## On Unequal Footing: Stakeholder Perspectives on the Marine Strategy Framework Directive as a Mechanism of the Ecosystembased Approach to Marine Management

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#### Abstract

The paper is structured with an introductory section first detailing the social, economic, and political significance of the five sectors and eNGOs in relation to the Marine Strategy Framework Directive, then describing the stakeholder consultation process as experienced by representatives from the sectors and eNGOs, and finally illustrating the EU policy landscape associated with the sectors. Three central themes emerge in relation to implementing the MSFD and the ecosystem-based approach to management in EU marine waters: (1) Boundaries; (2) Policy and management coordination; and (3) Balancing values and user conflicts have been explored.

The paper concludes that from a governance perspective it is clear that the MSFD has not been that well-thought through due to the consistency of the overall legal frameworks and specific regulations related to marine management have created legal vagueness and subsequently caused legal uncertainties leading to conflicting policies and regulations having unclear boundaries. The MSFD was planned to work in concert with the IMP to help with these issues of integrated activity planning and balancing needs, but the IMP has not moved at the rate of the MSFD. None of our informants knew much about IMP, nor were they engaged in its processes. Such ambiguity creates an

opportunity for actors to maneuver when negotiating and changing the institutional rules. Furthermore, we have demonstrated the dilemmas facing various sectors related to MSFD implementation and shown how unequally prepared the different sectors are to participate in this policy.

**Key words:** Marine Strategy Framework Directive, ecosystem-based approach, stakeholder involvement, marine sectors, regional seas

NOT TO BE QUOTED WITHOUT PERMISSION FROM THE AUTHORS

#### 1. Introduction

The Marine Strategy Framework Directive (MSFD) (2008/56/EC) represents a serious attempt by the European Union (EU) to implement the ecosystem-based approach to marine management (EBM) in its seas. One of the primary purposes of the MSFD is that ecological health should act as a primary driver in managing marine activities for both sustainable use and enjoyment of the seas. Until the 1990s, the EU addressed environmental issues primarily through sectoral policies (Mee et al., 2008). Consequently, the MSFD can be seen as an effort to move from a "use perspective" to a "system perspective"—meaning that rather than regulating only the activities occurring in and on the water, the MSFD with its partner legislation the Integrated Maritime Policy (IMP) seeks to manage the whole system of the marine environment and its associated activities in concert (Juda & Hennessey, 2001). While there has been strong movement towards an EBM, departing from sector-by-sector thinking is neither simple nor straightforward.

Ecosystems are the key to the MSFD, along with the concept of marine regions. The MSFD defines marine regions by "taking into account hydrological, oceanographic and biogeographic features" (MSFD 2008/56/EC, art 3(2)) as opposed to geopolitical boundaries. Furthermore, the Directive calls on Member States to work in concert around these marine regions and sub-regions, showing the EU's understanding that efforts to reach good environmental status by one Member State risk being undercut by lack of coordination and cooperation with others.

In practise the MSFD will require marine stakeholders in various business sectors active in the marine environment to comply with standards set forth by the eleven Good Environmental Status (GES) descriptors and Member State marine strategies. With this in mind, this article concentrates on five marine sectors (fisheries, offshore renewable energy, offshore oil and gas, navigation, tourism) and non-industry stakeholders represented by environmental Non-Governmental Organisations (eNGOs) and how they have engaged in the MSFD stakeholder consultation process and what they foresee potential challenges for implementation. As we know that stakeholders will neither react, nor be impacted, in the same manner, what precisely the governance changes mean for the sectors must be considered if we are to understand the impact of the MSFD and its potential for success.

The article draws its conclusions from literature relevant to the MSFD and key informant interviews with representatives from the five sectors and from eNGOs. The literature review offers context and insight into the MSFD policy formulation and the obstacles associated with the migration toward ecosystem-based approach to management, notably in the relation to the marine environment. Within the literature on the MSFD and EBM, the concept of Large Marine Ecosystem (LME) also represents a relevant concept for understanding the challenges of managing activities affecting a shared marine environment. The purpose of the literature review is to understand how the MSFD fits with other EU policies and how its structure as a framework directive will bare particular implications for its interpretation and implementation by Member States—a consequence under which all five sectors must operate.

To date, most research has focused on the policy-formation process of the MSFD (Juda, 2007; Juda, 2010). Due to the lack of literature specifically addressing the sector perspective on the MSFD, key informant interviews with stakeholders from the five sectors and eNGOs, along with position documents from the sector organizations, supplemented the literature. These interviews provided a sector perspective on the consultation process associated with the MSFD and provided a window into the challenges facing these sectors. With respect to sectors, the paper aims to first see how different sectors and stakeholders have approached or engaged in the consultation process and secondly how they have experienced coordination of the MSFD with other pre-existing policies relevant to the marine environment and maritime activities.

The sectors chosen for this research—fisheries, offshore renewable energy, offshore oil and gas, navigation, tourism—represent the most socially, economically, and politically important sectors operating in the European seas, some of which have special relevance in certain regions and in the context of maritime worlds. Additionally, discussions of the sectors cannot proceed without the inclusion of eNGOs as important stakeholders.

