beyond talking to decision-

making. In fact stakeholders start doubting the benefits of stakeholder involvement if it only slows down effective decision-making.

4.3.2 Throughput legitimacy

Throughput legitimacy focuses on legality, transparency and quality of decision-making. In general legality is not a problem on EU or national level (Scharpf, 1999). In the discussion about MPAs in the Dutch North Sea, legality is nevertheless a discussion point. Natura 2000 is legally implemented in the Dutch Flora and Fauna and Nature Conservation Acts concerning the conservation of respectively species and habitats. OSPAR's biodiversity and ecosystem strategy regarding MPAs so far has not been implemented in the Dutch legislation. Regarding Natura 2000 Member States have the right to establish MPAs even within their EEZ. Unfortunately the Flora and Fauna and Nature Conservation Acts in the Netherlands have so far not been extended to the EEZ, but this will be fulfilled in the near future. The Dutch Government has chosen to protect areas which fall under both Natura 2000 and OSPAR. Environmental NGOs and research institutes complain that the Dutch Government protects only what is minimally required by EU legislation. The users of the North Sea, on the other hand, complain not about the lack of ambition of the Dutch Government, but about the juridical and regulatory atmosphere in which decisions are taken. Natura 2000 is quite a rigid system that does not leave much room to manoeuvre for sectors operating in the future protected areas.

Concerning transparency and quality of decision-making opinions are divided. Actors question transparency regarding the content differences between Natura 2000 and OSPAR, the accessibility, the scientific basis, and the political character of decision-making.

For starters content differences between Natura 2000 and OSPAR are not clear (IMARES, interview, 24-06-2010). This does not enhance transparency about decision-making. In addition procedures are sometimes complex and tough leading to misunderstandings and ambiguity. LNV as responsible Ministry does not always present its vision clearly. When the Ministry is asked for clarity about its intentions regarding specific sectors, procedures and measures, the oil and gas and wind energy sectors find their questions unanswered (NOGEPA, interview, 9-06-2010). This result from discussions within the Ministry about what kind of protection is needed and which sectors should be taken in consideration (Deltares, interview, 24-06-2010). Not only sectors, but as well environmental NGOs complain about the lack of clarity of LNV. The reasoning behind certain decisions regarding protected areas is not always clear. Sometimes socio-economic factors prevail before protected areas are established. An example is the coast zone, which qualifies entirely as ecologically valuable area. However the European Commission advices Member States to designate 60 % of the total extent of the selected habitat type within their national jurisdiction (European Commission, 2007), only the Vlakte van de Raan, the Voordelta and the North Sea Coastal Zone are protected. The middle part is left out the protection regime (WWF NL, interview, 29-06-2010). Therefore decision-making is more characterized as political instead of transparent (Deltares, interview, 24-06-2010). The sectors themselves lack transparency as well. The oil and gas sector can mitigate their effects and show this clearly in reports, but the fishing sector is not able to do this (IMARES, interview, 24-06-2010).

Another discussion point in the context of transparency is accessibility to decision-making. In input legitimacy it was already explained that Greenpeace opposed to participate because of the preconditions. The meetings are confidential and participants have to pursue the outcomes of the discussions (Greenpeace, interview, 16-06-2010). Moreover the minutes of certain

meetings are not publicly available (IMARES, interview, 24-06-2010) North Sea Foundation acknowledges that sometimes discussion take place in closed groups, however the results of these closed sessions are presented in open meetings (North Sea Foundation, interview, 7-07-2010). Regarding transparency the Elverding Method is referred to by VenW. Actors can ask for clarity through the entire process of the establishment of protected areas. Outcomes of meetings are worked out and send back to the participating stakeholders for verification. The end report sent by the Ministry to the Second Chamber is accompanied by a participation report revealing the different stakeholders involved in different stages of the decision-making process (VenW, interview, 17-06-2010).

Another factor that causes problems with transparency is the scientific basis for protected areas in the Netherlands. LNV hired IMARES as research institute responsible for scientific input. Although other research institutes and universities provide research as well, IMARES is almost the only research institute investigating MPAs, resulting in unilateral scientific information regarding MPAs. Nevertheless the results presented by IMARES are used in conflicting situations (Fish Auction Den Helder, interview 16-06-2010).

Throughput legitimacy is evaluated on legality and transparency. Regarding legality two remarks can be made. Although the Netherlands decided to protect areas based on Natura 2000 and OSPAR, only Natura 2000 has been implemented in the Dutch Nature Conservation and Flora and Fauna Acts. So far both Acts only apply to the territorial sea, but have to be extended to the EEZ. Transparency is a bigger problem. There is ambiguity about the differences between Natura 2000 and OSPAR, the vision of LNV that is lacking, limited scientific input and accessibility to decision-making.

4.3.3 Output legitimacy

Output legitimacy consists of the efficiency of the process and whether the process effectively achieves the previously established goals. The effectiveness is yet hard to evaluate, because the deadline is set for 2012. Although a division between effectiveness on paper and through real measures should be made. The administrative procedures to designate MPAs before 2012 will be finished in time. Under Natura 2000 around 17 % of the Dutch North Sea will protected by the following five protected areas: The Dogger Bank, the Clover Bank, the Frisian Front, the North Sea Coast Zone, the Voordelta and the Vlakte van de Raan. Under OSPAR the Frisian Front is not protected resulting in 13 % protection of the Dutch marine environment (OSPAR Commission, 2010). Whether real protection measures will be taken in those areas by 2012 is another issue (North Sea Foundation, interview, 7-07-2010). The government is convinced they will reach this deadline (LNV, interview, 17-06-2010; VenW, interview, 17-06-2010). By 2012 it will be clear whether the target of 10 % is achieved on paper as well as by an effective protection regime. Efficiency of decision-making of last years can be evaluated regarding time-efficiency and process-efficiency.

The first report about the necessity and opportunities of MPAs in the Netherlands was published in 1991 (Bergman, et al., 1991). 20 years later no real decisions have been taken (IMARES, interview, 24-06-2010). VenW acknowledges that the process does not proceed fast. A factor that is responsible for the slow progress is the fact that the Nature Conservation and Flora Fauna Acts were declared controversially for the expansion to the EEZ after the collapse of the Dutch government in March 2010 (VenW, interview, 17-06-2010). However, the most important reason for slow decision-making is the underestimation of time necessary for stakeholder participation (WWF NL, interview, 29-06-2010). Preparations should have started earlier to gather all relevant actors together to start discussing MPAs (VenW,

interview, 17-06-2010). Inefficient discussions about details are sometimes necessary to achieve consensus (RWS NZ, interview, 22-06-2010). Nevertheless time available for decision-making and stakeholder involvement should be balanced.