The paper is structured with an introductory section first detailing the social, economic, and political significance of the five sectors and eNGOs, then describing the stakeholder consultation process as experienced by representatives from the sectors and eNGOs, and finally illustrating the EU policy landscape associated with the sectors. The paper illuminates the severe differences in the organizational capacity across the sectors and clearly pinpoints the unequal footing among them in terms of their ability to influence decision-making.<sup>1</sup>

Secondly, based upon an examination of the literature and analysis of the insights from the five sectors and eNGO representatives, three central themes emerge in relation to implementing the MSFD and the ecosystem-based approach to management in EU marine waters: (1) Boundaries; (2) Policy and management coordination; and (3) Balance values and user, particularly who balances the conflicting interests between business sector interests with broader stakeholder interests. The paper synthesizes the scholarly literature with the experiences and perceptions of the key informants to illuminate the three central themes relevant to the MSFD and implementation of EBM.

#### 1.1 Significant Marine Sectors in European Regional Seas

#### **Fishing**

Fisheries, historically vital to European Seas economically and politically, remain culturally and economically important (Arthur, et. al. 2011). In 2010 there were 84,000 vessels, with 141,100 persons directly employed in the European catching sector. Fisheries are important not only for direct employment, but also for the number of employees in related industries (ancillary, processing, etc.), in peripheral areas where alternative employment opportunities are limited (e.g. Baltic and the North Sea), for the sheer economic value of the fisheries (e.g. the pelagic subsector), and the cultural and

<sup>&</sup>lt;sup>1</sup> We have interviewed seven industrial and eNGO representatives who have been involved in or have followed the formulation of MSFD covered in this article as well drawing on numerous position documents from relevant stakeholder groupings. In order to maintain anonymity of the informant if referred it will be by number, e.g. Informant 2.

economic importance of these activities on people's way of life (e.g. Urk, the Netherlands). Overfishing is an issue in European Seas with 80 % of commercial stocks overexploited. 'Regime shifts' and the altering of the Seas' food chains resultant from fishing has been cited as the main culprit, though the introduction of invasive species through ballast water and other anthropogenic factors unrelated to fishing (e.g. pollution in the Black and Baltic Seas; climate change) (Arthur, et. al. 2011) have also been documented.

#### Coastal Tourism

Coastal tourism is an important marine sector in many regions and most particularly for the Mediterranean in terms of economic significance. We include tourism from a perspective of direct economic dependence, but also because of the sector's reliance on particular ecosystem goods and services not often economically valued (e.g. seascape vistas, beach access). There are a number of areas (Black and North Seas) turning to coastal tourism as a way to diversify their economies with a downturn in other sectors (e.g. fishing). In some ways, tourism, like fisheries, can be a double-edged sword—often relying on the environment, in this case as a draw for tourists, yet sometimes impacting it negatively (e.g. discharge from cruise ships, building in fragile coastal areas, and increased sewage and waste).

#### Navigation

The navigation sector covers a wide range of maritime industries including shipping, port development, and dredging, representing a major economic player with ecological impact particularly in the Baltic, Mediterranean and North Seas. Five thousand cargo ships cross the Baltic Sea every month. These ships annually transport at least 800,000 tons of cargo and 250 million tons of oil and its products (Matutis, V., 2010). This makes the Baltic area one of the most important shipping routes in the world; 9 % of all global cargo and over 10 % of oil/oil products are shipped through the Baltic Sea (Matutis, V, 2010.). Such a large volume of traffic has an impact on the environment through accidents and spills as well as through the introduction of invasive species through ballast water. In the Mediterranean Sea, shipping is particularly important given its position as the juncture of Europe, the Middle East and Africa, with the Suez Canal connecting it to the Indian Ocean.

#### Offshore Oil and Gas

The oil and gas sector has been extremely important in a number of areas of the regional seas, particularly in the North Sea and Black Seas. Offshore oil and gas development constitutes 90 % of European production (OGP Europe 2010). As a politically powerful sector, the oil and gas industry is also extremely economically important for employment (e.g. the North Sea region) as well as for the revenue for Member States. Platforms and the related no-fishing areas can have a positive effect on the health of the marine system. Yet, as seen in a number of oil spills around Europe, oil and gas exploration and transport do risk the health of the marine environment in an acute manner. Additionally, questions have been raised by the way platforms change the local environment (e.g. jellyfish polyps) with the oil and gas industry having a direct effect on the marine biodiversity.

#### Offshore Renewable Energy

The renewable energy sector is rapidly gaining importance throughout the EU regional seas, and most particularly in the North Sea as well as the greater North Atlantic. Ports around the North Sea are positioning themselves to expand their capabilities and serve as support bases for this sector which is focused around primarily wind energy, but some such as Hanstholm (Denmark) in relation to wave energy. These include historic areas such as Aberdeen (UK) with the oil industry, but also new players such as Oostende (Belgium) for renewables. Regions and municipalities are also investing greatly in making "marine clusters" in their port regions as a lure to industry to set up in their ports (Delaney, De Smet and Verhaeghe 2010). In some areas, such as the United Kingdom, there is a great deal of research taking place with other forms of renewable energy such as wave action.

In recent years eNGOs have gained significant power and a strong voice, speaking out on behalf of the natural environment, actively working for their vision of a clean and healthy environment. The group includes a variation of types of eNGOs, from small local groups to international ones with local offices throughout Europe (e.g. Greenpeace and WWF).

Thus, these five sectors and the additional stakeholder constituency emerged as economically, ecologically, and socially important for the EU member states in various corners of the European Exclusive Economic Zone (EEZ). It should be noted, however, that though each sector may be important socially and economically, this does not equate to equality among sectors. There is a wide diversity in the institutional capabilities, economic strength, and political clout of these sectors among one another and among the regions. The lack of economic strength and organisational capacity, such as seen in the fishing sector, can impact the industry's ability to fully take part in the policy formation process as illustrated later. Consequently as we look into the MSFD we see that sectors are not all on equal footing and at times their objectives and mandates conflict with one another.

#### 1.2 The Stakeholder Consultation Process

The literature pays limited attention to the issue of stakeholder participation in the MSFD process. Some suggest how to better involve stakeholders at multiple stages of the process and discuss the implications for the difference in values between scientists. stakeholders, and policymakers (Fletcher, 2007). There is little in the way of empirical studies on how the process actually plays out even with the understanding that "Questions about sustainability, ecosystems, and ecosystem management are not simply questions about science; they are about values," (Juda & Hennessey, 2001, p. 49 ref 30). With the stakeholder participation in mind, the following section presents a discussion on how different sectors approach the MSFD and the Directive's impact on their activities. Stakeholders and sector representatives from various maritime sectors and regional seas were invited to take part and provide input and expertise into the policy implementation process for the MSFD. Given the varied nature of capacities and capabilities, however, equal inclusion in the process was not always possible. The navigation, offshore oil and gas, and offshore wind energy sectors have actively engaged in the MSFD consultation processes and participated in select working groups. Moreover, representatives from numerous eNGOs have participated in the consultation process. By contrast, the fishing and coastal tourism sectors have been far less active in

the MSFD stakeholder forums. The following section discusses some of the reasons for these observed differences.

While oil and gas, navigation, and eNGOs have been actively involved in the MSFD consultation process, the fishing sector's engagement has been limited. Europêche, the Europe-wide fisheries stakeholder group, has not submitted comments to the MSFD GES descriptors and our fisheries sector interview informant had not attended any working groups related to the MSFD. Initially, the fishing sector was somewhat resistant to the development where DG Environment took over some of the fishing domain responsibilities in the EU policy arena, from DG MARE. Additionally, environmental ministries at the Member State level obtained similar competencies over sector-oriented ministries, showing an overall international trend in this direction (Informant 1). Van Hoof & van Tatenhove (2009) make a similar observation. In terms of EU policy, the fishing sector remains focused on the CFP and proposals coming out of DG MARE as they see these as more pressing such as vessel licenses or new control measures (Informant 1).

EU fisheries management forums, the Regional Advisory Councils (RACs) introduced by the 2002 CFP reform, exist to carry advice from the industry and other interested stakeholders to the Commission. Thus, many fisheries representatives are already engaging in EU policy consultation. Given their limited time and resources, they find it difficult to justify engaging in what are perceived as rather vague policy discussions related to the MSFD when the demands of RAC advice can be so formidable and have more concrete implications (Informant 1, van Leeuwen et al 2011). Explaining the lack of engagement on the part of the fishing sector:

I know this is a huge tsunami of new policy which we are always underrepresented—the fisheries sector—we know, but it is just too much, is really too much... So we are underrepresented. Some of us know that this is wrong that things are moving on also without us, but it's just kind of the fact of life. So, it's a bit sad to be honest, really (Informant 1).

While eNGOs and fishing have sought to influence the MSFD to different degrees, they remain visible exemplars of marine stakeholders. The same can be said for navigation, oil and gas, and offshore wind as well, but in many respects coastal tourism slips under the radar. Explaining the lack of requests for consultation on marine policies beyond just the MSFD, a coastal tourism informant explained that due to the dispersed and diverse characteristic of the sector, they oftentimes do not engage in these processes. To illustrate, he argued that whenever a policymaker wishes to hear the fishermen's perspective, they know whom to call; however, the same cannot be said in regard to coastal tourism. On the flip side, those in the coastal tourism sector seem largely unaware of the MSFD (Informant 2).

# 1.3 Overview of Directives, Conventions and Regulations concerning EU Marine Policies

As it was presented in the introduction of this article, sectors face certain challenges that make the implementation of EBM difficult. One such challenge relates to the fact that most of the EU legislation linked to the sea is still managed according to sectors.

Figure 1 illustrates different policy areas linked to the sea covered by the European Commission with various policy areas grouped under the different Directorate Generals (DGs) who manage them. Notably, several DGs have control over the same policy area (i.e. tourism is managed by DG ENV, DG ENTR, and DG REGIO).

To demonstrate, the legislation applicable to each one of the sectors of this study is managed by independent policy areas. For example, Maritime Affairs and Fisheries (DG MARE) manages most of the legislation related to the fishing sector. Much of the legislation applicable to shipping and navigation is managed by Transport (DG MOVE), whereas most of the legislation applicable to offshore renewable energy and oil and gas is managed by Energy (DG ENER) (European Commission, n.d.). Management of coastal tourism, however, falls under several policy areas (as shown in Figure 1). With the introduction of the MSFD, Environment (DG ENV) will likely oversee some of sectors and their activities as well.