Another important aspect to analyze efficiency is the process of decision-making. The designation of MPAs on paper is proceeding, but real protection measures have not taken place yet. Deltares believes the norms can still be achieved by 2012 if all parties agree about the designated areas and measures (Deltares, interview, 24-06-2010). Before consensus is achieved stakeholders should feel truly involved, which is not the case nowadays. Therefore some actors see benefits in fewer meetings which are characterized by real stakeholder participation and effective decision-making (Greenpeace, interview, 16-06-2010). In addition efficiency lacks because not all tools available to achieve a representative network of MPAs are used maximally. For example OSPAR could be used to facilitate a representative network. Nowadays the process is dominated by obligations in stead of opportunities (WWF NL, interview, 29-06-2010). Another factor that decreases the efficiency of the process is ambiguity. So far EU legislation is used as reference. Sometimes EC Directives lack concreteness, leaving issues open for interpretation. To the sectors operating in the North Sea, the specific problem that should be dealt with is not clear (NOGEPA, interview, 9-06-2010). As a result of this ambiguity, sectors fight for each square km to secure themselves (WWF NL, interview, 29-06-2010).

Output legitimacy should be analysed in terms of effective and efficient decision-making. Regarding MPAs on paper the deadline of 10 % protection of the marine environment by 2012 will be held. MPAs should in addition be subjected to real protection measures. Whether this will be achieved in time can be evaluated in 2012. Efficiency of time-management and the process of decision-making are not satisfactory. Twenty years ago MPAs came in the picture. So far a lot of talking occurred, but no real measures have been taken. This results from lack of stakeholder input, limited research and a strong lead of LNV that is missing.

4.4 Deliberative governance

As explained in the conceptual framework deliberative governance want to achieve effective decision-making aiming at consensus through means of focusing on practical problems, interaction between the state and economical and civil society actors and the problem-solving approach through exchange of argumentation and visions. Each of those characteristics will be explained below regarding the discussion about MPAs in the Netherlands.

4.4.1 Focus on practical problems

As explained in the theoretical chapter, practical policy analysis follows the next steps. First all conditions that lead to the problem at stake are identified. Once the problem is framed, different scenarios are formulated based on the means available, feasibility and legality of procedures. From the range of scenarios, one is selected as policy intervention. In the end the results of the chosen scenario are evaluated (Lave, et al., 1991).

Regarding the process of MPAs in the Netherlands, the practical approach is at the second stage in which different scenarios are created for future protection of the marine environment. All stakeholders agree MPAs are good management tools to stress human impact that caused the current damage to the ecosystem of the North Sea. However the problem is not yet clearly defined according to different stakeholders due to a lot of uncertainty about the relatively new concept of MPAs (VenW, interview, 16-06-2010; Fish Auction Den Helder, interview, 17-06-2010). The users and research institutes want clear goals about which areas need protection

and for what reasons (Fish Auction Den Helder, interview, 17-06-2010; Pondera Consult, interview, 25-06-2010; Deltares, interview, 24-06-2010, IMARES, interview 24-06-2010). This uncertainty is as well present in the next phase in which feasible scenarios for the Dutch North Sea are composed. There is uncertainty whether MPAs contribute significantly to the protection of the marine environment. So far the precautionary principle has been applied in case of uncertainty. The users perceive this approach as unnecessary and even unreasonable, because there is ambiguity about what this will impose on different sectors (Fish Auction Den Helder, interview, 17-06-2010; Pondera Consult, interview, 25-06-2010).

Scenarios for future MPAs should take advantage of means available and legal procedures. As explained in throughput legality, two issues are important. The Netherlands decided to establish MPAs based on Natura 2000 as well as OSPAR. Although Natura 2000 is implemented in the Dutch Nature Conservation and Flora and Fauna Acts, OSPAR so far has not been implemented in Dutch legislation. In the future both Acts have to be extended to the EEZ to be able to establish MPAs outside the territorial sea. Stakeholders are not satisfied that the means available are not optimally used.

LNV confirmed different scenarios are being composed containing different measures packages. The best scenario will be selected based on compliance with (inter)national law, achieving favourable status for species and habitats, stakeholder involvement and minimal cost. Since such a scenario has not yet been chosen, the third phase can not be analysed yet. By 2012 a representative network of MPAs which protects 10 % of the Dutch marine environment will have to be established. By that time the evaluation of the results of the chosen intervention can start.

4.4.2 Interaction between state with economical and civil society actors

The representativity of stakeholders has been addressed in two previous sections: individual legitimacy within stakeholder salience and input legitimacy of system legitimacy. The section about individual legitimacy concluded that every stakeholder has legitimate claims on the discussion about MPAs in the Netherlands. The work of each organisation is important with respect to MPAs. Moreover all stakeholders were invited by LNV to participate in decision-making. And last but not least all participants agreed that the relevant stakeholders were involved in decision-making. Therefore all actors have legitimate claims on the discussion of MPAs.

As a result a lot of meetings took place in which different parties participated. The representativity differed per phase of decision-making, per area and per sector. Only a handful of people participated every time in different discussion groups. Stakeholders explained their interests and arguments with respect to MPAs, but did not feel truly involved. A few years later no real progress has been noticed. The conversations focused too much on achieving consensus in stead of actual decision-making. In the end stakeholder participation constrains decision-making.

The quality of interaction reveals why decision-making about MPAs does not proceed as expected. The government wants to increase legitimacy and carrying capacity for MPAs in the Netherlands by the inclusion of different stakeholder categories. Stakeholder involvement is assumed to lead to ‘faster and better’ decision-making by the Commission Elverding. The government is satisfied with the interaction. All relevant stakeholders are present at discussions. However VenW acknowledged that the time necessary for stakeholder involvement about MPAs is underestimated. Especially environmental NGOs complain about

the lack of real stakeholder involvement, certainly in the designation phase of MPAs in which only scientists and LNV and VenW cooperated. In fact stakeholder participation started too late. Although the government aims at carrying capacity for MPAs through means of stakeholder input, environmental NGOs think the government does not invest enough in this aspect. Therefore they made it their responsibility to create carrying capacity. The sectors question as well whether they are really heard. For now real decision-making cannot take place according to the sectors, because a lot of aspects regarding MPAs are still uncertain. Research is necessary to provide clarity about the consequences of MPAs for different sectors. At that time the sectors would feel more urge to participate intensively in discussions. Research institutes start doubting the benefits of stakeholder participation, because so far it only constrains decision-making.

Although there is interaction between state, economy and civil society, the interaction process started too late limiting opportunities for real stakeholder involvement. Uncertainty about many aspects makes real stakeholder input and decision-making difficult. A lot of meetings take place which are characterized by a lot of talking and no real decisions. As result stakeholder participation constrains decision-making questioning whether a lot of interaction is beneficial for the establishment of MPAs in the Netherlands.