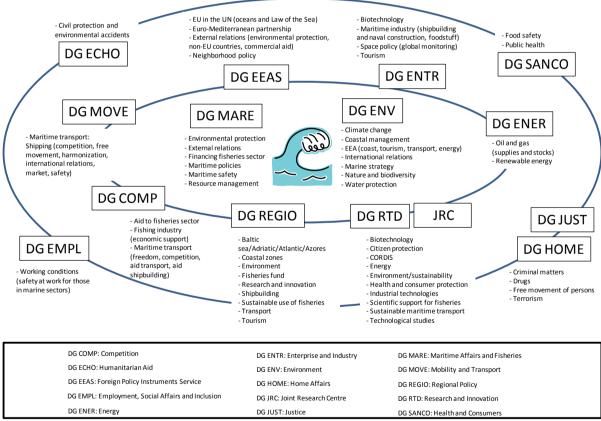


Figure 1: Policy areas covered by the European Commission and are linked to the sea. The inner ring is the DGs who manage those topics more directly linked to the sea, leaving to the peripheral ring to those whose topics are indirectly related. (Adapted from DG MARE, n.d.)

The Marine Strategy Framework Directive (MSFD) aims to link all these policy areas. In doing so the MSFD becomes the framework protecting the marine environment and maintaining the health of the ecosystem to ensure the socioeconomic viability of the marine sectors:

In order to achieve those objectives, a transparent and coherent legislative framework is required. This framework should contribute to coherence between different policies and foster the integration of environmental concerns into other policies, such as the Common Fisheries Policy, the Common Agricultural Policy and other relevant Community policies. The legislative framework should provide an overall framework for action and enable the action taken to be coordinated, consistent and properly integrated with action under other Community legislation and international agreements (MSFD 2008/56/EC, §9).

However, this task of linking the existing policies is fraught with difficulties particularly with the overlapping nature of legislation dealing with the marine environment with varying standards. Four such pieces of legislation and the way they overlap with the MSFD (2008/56/EC) are presented in the following section: The Water Framework Directive (WFD) (2000/76/EC), the Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC), and the Common Fisheries Policy (CFP) (2371/2002).

#### Water Framework Directive

While the WFD aims at achieving "good status" for all water sources by 2015, the MSFD aims at achieving "good environmental status" of EU's marine waters by 2020. The "good status" relates to ecological, chemical and special protected status; the latter is applicable only to specific areas and to specific objectives such as bathing waters or drinking water. "Good environmental status" refers to a list of eleven descriptors, categories, which in principle are not already covered by the "good status" categories (ecological, chemical and special) That is, the MSFD serves as a complement to the WFD in increasing the quality of the EU waters (DG ENV, 2008).

An overlapping area of the Directives is that both Directives use the management by "ecologically defined space": the WFD uses "river basin management" and the MSFD uses "marine region management." This situation could create challenges for the river and marine administrations within the Member States. "Coastal waters" represent one such case where the area covered by both Directives (European Commission, 2011). In this respect, the WFD has the priority; the provisions from the MSFD apply only if the aspect is not already covered by the WFD (MSFD 2008/56/EC §12). In any case, the most stringent provision shall apply (European Commission, 2011).

#### Habitats Directive, Birds Directive, Natura 2000

The Habitats Directive (92/43/EEC) addresses the protection of animals, plants and habitats; as the name suggests, the aim of the Birds Directive (2009/147/EC) is the protection of wild birds. Natura 2000 is the network of the protected areas defined by the Habitats and the Birds Directives. These two Directives intersect the MSFD in what is known as the marine component of Natura 2000; that is the establishment of marine protected areas (i.e. estuaries as nursery grounds for fish or habitats for migratory marine birds) (European Commission, 2007).

The establishment of these areas is to be done in both offshore and coastal areas. Establishment of sites in the offshore area has proven challenging due to a lack of scientific knowledge (i.e. distribution or abundance of species and habitat types), consequently few Natura 2000 sites have been identified offshore, though a Commission ad hoc working group created a document to help facilitate the process of designation and management of these areas (European Commission, 2007).

Conventional wisdom holds that the establishment of protected areas in the coastal areas is easier compared to offshore ones (European Commission, 2007). However, implementation has been challenging given that some of the Natura 2000 places which relate to estuaries are also associated with ports. The situation has thus created complications in the process of port developments. A document was then created to try to balance the economic interests associated with port development and the management of Natura 2000 sites (European Commission, 2011).

#### Common Fisheries Policy

The Common Fisheries Policy (CFP) is the main policy instrument managing European fisheries in EU waters. In relation to conservation measures, the legal provision is found in the Basic Regulation (Council Regulation 2371/2002). The CFP became a reality in 1983, when the Council agreed on a conservation component and a Total Allowable Catch (TAC) system was adopted for most stocks, allocating the same percentages of the TAC to member states every year—known as "relative stability". The CFP has developed over the years and is up for review every 10 years. The CFP is a heavily top-down micromanagement-oriented policy that in almost every detail is specifying management measures to be implemented to steer fishing activities. Resulting regulations are cobbled together adding another layer of regulation, solving some problems, but often creating new ones in the process (Christensen & Raakjær, 2006). Simultaneously, the CFP is broadening its scope and moving from being a fisheries specific policy to promoting the integration with other governance structures related to maritime policies in the Member States. Marine Spatial Planning, Integrated Coastal Zone Management and demarcation of Natura 2000 sites have become increasingly influential and will in the future continue to have a large impact on how fishing activities can be conducted.