4.4.3 Problem-solving through exchange of argumentation and visions

Stakeholders reveal a lot of valuable information when they sum up their advantages, disadvantages and requirements regarding MPAs, especially when the imbalance between nature conservation and economic development is taken into account. Based on stakeholders' reasoning different environmental discourses are found which highlight different perspectives on MPAs. In total five environmental discourses were identified which were placed in the discourse framework of Dryzek, based on two axes, varying from radical to reform and prosaic to imaginative. Only one discourse, survivalism, is characterised radically. Greenpeace supports this radical, but prosaic discourse because they stress the essence of a network of MPAs that closes at least 40 % of the North Sea for every human activity. The other discourses are situated in the reformist corner. The most prosaic discourse is short-term pragmatism. The governmental bodies pursue this discourse that aims at MPAs complying with (inter)national legislation, achieving favourable status for protected habitats and species, based on stakeholder participation and at minimal cost. Another discourse that looks at short-term solutions is NIMBY. Users are not against MPAs if those areas do not fall in areas where they operate. This discourse is situated in between prosaic and imaginative. Coming to more imaginative solutions, ecological modernisation can be found. Research institutes fall within this discourse because they want MPAs to be based on human activities in stead of ecological values. A similar discourse is sustainable development, intended by environmental NGOs North Sea Foundation and WWF NL. They want a zoning system for MPAs which leaves room for economic activities.

If the stakeholder positions of stakeholder salience theory in terms of legitimacy, power and urgency are combined with the discourses they pursue, Figure 10 is obtained. As a result the discourses of the definitive stakeholders are the most important ones, being the short-term pragmatism (LNV and VenW), sustainable development (North Sea Foundation and WWF NL) and survivalism (Greenpeace). The second and third important are NIMBY (Fish Auction Den Helder and NOGEPA) and ecological modernisation (IMARES, RWS NZ).

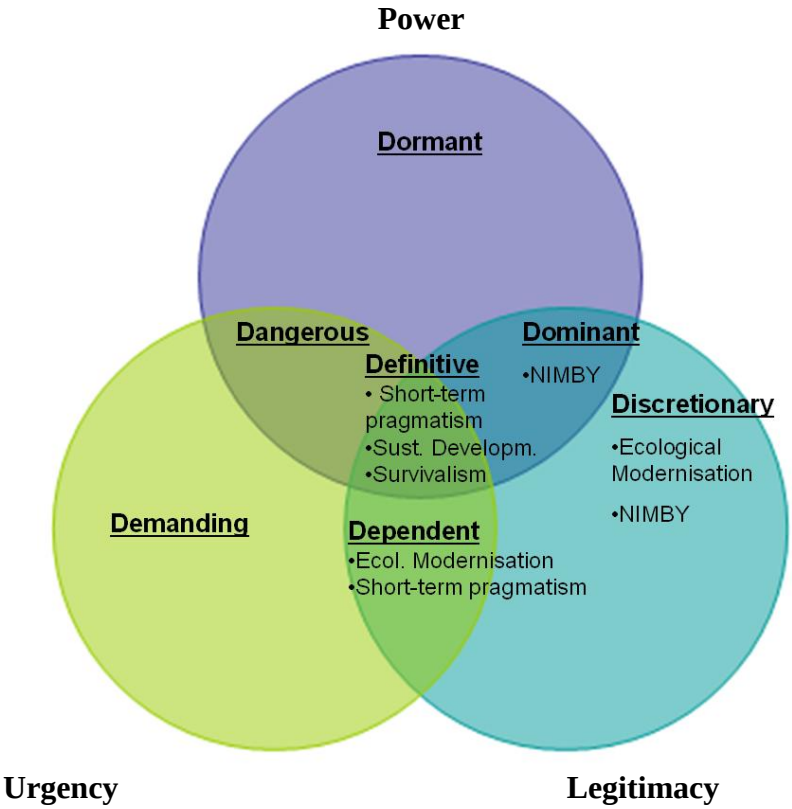

Figure 10: Stakeholder salience combined with discourse analysis

In order to reach consensus, stakeholders' positions and their associated discourses should be balanced. Regarding the definitive stakeholders and their discourses, Greenpeace's radicalism and the Ministries' short term pragmatism are situated on the outer parts of the axes. Greenpeace is quite radical in its approach, while the Ministries are very pragmatic resulting in business-as-usual in stead of ambitious scenarios. The other environmental NGOs balance those two extremes by pursuing sustainable development. They aim at a network of MPAs that has different protection zones in which different activities can take place. Nevertheless, NIMBY and ecological modernisation should not be left out.

In fact all stakeholders, except the sectors pursuing NIMBY, agree that some areas will have to be entirely closed. The fishing and oil and gas sectors exercise power to avoid completely closed areas to be established in their working environment. The fishing industry is a powerful actor in political and governmental spheres on national and European level, while oil and gas benefits from the fact that they provide important revenues for the Dutch State Treasury. Although all stakeholder categories, except the sectors, stress the benefits of MPAs for fisheries on the long-term, the sectors and especially the fisheries do not perceive the creation of a network of MPAs as urgent. The users of the North Sea ask for more research about MPAs and its contribution to the protection of the marine environment and the consequences for sectors before rigid measures are take like entirely closed areas as precautionary measures in response to the current uncertainty. With this request for more science they postpone decision-making about MPAs, meaning they can operate as they used to.

The example of closed areas illustrates the core of the discussion: short-term versus long-term thinking and economic development versus nature conservation. Short-term thinking and economic development are found in the government and sector's discourses of short-term

pragmatism and NIMBY. The discourses of survivalism and sustainable development of environmental NGO's and ecological modernisation of research institute institutes aim at long-term thinking and nature conservation. However ecological modernisation has a different approach to reach nature conservation. They want to change human activities to achieve nature conservation in stead of establishing MPAs based on ecological values.

The main reason why consensus is not yet achieved is uncertainty. The government falls under short-term pragmatism because they have to reach the deadline of 10 % MPAs by 2012. Currently not enough scientific input is available about the contribution of MPAs for marine protection, their goals of protection and the consequences of MPAs for sectors in the North Sea. Lack of scientific and stakeholder input results in decisions taken without a clear reasoning. Currently in situations of uncertainty, the precautionary principle is applied. Stakeholders need more clarity to be able to participate effectively in decision-making. The definitive stakeholders' opinion about the precautionary principle is divided. Environmental NGOs are in favour of this approach. The government perceives uncertainty as well as a negative aspect of MPAs, but they do not face consequences about this precautionary principle. The sectors will be subjected to protection measures due to the precautionary principle and perceive this approach as rigid and unnecessary. Therefore they try to postpone decision-making by hiding behind the request for more research. Although the users are not characterized as definitive, but as dominant and discretionary stakeholders, regarding the discussion about closed areas they have a significant influence on decision-making. If this uncertainty is resolved and clarity about the consequences for operating industries is given, there will be opportunities for real stakeholder involvement and effective decision-making.