## 2. Emerging Themes

Based on the literature review and key informant interviews on stakeholder perspectives on MSFD and the implementation of EBM, three central themes emerge in relation to implementing the MSFD and the ecosystem-based approach to management in EU marine waters: (1) Boundaries, in particular how to demarcate in an ecologically appropriate, yet manageable manner, where the challenge is to balance local needs without becoming too local rather than a single, one-size-fits-all approach, which leads to management of the lowest common denominator with poor ecological outcomes; (2) Policy and management coordination, particularly how the MSFD can move policy from a 'use perspective' to a 'system perspective' for holistic management of the marine environment, where the entire system of the marine environment shall be managed in concert; and (3) Balancing values and user conflicts, relating to how to balance

conflicting interests between business sector interests with broader stakeholder interests. The MSFD tries to capture need for balance between environmental health and socioeconomic viability. In a nutshell the question is how to maintain or develop economic activities in the marine environment without watering the MSFD and its descriptors down in that process.

As previously noted, the true impact of MSFD is yet to be seen as many Member States have only finished the transposition process and the implementation process has just been initiated. No one has, to date, issued marine strategies (Long, 2011). Nonetheless, some lessons can be drawn from the experience and perspectives of the sectors and the literature enables us to critically examine the problems the MSFD tries to resolve and the issues it will continue to face if we fail to coordinate not only maritime activities, but also addressing overlapping EU policies affecting sectors operating in the shared marine environment.

#### 2.1 Boundaries

Ecosystems and the concept of marine boundaries are keys to the MSFD. Large Marine Ecosystems (LMEs) span the political boundaries of national EEZs and encourage a reorientation toward cooperative governance and management (van Leeuwen et al 2011, Raakjær et al 2010, Symes 2009). Nonetheless, when managing activities in an LME abutting many countries:

"The divergence between 'ecologically defined space' and 'politically defined space' gives rise to a host of management problems and might provide either a rationale for international cooperation or, alternatively, in situations in which international cooperation is weak or has not been forthcoming, an abandonment of national efforts because if such efforts are undercut by the actions of those in other jurisdictions they will be rendered ineffective anyway. Accordingly, achievement of an appropriate level of regional cooperation to foster effective management is an important objective" (Juda & Hennessey, 2001, p. 47).

Organizing activities throughout a LME requires a great degree of political cooperation because actions of one Member State can be undermined by inaction of another. Long (2011) notes the novelty of the MSFD's employment of regions and sub-regions and in reference to the insights of Juda & Hennessey (2001), it is evident that the Commission has endeavored to avoid issues of free-riding or competitive advantage in the name of the health of the marine environment. The MSFD specifically defines 'regional cooperation' as "Cooperation and coordination of activities between Member States and, whenever possible, third countries sharing the same marine region or subregion, for the purpose of developing and implementing marine strategies" (MSFD 2008/56/EC art 3(9)). Raakjær et al. (2010) deal with a similar issue of suitable geographic scale for the management of EU fisheries and the potential to regionalize. Nonetheless, these regions and sub-regions outlined in the MSFD exemplify the problem of institutional ambiguity (van Leeuwen et al 2011).

Some marine stakeholders reveal trepidation over the complexity of the MSFD in its extent of regulation defined by individual member states with the risk of a "less of a level playing field" across Europe. The navigation sector provides a great deal of insight into this issue from experience with the Habitats Directive, the Water Framework Directive, and now the beginning stages of the MSFD. Especially for those industries like shipping—or the entire navigation sector—whose activities span political boundaries, there is concern in relation to the MSFD that Member States will interpret the directive to various extents of stringency.

In mild contrast to the navigation representative, an informant from the offshore oil and gas sector seemed more comfortable with the varying levels of regulation at the member state level. The oil and gas representative emphasizes the industry's attention to working case-by-case in terms of getting the support of the local community, "I think it's really the case that the industry operates often in very local areas. So, it's important to take into account the views of the population and that's what the company is trying to do and trying to integrate in their plans" (Informant 3). Speaking about public participation in Strategic Environmental Assessment and Environmental Impact Assessment the oil and gas representative recognizes the differences between locations but concludes, "I think it really depends on where you are, on what other activities are planned in the area, and how sensitive the local population is to particular issues," (Informant 3).

Perhaps the difference seen here between these two sectors is related to the characteristics of the activities—an oil and gas platform stands in a fixed position whereas shipping and dredging are mobile—a differentiation introduced by Maes (2008). In a similar vein, the ongoing debates and discussions on the CFP reform recognise the duality of local conditions versus maintaining a level playing field in terms of access to stocks (Raakjær, Hegland/MEFEPO, 2010). The LME concept advocates planning and coordinating management spanning an area defined by ecological, biological, forthcoming bathymetric characteristics rather than political delineations. Nevertheless, the unknown outcome of the individual Member State marine strategies calls into questioning the level of variation over borders and along boundaries.

#### 2.2 Policy and Management coordination

The previous discussion of boundaries dealt with the need for cooperation among member states to solve a variation of the commons dilemma related to maintaining ocean health; however, within a political system like the EU, boundaries between ministries and policy areas become socially constructed as well. Often several ministries within a member state have authority related to the ecosystem and most often the ministers have different planning scales and objectives (U.S. Government Accounting Office, 1994), Juda & Hennessey, 2001). Furthermore, van Leeuwen et al (2011) point out that the MSFD's reliance on other EU policies—both sectoral and systems-based—and absence of coordination mechanisms give rise to the second dimension of institutional ambiguity. Stakeholder groups and interest organisations typically revolve around the activities of a single sector or discrete issue, thus making it difficult to find participants who span multiple activities or sectors within a marine ecosystem (Juda & Hennessey, 2001). Thus, while the holistic approach is needed, actors have incentives to

focus narrowly on their interest. Even for eNGOs, whose point of departure is the health of the environment, there is a tendency to structure campaigns and advocacy around discrete issues.

The MSFD in its position as the "environmental pillar" of the EU's Integrated Maritime Policy seeks to move away from sector-by-sector management; however, the extent to which those two policies will operate in tandem is yet to be seen (Juda, 2007; van Hoof & van Tatenhove, 2009; Juda, 2010; Long, 2011). Nonetheless, as the EU layers the MSFD and the IMP on top of existing policies we should probe the degree of overlap and conflicting requirements not only in terms of sector-specific policies, systems-oriented legislation, but also stakeholder input mechanisms associated with such regulation (van Hoof & van Tatenhove, 2009).

Interestingly, Mee et al. (2008) also note that the European seas fell into jurisdictional void between the Water Framework Directive and the Habitats Directive, prompting the creation of the MSFD. Nonetheless the MSFD still suffers from jurisdictional confusion or inconsistency between its standards and those laid out in the WFD as experienced by the navigation sector (Informant 4). The sector would like to avoid "an artificial line in the sea, where the WFD works on one side of it one way and on the other side of it, the MSFD works in completely different way," as such an outcome would be burdensome and present great difficulty for operations (Informant 4). This complication of jurisdictional boundary seems to arise partly because of the transition from a policy landscape organized by sector-specific regulations to one in which activities are regulated in concert, based on shared space and time. Nonetheless, in this instance the MSFD runs up against other "system perspective" policies like the Water Framework Directive or the Habitats Directive.

As illustrated in a previous section (1.3.) the regulatory space related to these five sectors is perhaps just as crowded as the seas and oceans under protection. One remedy to the frustration felt by sectors under such a change in management paradigm is to proceed through incremental steps, which over time build to the cumulative impact of ecosystem-based approach to marine management (Juda & Hennessey, 2001). Additionally, adaptive management offers another way of reaching GES and allows regions to capture the nuance of their local areas more effectively, although without particular limitations (Mee et al., 2008).

The navigation sector voiced frustration with the growing complexity associated with the environmental regulations related to dredging, shipping and its other industries. The navigation informant raises two specific IMO protocols currently at work in the sector—ballast water and anti-fouling paint—where there is concern that the EU will adopt a new, different protocol in either the MSFD, the WFD, or in both directives that will conflict with the present IMO standard (Informant 4). Furthermore, the navigation sector voices concern that adequate communication and collaboration between DG Environment and DG Transport among other directorates (Informant 4). The oil and gas sector notes the same concern in terms of communication with DG Energy (Informant 3).

As previously highlighted, sectors have limited resources and organizational capacity to devote to participation in seemingly myriad EU policy consultations as they relate not

only to the sector-specific policies but also to "systems" policies like the MSFD. Remaining mindful of the trend toward and reasons behind increased environmental legislation and public consultation, the navigation sector understands that the MSFD is likely not the final piece of environmental legislation and will do what it can to stay current with the regulations (Informant 4). Nevertheless, our informant laments that as the sector becomes comfortable with one piece of legislation and its process (i.e. the Water Framework Directive and Habitats Directive), it then must get up to speed on a new set of requirements and engage in a new process with the MSFD (Informant 4). Describing the legislation as complicated, demanding and onerous, the navigation sector perseveres in both the international, EU and member state policy arenas to stay up to date. However, one cannot ignore the frustration expressed as our informant concludes, "And there is a fear as the 'what next' with the Marine SFD," (Informant 4).

#### 2.3 Balancing values and user conflicts

Finally, a major theme in the ecosystem-based management literature mirrored in the insights of the interview informants addresses the issue of values and the lingering reality of making certain trade-offs. Imparting the ecosystem-based approach to management in the context of the marine environment does not automatically resolve conflicts between user groups or stakeholder interests.

There is a compelling limitation of EBM in that decisions on the extent of protection and the appropriate level of maintenance and restoration of particular habitats and ecosystems in the face of competing societal needs are more questions of public policy decisions than about management strategy (U.S. Government Accounting Office, 1994). Ecosystem-based management and its intended outcome of sustainability is not a simple matter of employing scientific knowledge; societal values play a central role in how we define desirable outcomes (Juda & Hennessey, 2001). Mee et al. (2008) discuss the continuum of views on sustainability. Proponents of "soft sustainability" see the four types of capital (man-made, human, natural, and moral) as interchangeable, implying that a loss of natural capital would be acceptable for a gain in the man-made aspect, whereas "hard sustainability" advocates seek constant levels of all four types of capital (Mee et al. 2008). Therefore, the EU and its member states have not escaped this issue with the passage of the MSFD. The MSFD tries to capture the need for balance between environmental health and socioeconomic viability; however, the extent of that balance and how it should guide particular conflicts is yet to be seen.