5. Conclusions and recommendations

In this last chapter conclusions will be drawn regarding the research questions of this report. How do institutional and content differences between Natura 2000 and OSPAR influence the Netherlands in the establishment of a network of marine protected area? What impact do stakeholders have on the Dutch network of marine protected areas in terms of legitimacy, power, urgency and discourses? Based on the conclusions, recommendations will be given for the Netherlands to come closer to the Convention on Biological Diversity of 10 % protection of the marine environment by 2012. At the end of this chapter some discussion points will be made regarding the interview methodology and the conceptual framework applied in this report.

5.1 Conclusions

2010 is declared as the international year of biodiversity. Biodiversity loss does not only occur in the terrestrial environment, but as well in coastal and marine areas. An important management tool to restore marine and coastal biodiversity is a network of marine protected areas (MPAs). The adoption of the Covention on Biological Diversity (CBD) in 1992 marks the era of MPAs internationally. This Convention aims at a representative network of MPAs by 2012 that protects at least 10 % of the world's ecological regions. How Contracting Parties meet this obligation is left open. Natura 2000 as well as OSPAR can be applied to establish a network of MPAs in the Netherlands.

The first two research questions deal with how institutional and content differences between OSPAR and Natura 2000 influence the establishment of MPAs in the Netherlands.
Regarding institutional differences, the most important one is the different structure of the EU as supranational body compared to OSPAR as treaty. The EU is able to enforce their Birds and Habitats Directives by means of the infringement procedure. OSPAR, on the other hand, can only a 'blaming and shaming' approach regarding the adoption of their decisions, recommendations and agreements, because none of those tools are legally binding.
Natura 2000 and OSPAR do not only differ on institutional level, significant content differences were found in this report as well. Although the geographical scope in which MPAs can be established differs between Natura 2000 and OSPAR, the more significant difference is the application of different criteria for the protection of habitats and species which results in other habitat types and species that are subjected to protection measures. OSPAR has broader ecological criteria and additional practical criteria that should be taken into account in the creation of MPAs. The Habitats Directive provides insufficient protection for marine species and habitats, because it was originally designated for the terrestrial environment.
Those institutional and content differences affect the process of MPAs in the Netherlands. Although the Netherlands decided to establish MPAs based on Natura 2000 as well as OSPAR, the process reveals that Natura 2000 is preferred over OSPAR. This is illustrated by the fact that since the 1st of October 2005 the Birds and Habitats Directive are implemented in the Dutch Nature Conservation and Flora and Fauna Acts. Both Acts still have to be extended to the EEZ to be able to establish MPAs as well outside the Dutch territorial sea. So far OSPAR has not been legally implemented, but opportunities could come in the context of the Marine Strategy Framework Directive. If OSPAR was legally implemented, more species and habitats should be protected by MPAs and more attention would be paid to stakeholder acceptance of decision-making. Currently this is not the case and the Netherlands have more flexibility and freedom regarding the nature conservation in the North Sea.

The second part of this report provided a stakeholder analysis to find out how stakeholders can influence the decision-making process of MPAs in the Dutch North Sea. Stakeholders' salience in terms legitimacy, power and urgency and a discourse analysis provide a stakeholder analysis. Together with input, throughput and output legitimacy, stakeholder salience and the discourse analysis form the basis for deliberative governance, consisting of a practical focus on problems, interaction between state, economy and civil society and problem solving through of exchange of argumentation and visions.

Practical policy analysis is divided in three steps. Problem framing, creating scenarios based on means available, feasibility and legality and the evaluation of the chosen policy intervention. Although all actors agree human activities caused the current damage to the North Sea, the problem is not clearly defined according to all stakeholders. The Netherlands is at the next stage of developing different scenarios which involves as well a lot of uncertainty. Ambiguity about the goals of protection, how MPAs contribute to the protection of the marine environment and the consequences for the different sectors that used to operate in those areas dominates decision-making due to LNV's vision that lacks and limited scientific input. LNV does not have a clear vision, because it strives for a shared vision based on stakeholder support that would result in 'faster and better' decision-making of the Commission Elverding. An additional factor that impedes LNV to be clear about its intentions is the structure of LNV that functions as umbrella Ministry for fisheries as well as for nature conservation. The vision that lacks result from the fact that LNV does not take the lead as other stakeholders want them to. Clear leadership is necessary to guide stakeholder involvement and decision-making. Although universities and other research institutes contribute, IMARES is almost the only research institute that investigates MPAs. Regarding means available and legality of procedures, in throughput legitimacy stakeholders complained about the institutional differences between Natura 2000 and OSPAR which lead to the fact that OSPAR is not used maximally by the Netherlands.

Secondly, deliberative governance aims at interaction between state, economic and civil society actors. Before looking at the interaction between different stakeholders, each stakeholder's position in terms of legitimacy, power and urgency is given. All stakeholders have legitimate claims regarding the discussion of MPAs. Deltares and Pondera Consult are discretionary stakeholders, the fishing and oil and gas sectors are called dominant, while IMARES and RWS NZ are defined as dependent stakeholders. All environmental NGOs as well as LNV and VenW have all three attributes which makes them definitive stakeholders. Presence of all relevant stakeholders at discussions does not equal real stakeholder involvement. In input legitimacy attention was paid to representativity and real stakeholder involvement. Representativity differed per phase of decision-making, area and sector. In the designation phase only scientists, LNV and VenW participated. Environmental NGOs and sectors were only involved from the second phase when management plans were being formulated. Even in this phase stakeholders do not feel really involved. The reasons behind limited stakeholder involvement are the exclusion of environmental NGOs and sectors in the designation phase and the underestimation of time necessary for real stakeholder involvement. The previous mentioned uncertainty regarding MPAs makes it difficult for stakeholder to have a clear opinion, because they do not know the consequences of their proposed actions. Currently stakeholder participation consists mainly of conversations which do not achieve the intended 'faster and better' decision-making. Therefore research institutes question the benefits of frequent interaction if it constrains decision-making.

The third aspect of problem-solving through exchange of argumentations and visions reveals why decision-making is stuck. A discourse analysis is performed to examine which discourses prevail amongst the relevant stakeholders in the discussion about MPAs. The environmental NGOs are divided over survivalism, pursued by Greenpeace, and sustainable development, strived for by North Sea Foundation and WWF NL. The government falls under short-term pragmatism. The sectors' discourse is NIMBY and the research institutes have characteristics of ecological modernisation. The important differences between those five discourses are short- versus long-term perspective and the prevalence of economic development versus nature development. Despite the efforts for nature conservation, the short-term perspective and economic development dominate in short-term pragmatism and NIMBY. The other three discourses prefer long-term thinking and nature conservation, but differ in their approach to achieve this. Those two paradoxes are crucial in the discussion about whether areas should be entirely closed. All actors agree that in some areas all human activities will have to be prohibited. The sectors find it rigid that the precautionary principle is applied in situations of uncertainty which leads to completely closed areas. As explained before this uncertainty originates from lack of scientific input and a vision of the Ministry of LNV that is lacking. This uncertainty compromises real stakeholder involvement and effective decision-making which have not occurred so far.