Many recognize the short- and long-term trade-offs that each of these sectors face when trying to move into a more sustainable future than the reality of present management. The sectors themselves recognize the reality of increasingly crowded oceans and the transition from a by-gone era when industry operated untethered, although—whether the sectors view user conflicts and vying for scarce space as the potential for synergies or the need for compromise is another matter. With the respect to such trade-offs, "In the Commission's view, such sacrifices are costs that must be paid to attain long-term benefits in terms of healthy marine ecosystems that will generate economic benefits for the fishing and tourist industries, improve public health, and create new economic opportunities as a consequence of increased research" (Juda, 2007, p. 270). The tension between conservation groups, economic interests, and the Council's vision to make the

regulation less binding was one of the primary hurdles to overcome in drafting and passing the legislation (Mee et al. 2008, Long, 2011).

Furthermore, some in the eNGO community remain unsatisfied with the outcome and are ready to take other actions such as public media campaigns or judicial oversight to strengthen conservation measures (Informant 5). Our approach is that the environment should have priority first, setting the standards and then the scene" (Informant 5). In regard to the potential of marine spatial planning and conflicts between sectors for ocean space, the navigation and fishing informants highlighted the conflict with their industries' activities and protected areas (Informant 1 and 4). The navigation sector feels that in their experience in working groups the socio-economic factor is "not given credence it should be given" and that ecological value is considered more important. The navigation informant noted that the sector was less concerned about conflicts with other industry activities, but rather they were concerned with strict conservation. The navigation sector hopes that the MSFD gives guidance, but is not prohibitive of acceptable uses (Informant 4).

The fishing sector sees the need for compromise with other marine sectors in what is becoming increasingly crowded space. Although there are some conflicts with bottom fishing and port development and gravel extraction due to short-term distortion of fish habitats, those in the demersal fishing industry are aware of the need for compromise (Informant 1). However, the eNGO's emphasis on habitat designation and protected areas is viewed as more threatening by those in the commercial fishing industry. While our fishing sector informant knew there would be the need for compromise the associated positive effects of such designations often heralded by eNGOs are not viewed as positively by those in the fishing industry.

Although somewhat wary to outwardly state a conflict with conservation interests, in their documents the offshore oil and gas sector echoes the sentiments of the navigation sector in that it hopes that the MSFD will not be overly prescriptive and preclude certain uses. In addition to the present oil and gas production and exploration activities, the sector underscores its interest in securing the right to new exploration and production activities remarking that many untapped resources lie in areas that are more challenging to access because of water depth or position in more extreme geographic locations (Informant 3). The oil and gas sectors believes that marine spatial planning should go as follows, "Maritime plans should ensure continued access to oil and gas resources, promote the development of existing fields and encourage identification of, access to and investment in new resources and reserves," (OGP Europe, 2010).

Historically, eNGOs and the oil and gas industry have been in fierce conflicts, but both entities seem to recognize progress over the past decades toward more mutual understanding as the oil and gas sector itself has taken on environmental concerns (Informant 6). Nevertheless, the oil and gas industry's position to preserve access to offshore fields as well as the right to find new ones in areas like the Arctic does not align with the views of the eNGOs. One informant recognized this reality. "There is probably always going to be a bit of conflict there, because our sort of global desire for oil and gas exploration and development is one that grows, and the pressures to develop and

places which many people would think inappropriate is growing as well, and conflicts like that I think are going to be inevitable," (Informant 6).

So, therefore while the sectors and eNGOs recognize that conflicts do exist, they all seem to recognize the need for compromise. The sectors focus more on use and mitigating conflicts in order to continue access to resources or ocean space, whereas the eNGOs lead with conservation. While there is hope to align some of the incentives of enterprise with conservation—a trend that has emerged over the past ten years—ultimately society through representative government or otherwise will need to make a decision on the acceptable balance. As explained earlier, EDM cannot make decisions as to the desirable mix of trade-offs and whose short-term losses are more acceptable in light of another's long-term gains, those are judgments of value and not simply ecological indicators.

#### 3. Conclusion

The ecosystem-based approach to marine management (EBM) has become the prevailing wisdom of best practice in environmental policy. There is no doubt that activities in the marine environment should be addressed in a more holistic manner; this is, for example, already accepted best practice in other developed countries such as the United States, Canada and Australia. These countries have all developed comprehensive ocean management legislation to address the dearth of a single responsible agency for oversight of the oceans. The EU is moving in this direction and the MSFD has together with the IMP become the EU approach to integrated environmental policies in the marine domain. The MSFD and in part the IMP recognized a problem that many industrialised countries have realised—activities in marine waters are dealt with by many different sector-specific policies and have little in the way of coordination of activities occurring in a single ecosystem.

In this article we have identified three themes, which cause challenges to the implementation of the MSFD and subsequently IMP and thus *per se* EMB.

#### **Boundaries**

From a governance perspective it is clear that the MSFD has not been that well-thought through Long (2011); the consistency of the overall legal frameworks and specific regulations related to marine management has created legal vagueness and subsequently caused legal uncertainties leading to conflicting policies and regulations having unclear boundaries. Leeuwen et al (2011) show how the MSFD is caught within institutional ambiguity due to the mismatch between institutions of the different policymaking settings involved in the implementation of the MSFD.