5.2 Recommendations

To come closer to the Convention on Biological Diversity target which aims at a representative network of MPAs by 2012, which protects at least 10 % of the world's ecological regions, balance should be found between the following four key issues:

1. Effectiveness regarding MPAs on paper and by real protection measures
2. Real stakeholder involvement and 'faster and better' decision-making
3. Short-term versus long-term perspective
4. Ecological values versus economic values

Effectiveness of MPAs on paper and real protection measures can be achieved by overcoming institutional and content differences between Natura 2000 and OSPAR. Although the Netherlands said to establish MPAs categorized under Natura 2000 as well as under OSPAR, Natura 2000 is preferred over OSPAR. To resolve this imbalance not only the Birds and Habitats Directives should be implemented in the Dutch Nature Conservation and Flora and Fauna Acts, but OSPAR as well. In the context of the Marine Strategy Framework Directive opportunities will rise for OSPAR to become legally binding in the Netherlands. Currently it is not clear whether OSPAR will become part of the Nature Conservation Act or the Water Act. To avoid complexity, OSPAR should become part of the Nature Conservation Act for the protection of habitats and for the conservation of species the Flora and Fauna Act will be responsible. As result more species and habitats will be subjected to protection measures due to the broader set of ecological criteria for MPAs under OSPAR. The process to extend both Acts to the EEZ regarding the establishment of MPAs should be accelerated.

Currently real stakeholder involvement and 'faster and better' decision-making is compromised by uncertainty that dominates the discussion about MPAs. This uncertainty is caused by the following two reasons: limited scientific input and a strong lead of LNV that is lacking. Although other research institutes and universities contribute, most of the scientific data used for decision-making about MPAs originates from IMARES, which is hired by LNV. To avoid this one-sided perspective on MPAs, more research is necessary from different institutes. Currently Deltares is characterized as a discretionary stakeholder in the discussion

on MPAs. This research institute functions as advisor for the VenW and RWS NZ regarding questions about the Marine Strategy Framework Directive. In this context more responsibility could be given to this institute regarding the establishment of a representative network of MPAs. With respect to the issues that need more research, the following aspects cause a lot of ambiguity between the different stakeholders: the goal of protection for certain (boundaries of) areas, the contribution of MPAs to the protection of the marine environment and the consequences for sectors that used to operate in those areas.

Apparently LNV lacks a clear vision about its intentions regarding MPAs and adequate leadership skills to guide decision-making. This can be dedicated to the aim for a shared vision based on stakeholder participation, promoted by 'faster and better' decision-making of the Commission Elverding, and the umbrella function of LNV for fisheries as well as for nature conservation. Therefore it could be better if both aspects are divided over two different Ministries. A potential new Ministry responsible for nature conservation at sea could be VenW because it is already involved in the process of MPAs and its executive body RWS NZ is already assigned to formulate management plants for MPAs. In response to a clear vision that is lacking, the Ministry can present how a shared vision would look like according to them, meaning there is a proposal that gives food for thought. The necessity of stakeholder involvement does not exclude the fact that there should be a clear chairman to coordinate discussions. Therefore the responsible Ministry should assign a chairman with good leadership qualities.

Stakeholder input will be enhanced by the implementation of OSPAR, because acceptance by stakeholders and political bodies on its list of practical criteria should be taken into account when establishing MPAs. Regarding real stakeholder input it is important that all stakeholders are already involved in the designation phase of MPAs. Currently time necessary for stakeholder participation was underestimated. Therefore the process of involvement of all relevant stakeholders should start earlier. Once the causes of uncertainty about MPAs are dealt with through more research and another responsible Ministry for nature conservation at sea, opportunities will come for real stakeholder involvement and decision-making. As a result fewer stakeholder meetings on MPAs should take place. Those meetings will be characterized by true stakeholder involvement and more transparency leading to 'faster and better' decision-making.

Regarding content differences on MPAs in the Netherlands, the five discourses of short-term pragmatism, sustainable development, survivalism, ecological modernisation and NIMBY identified the following two paradoxes: short- versus long-term and economy versus ecology. In stead of focusing on those conflicts, consensus could be achieved on the following aspects. Some areas will have to be entirely closed for any activity. Although the fishing sector does not see the benefits of MPAs, three discourses stress the importance of those areas for fisheries on the long-term. Although it is hard to take economic values into account, sector innovation will make sure activities become more sustainable. The fishing industry agreed to become more sustainable, but for economic reasons. The more preservation of sectors take place, the less entirely closed areas should be established. If some areas are completely closed and if sectors invest in sustainable activities, time is created to conduct more research for future MPAs. In the end MPAs will function as reservoir for the entire North Sea.

5.3 Discussion

Regarding the conclusions and recommendations, some remarks must be made with respect to the analysis of this report. Especially the interview methodology and the conceptual framework will be discussed.

Due to time limitations, it was decided to conduct only 11 interviews with four stakeholder categories: three governmental bodies, two research institutes, three environmental NGOs and three different sectors. Those four categories give a good overview of involvement in the discussion regarding MPAs in the Netherlands. However in the entire process more stakeholders are involved. Therefore these interviewees do not cover all different perspectives regarding MPAs, limiting the stakeholder representativity. To have more representative conclusions and recommendations, more actors should be interviewed for the stakeholder analysis.
Concerning the interview methodology, some comments can be made as well. Not all interviews were taken face-to-face, two of them (WWF NL and North Sea Foundation) were performed by telephone. This could have changed the interview setting. The interviewees knew more or less the research question of this report; therefore the answers could suffer from response bias. This means the interviewees answer the questions in the way they think the questioner wants them to answer rather than according to their true beliefs. Especially VenW was well informed about the goal of this report, before the interview took place. Moreover stakeholders do not always say how the situation is nowadays, but how they want it to be. This does not always give a good overview of the current situation. This should be taken into account when reading this report.

Regarding the conceptual framework applied in this report, some discussion points can be made. The overall framework of deliberative governance was split up in stakeholder salience in terms of legitimacy, power and urgency and a discourse analysis. Deliberative governance is characterized by a practical focus on the problem, the interaction of state with economy and civil society and problem-solving through exchange of argumentations and visions. The stakeholder salience theory designed by Jacques Chevalier and elaborated by Mitchell, Agle and Wood deals very well with the interaction aspect by positioning different stakeholders based on legitimacy, power and urgency. The analysis of the interaction was strengthened by the power distinction of Barnett and Duvall. Power types were based on relational specificity and power through interactions of specific actors or through social relations of constitution. The discourse analysis provides answers to the last characteristic. Dryzek environmental discourse taxonomy is used as a starting point. For this report Dryzek's taxonomy was too rigid, because the discourses identified in this report combined different aspects of different prescribed discourses by Dryzek. Although the stakeholder salience theory and Dryzek's discourse analysis were appropriate to be combined with the last two attributes of deliberative governance, there was not another framework used that applies to the first aspect of deliberative governance of practical problem-solving. Therefore this first aspect could be overshadowed by the two remaining aspects of deliberative governance. Despite this remark, deliberative governance can be perfectly combined by with stakeholder salience and discourse analysis. This framework was quite appropriate to analyse the discussion of MPAs in the Netherlands.

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Appendices

Appendix A: Marine habitats and species in Annexes I and II of the Habitats Directive (Atlantic region) (Dotinga, et al., 2009)

Habitats (Annex I):

1110	Sandbanks which are slightly covered by sea water all the time
1130	Estuaries
1140	Mudflats and sandflats not covered by seawater at low tide
1150	Coastal lagoons
1160	Large shallow inlets and bays
1170	Reefs
1180	Submarine structures made by leaking gases
8330	Submerged or partially submerged sea caves

Species (Annex II):

Bottlenose dolphin	River lamprey
Harbour porpoise	Atlantic sturgeon
Grey seal	Allis shad
Harbour/common seal	Twaite shad
Mediterranean monk seal	Houting
Loggerhead sea turtle	Spanish toothcarp
Sea lamprey	

Appendix B: OSPAR's criteria, habitats and species for the identification and selection of marine protected areas (Dotinga, et al., 2009)

Appendix B.1: OSPAR criteria for the identification and selection of marine protected areas (Dotinga, et al., 2009)

Ecological criteria:

1. *Threatened or declining species and habitats/biotopes*: the area is important for species, habitats/biotopes and ecological processes that appear to be under immediate threat or subject to rapid decline as identified by the ongoing OSPAR (Texel-Faial) selection process (reference point: OSPAR list of threatened and declining species and habitats);
2. *Important species and habitats/biotopes*: the area is important for other species and habitats/biotopes as identified by the ongoing OSPAR (Texel-Faial) selection process.
3. *Ecological significance*: the area has a high proportion of a habitat/biotope type or a biogeographic population of a species at any stage in its life cycle; important feeding, breeding, moulting, wintering or resting areas; important nursery, juvenile or spawning areas; or a high natural biological productivity of the species or features being represented.
4. *High natural biological diversity*: the area has a naturally high variety of species (in comparison to similar habitat/biotope features elsewhere) or includes a wide variety of habitats/biotopes (in comparison to similar habitat/biotope complexes elsewhere).
5. *Representativity*: the area contains a number of habitat/biotope types, habitat/biotope complexes, species, ecological processes or other natural characteristics that are representative for the OSPAR maritime area as a whole or for its different biogeographic regions and sub-regions.
6. *Sensitivity*: the area contains a high proportion of very sensitive or sensitive habitats/biotopes or species.
7. *Naturalness*: the area has a high degree of naturalness, with species and habitats/biotope types still in a very natural state as a result of the lack of human-induced disturbance or degradation.

Practical criteria

1. *Size*: the size of the area should be suitable for the particular aim of designating the area, including maintaining its integrity, and should enable the effective management of that area.
2. *Potential for restoration*: the area has a high potential to return to a more natural state under appropriate management.
3. *Degree of acceptance*: the establishment of the MPA has a comparatively high potential level of support from stakeholders and political acceptability.
4. *Potential for success of management measures*: there is a high probability that management measures and the ability to implement them (such as legislation, relevant authorities, funding, and scientific knowledge) will meet the aims for designation.
5. *Potential damage to the area by human activities*: it is an area where significant damage by human activity may happen in the short term.
6. *Scientific value*: the area has a high value for scientific research and monitoring.

Appendix B.2: OSPAR List of Threatened and/or Declining Species and Habitats (Greater North Sea) (Dotinga, et al., 2009)

Invertebrates	***Reptiles:***
Ocean quahog	Leatherback turtle
Dog whelk	
Flat oyster	***Mammals:***
	Blue whale
Birds:	Northern right whale
Balearic shearwater	Harbour porpoise
Black-legged kittiwake	
Roseate tern	***Habitats:***
	Coral gardens
Fish:	Intertidal mytilus edulis beds on mixed
Sturgeon*	and sandy sediments
Allis shad*	Intertidal mudflats
European eel*	Littoral chalk communities
Portuguese dogfish*	Lophelia pertusa reefs
Leafscale gulper shark*	Maerl beds
Basking shark*	Modiolus modiolus beds
Houting	Ostrea edulis beds
Common skate*	Sabellaria spinulosa reefs
Spotted ray*	Sea-pen and burrowing megafauna
Cod*	communities
Long-snouted seahorse	Zostera beds
Short-snouted seahorse	
Porbeagle shark*	
Sea lamprey	
Thornback skate/ray*	Fish species affected by fishing in this list
White skate*	are marked with an asterisk (*). These
Salmon*	species are subject to management by an
(Northeast Atlantic) spurdog*	international or national fisheries
Angel shark*	authority or body.

Appendix C: Comparison of habitats and species between Natura 2000 and OSPAR (Dotinga, et al., 2009 and Lindeboom, et al., 2005)

Habitats Directive for protection of habitats on the Dutch Continental Shelf	**OSPAR List of Threatenend and/or declining Habitats in the North Sea**
Submarine structures made by leaking gases	Coral Gardens
Sandbanks slightly covered by seawater all the time	Intertidal mudflats
Reefs	*Lophelia Pertusa* (cold water coral) reefs
	Sabellaria Spinulosa (worms) reefs
	Intertidal *Mytulis Edulis* (mussel) beds on mixed and sandy sediments
	Littoral chalk communities
	Maerl (red algae) beds
	Modiolus Modiolus (horse mussel) beds
	Ostrea Edulis (Oyster) beds
	Sea-pen and burrowing megafauna communities
	Zostera (sea grass) beds