The structure of the MSFD as a directive to Member States summons the concern that particular member states will interpret good environmental status and other aspects of the legislation to different degrees of stringency—a concern based on experience with similar EU directives. The Dogger Bank provides a vivid example where four different Member States (Denmark, Germany, the Netherlands and the UK) have found great difficulty in agreeing on habitat protection and the acceptable level of industry activities like fishing or wind farms. As Juda & Hennessey (2001) warn, there is a risk that

inaction by a single player will push others to follow suit if they feel that their efforts will simply be undercut by the inaction of another. In its employment of regions, the framers of the MSFD aim to instill cooperation in smaller subsets of Member States; however, it is too early to judge their success. Sectors with activities spanning European waters are the first to recognize when a policy is either too localized or when a single, one-size-fits-all approach leads to management of the lowest common denominator and poor ecological outcomes.

#### Policy and Management coordination

The MSFD was planned to work in concert with the IMP to help with these issues of integrated activity planning and balancing needs, but the IMP has not moved at the rate of the MSFD. None of our informants knew much about IMP, nor were they engaged in its processes. Integrated policies in the marine domain are challenged to ensure that economic benefits obtained from marine environment are done in a sustainable manner. In regard to the relationship between the MSFD and IMP Juda (2007) has clearly addressed the balancing act between economic benefits and environmental considerations:

The relationship of the Strategy and the Policy awaits further clarification and, no doubt, will be a subject of controversy. Will the broader Maritime Policy provide an umbrella that encompasses and seriously takes ecological needs into account, sacrificing economic benefits in the name of environmental considerations? Or, will the Marine Strategy be the tail on the economic development dog, having little actual influence on ocean activities? (Juda, 2007, p. 274)

Such ambiguity creates an opportunity for actors to maneuver when negotiating and changing the institutional rules. Furthermore, the regulatory signature of the legislation is still to be determined as implementation rests upon the member states designating their own marine strategies, hopefully in coordination with other relevant member states. Furthermore, if the MSFD aims to deliver good environmental status, it should seek ways to better coordinate policies and responsible persons in relevant Directorate Generals and ensure genuine stakeholder involvement.

#### Balancing values and user conflicts

Sector actors and eNGOs have been involved in the decision-making process leading up to the MSFD and the following implementation process to varying degrees. We have demonstrated the dilemmas facing various sectors related to MSFD implementation and how unequally prepared the different sectors are to participate in this policy.

The navigation, offshore oil and gas, and offshore wind energy sectors as well as eNGOs have the capacities and capabilities to actively engage in the MSFD processes, whereas the fishing and coastal tourism sectors have not really engaged in the MSFD process. The fishing sector has been heavily regulated by the CFP, a policy with which they are displeased. Initially, the sector was resistant to the development where policy authority within the fishing domain was transferred from sector-focused administrative bodies to environment-oriented administrative bodies both at EU and Member State level. In addition the fishing industry was fully occupied dealing with the reform process of the

CFP and did not have capacities to be heavily engaged in yet another policy area, which, in their view, is only adding complexity and confusion.

Tourism represents a mixed group of interests having in-built incentives and dilemmas between a clean marine environment and business interests. There is also a high degree of difference in political strength between the various actors within the sector reducing the strength of the voice or not representing all, where particular local coastal communities is in risk of being left out. In contrast the other economic sectors hold substantial economic power and are politically well connected and have consequently been influential in the MSFD process. Environmental NGOs have gained significant power and present a strong voice in EU decision-making, actively working for a clean and healthy environment. Nevertheless, sectors with comparatively greater organizational capacity than fishing and tourism still find navigating EU policies and processes related to the marine environment at best challenging and at worse overly burdensome.

The MSFD will continue to face a legitimacy trap among sector actors in the near future. In this respect it is important to reiterate that though sectors may be important socially and economically, this does not equate to equality among sectors; neither does it provide a guarantee that their voices are heard in the process. Consequently as we look into the MSFD we see that sectors are not all on equal footing, because there is a wide diversity in the institutional capabilities, economic strength, and political clout among them. In addition, the attributes of sector activities and the associated resource ownership also make some sectors more aware of the institutional ambiguity associated with the MSFD. For example, offshore oil and gas is able to work in a more localised way than fisheries due to the fact that oil and gas reserves, unlike fish, are the property of the member state through the rights to the seabed.

Altogether, the MSFD tries to impart the ecosystem-based approach to management in marine waters, but conflicts between users or conservers of ocean space will not be resolved by this management paradigm alone. As was the intention through partnering with the IMP, marine spatial planning and other management tools could help resolve some conflicts. It is debatable whether sector policies should be phased out in the name of more holistic policies, but at least some sharing of data gathering or other tasks could be better coordinated. Moreover, a clearer coordinating mechanism for the Directorate Generals associated with marine activities and related ecosystems would also relieve the confusion and frustration experienced by marine sectors.

### Acknowledgement:

The empirical data for this article is generated under the EU FP7 project Options for Delivering Ecosystem Based Marine Management (ODEMM). However, the views presented in this article do not represent the Commission's position and in no way anticipate any future opinion of the Commission in this sphere. We would like to thank the ODEMM partners: Judith van Leeuwen and Jan van Tatenhove, Environmental Policy Group, Wageningen University; Luc van Hoof, IMARES, Wageningen University and Research centre; Ronan Long, Marine Law and Ocean Policy Research Services Ltd. and

Rebecca Koss, University of Liverpool for comments provided on earlier versions of this article.

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