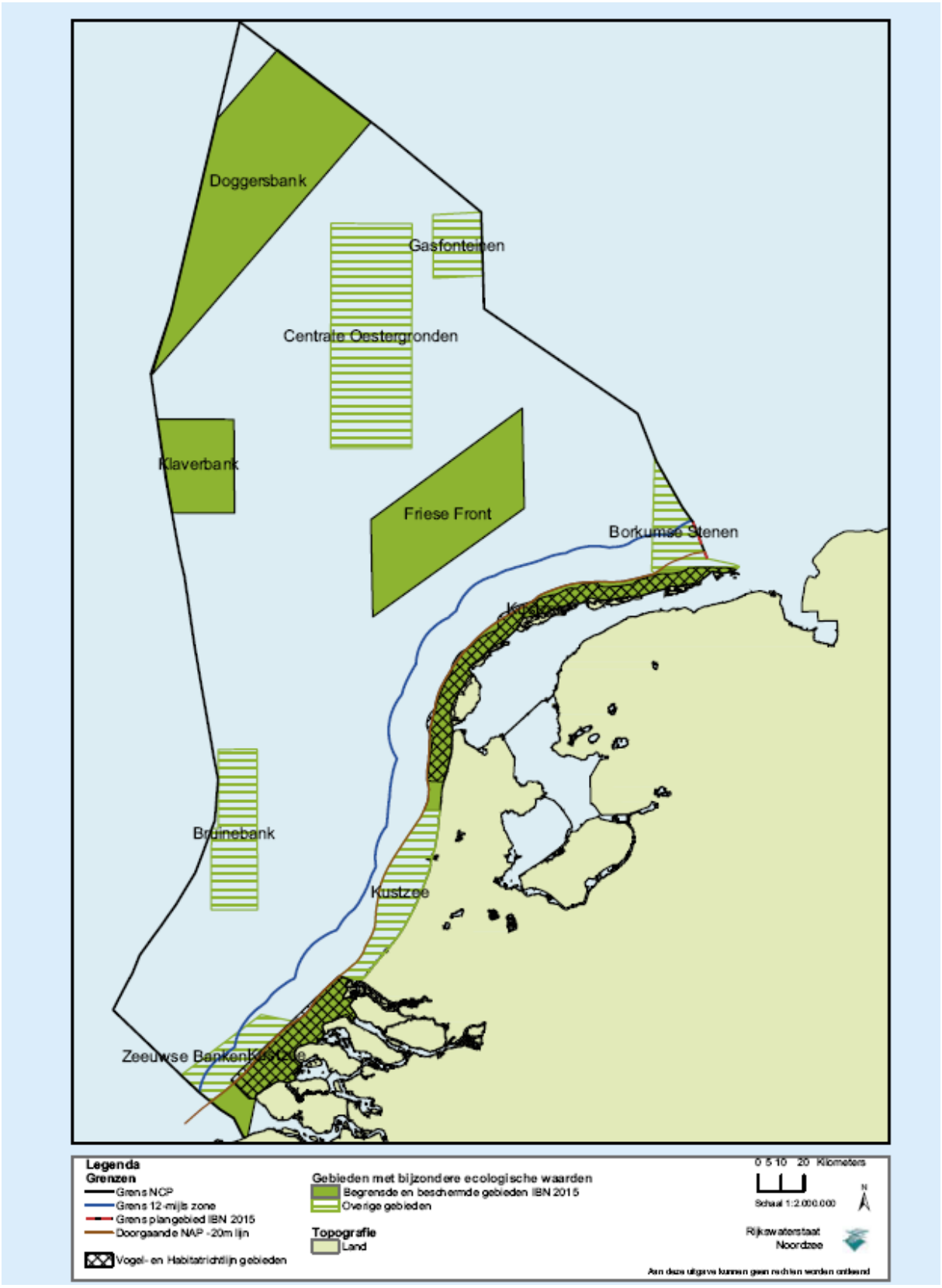
Birds Directive for protection of birds on the Dutch Continental Shelf	**OSPAR List of Threatenend and/or declining Birds in the North Sea**
Balearic shearwater	Balearic shearwater
	Black-legged kittiwake
Tern	Roseate tern
Common tern	
Arctic tern	
Little tern	
Black tern	
Pearl diver	
Red-throatened diver	
Crested diver	
Loon	
Storm-petrel	
Pale Storm-petrel	
Little gull	

Habitats Directive for protection of fish on the Dutch Continental Shelf	**OSPAR List of Threatenend and/or declining Fish in the North Sea**
Sea lamprey	Sea Lamprey
River lamprey	
Atlantic sturgeon	Sturgeon
Allis shad	Allis shad
Houting	Houting
	European eel
	Portuguese dogfish
	Leafscale gulper shark
	Basking shark
	Common skate

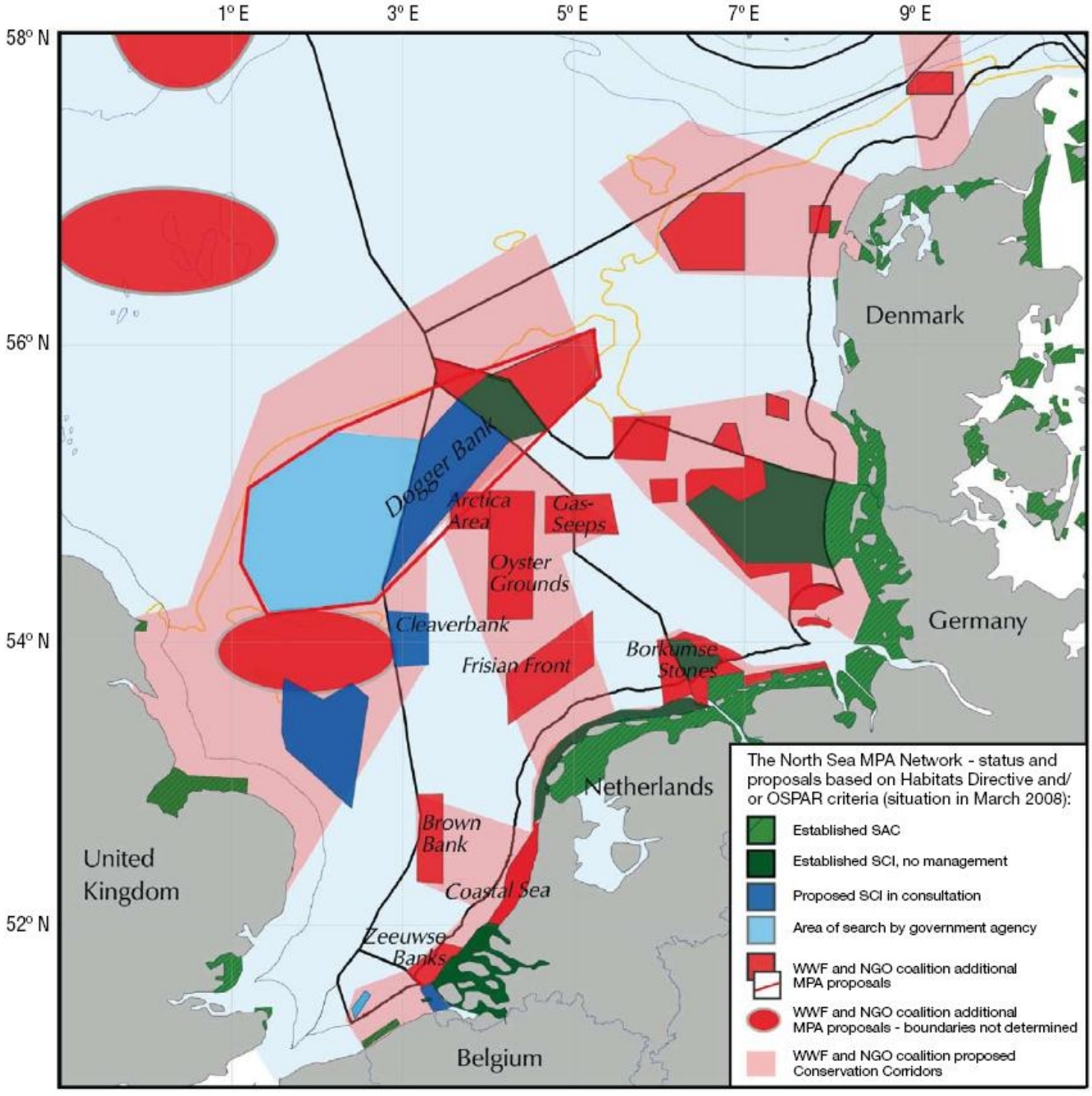
	Spotted ray
	Cod
	Long-snouted seahorse
	Short-snouted seahorse
	Porbeagle
	Thornback skate/ray
	White skate
	Salmon
	(Northeast Atlantic spurdog)

Habitats Directive for protection of mammals on the Dutch Continental Shelf	**OSPAR List of Threatenend and/or declining mammals in the North Sea**
Harbour porpoise	Harbour porpoise
Bottlenose dolphin	
Grey seal	
Harbour/common seal	
	Blue whale
	Northern right whale
Habitats Directive for protection of reptiles on the Dutch Continental Shelf	**OSPAR List of Threatenend and/or declining Reptiles in the North Sea**
Loggerhead sea turtle	Leatherhead turtle
Habitats Directive for protection of Invertebrates on the Dutch Continental Shelf	**OSPAR List of Threatenend and/or declining Invertebrates in the North Sea**
	Ocean quahog
	Flat oyster
	Dog whelk

Appendix D: Ecologically important areas in the Netherlands part of the North Sea (IDON, 2005)



Appendix E: WWF NL's proposal for a network of MPAs in the North Sea (Hugenholtz, 2008)



Appendix F: Interview questions regarding marine protected areas in the Dutch North Sea

Linde Van Bets
Msc Student Management Mariene Ecosystemen
Wageningen Universiteit
Linde.vanbets@wur.nl
Tel: 0611160976

Inleiding
MPAs zijn beschermde gebieden met bijzondere ecologische waarden, waar eventuele schadelijke activiteiten verboden worden. In mijn thesis onderzoek ik hoe Nederland omgaat met Natura 2000 en OSPAR criteria voor het aanstellen van MPAs in het nederlandse gedeelte van de Noordzee.Om dit te bereiken wil ik de verschillende actoren over hun betrokkenheid en visie op MPAs in de Noordzee. Het interview bestaat uit 3 delen: inleidende vragen over de organisatie, inhoudelijke vragen tov MPAs en interactie vragen om de verschillende stakeholders te positioneren.

Het interview zal ongeveer 1 uur duren. Alvast bedankt voor uw medewerking!

Gegevens
Naam organisatie:
Adres organisatie:
Datum:
Contactpersoon:
Telefoon:
Email:

Inleidende vragen

1. Op welke manier heeft uw organisatie te maken met het Noordzeebeleid? (% activiteiten, % inkomen)

2. Hoe en sinds wanneer zijn jullie betrokken bij de discussie over de aanstelling van MPAs in het nederlands gedeelte van de Noordzee?

Inhoudelijke vragen

The Convention of Biological Diversity besliste om ten minste 10 % van de mariene omgeving te beschermen tegen 2012. Een middel om dit target te bereiken is het creëren van MPAs. Nederland is lid van de Convention of Biological Diversity en wil dus ook deze deadline halen.

3. Hoe wil uw organisatie de target van 10 % bescherming van de mariene omgeving vastgesteld door de Convention of Biological Diversity bereiken?

Natura 2000 is het Europese network van MPAs. De gebieden zijn aangewezen op basis van criteria volgens de Vogelrichtlijn en Habitatrichtlijn. OSPAR is de organisatie voor de

bescherming van het mariene ecosysteem van de Noord-Atlantische Oceaan. OSPAR beschermt meer habitats and meer soorten dan de Habitatrichtlijn.

4. Wat zijn volgens uw organisatie de verschillen tussen Natura 2000 en OSPAR?

5. Waarom denkt u dat Nederland de voorkeur geeft aan Natura 2000 criteria tov OSPAR criteria voor het aanstellen van MPAs?

6. Hoe kijkt uw organisatie ten opzichte van mariene beschermde gebieden in het nederlandse deel van de Noordzee?

7. Wat zijn de positieve en negatieve aspecten van MPAs?

8. Wat zijn de onderliggende redenen voor uw organisatie's waardering van MPAs dat u in vraag 6 gegeven hebt?

9. Wat zijn de mogelijke gevolgen voor uw organisatie bij het instellen van een beschermd gebied? En de gevolgen voor andere actoren?

10. Aan welke voorwaarden moet een marine protected area voldoen om volgens uw organisatie acceptabel te zijn?

11. Welke andere maatregelen zijn volgens uw organisatie geschikt met betrekking tot natuurbescherming?

12. Hoe denkt uw organisatie natuurbescherming te combineren met economische belangen?

<u>Interactie vragen</u>

13. Hoe is uw organisatie actief/passief betrokken bij de discussie over de aanstelling van MPAs in de Noordzee?

14. Welke actoren zijn relevant volgens uw organisatie voor het aanstellen van MPAs in de Noordzee? Zijn deze actoren allemaal betrokken in de discussie?

15. Met welke andere actoren, relevant in het debat over MPAs, heeft uw organisatie contact?
    a. Met welke actoren heeft u het meeste contact? Welk soort contact ? Wanneer? Waar? Met welk doel? Wie initieert dit contact?
    b. Met welke actoren heeft u het minste contact? Waarom?

16. Hoe vindt u de legitimeit van het process van de aanstelling van MPAs, op basis van:
    a. Representativiteit?
    b. Transparantie van de procedures?
    c. Efficiency of het behalen van de vooraf vastgestelde norms?

17. Zijn de gebieden, die aangesteld zijn als MPAs, de juiste gebieden? Waarom wel/niet?

18. Sinds wanneer werd het aanstellen van MPAs een dringende zaak en waarom?

19. Voor welke actoren is de beslissing over de aanstelling van MPAs een dringende zaak? Waarom?

20. In de discussie over de aanstelling van mariene beschermde gebieden worden bepaalde middelen ingezet (financiele middelen, mensen, kennis, machtsverhouding, onderhandelingsvaardigheden, media aandacht of andere middelen)?

    a. Welke middelen zijn de belangrijkste, de minst belangrijkste?
    b. Wie beschikt over deze middelen?
    c. Over welke middelen beschikt uw organisatie?
    d. Hoe zet uw organisatie deze middelen in?

21. Welke actoren spelen volgens uw organisatie de belangrijkste rol in de besluitvorming van MPAs?