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Sometimes you cannot make it on your own; drivers and scenarios for regional cooperation in implementing the EU Marine Strategy Framework Directive

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ABSTRACT

Implementing the EU Marine Strategy Framework Directive explicitly calls for regional cooperation between the EU Member States in the different regional seas. This regional cooperation, although set in a general framework of EU Member States and non-EU states utilising existing Regional Sea Conventions as focal point, develops along different tracks. Based on a series of interviews with different stakeholder groups in the different regional seas the drivers for this regional cooperation were determined. These drivers were used to develop a set of scenarios to depict possible ways and structures for cooperation at the different regional seas. In this paper the result of this analysis and the different scenarios developed are presented. The five scenarios developed were very helpful in elaborating alternative governance models for regional cooperation. From the validation by the stakeholders it became clear that both the drivers used, as the scenarios developed were found to be relevant. There is no single solution that is going to fit all regional seas, or that is going to appeal to all stakeholders within a regional sea. Especially in this setting the scenario approach does help people to explore the full range of possibilities that exists for the development of alternative governance models that address two issues raised but not detailed in the MSFD: cooperation and participation.

1. Introduction

European legislators have adopted ambitious policy initiatives for the oceans, seas and coasts, to be implemented over the next two decades. These initiatives include e.g. the 2007 Integrated Maritime Policy, the 2009 Renewable Energy Directive, the 2012 Motorways of the Sea initiative and the Blue Growth Strategy and the recent reform of the Common Fisheries Policy [1]. With the introduction of the Marine Strategy Framework Directive (MSFD) in 2008, the European Union (EU) has made a firm commitment to implement an ecosystem-based approach to marine management. The MSFD provides a comprehensive framework for the protection of the marine environment.

The main objective of the MSFD is to put in place measures to achieve or maintain "Good Environmental Status" (GES) of Europe's regionals seas by 2020 [2,3]. Europe's seas differ in terms of ecosystem components, and the sectors and activities that exert pressures upon them [2,3]; thus different and specific solutions at both the regional and sub-regional levels are required in working towards GES [2]. Whilst the MSFD calls for individual Member States (MS) to develop a marine strategy based on the specific needs and challenges identified for its own waters, it also requires cooperation and coordination of activities between MS, and where possible with third countries sharing a region, in both the development and implementation of strategies to ensure that the overall perspective of the marine region or sub-region is not overlooked [2]. The MSFD states that "where practical and appropriate" regional level working makes use of existing regional institutional cooperation structures, such as the Regional Sea Conventions, but contains no specific legal framework nor specifies governing structures to ensure cooperation [4]. Furthermore, the regional level is not formally reflected in the European Treaty [5]. Achieving regional cooperation thus poses challenges for MSFD implementation, particularly given that neighbouring MSs within a region may have different, and potentially contradicting, priorities and that for all regional seas, neighbours include third countries that are not bound to the MSFD [6].

Hence the 'governance model' or way in which cooperation in implementing the MSFD is organised at the regional sea level

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needs to be further developed. The key objective of the EU FP7 funded ODEMM project (*Options for Delivering Ecosystem-based Marine Management*) was to develop scientifically-based operational procedures to assist in the transition towards fully integrated management over sectors, actions and policy domains. Given this remit, the challenge of regional coordination in implementing the MSFD was clearly apparent.

The regional seas differ both in ecosystem characteristics and governance settings. Given that different governance solutions could be used to address regional organisation, the choice was made to develop several alternative governance models using a scenario approach. The scenario approach allows for an exploration of future developments and at the same time analysing the current situation. Drivers for the scenarios were identified based on a series of interviews with key informants from around the main regional seas in Europe, representing the main sectors and policy fields and were used to construct scenarios of alternative regional governance models. These models were used in further discussions conducted with regional sea level focus groups to determine which model would have the best 'fit' with the regional circumstances.

In the next sections the basic methodology of scenario development is presented; starting from the identification of drivers, micro-scenarios and macro-scenarios are being developed. In Section 2 the methodology is detailed and in Section 3 the different drivers are being described. Section 4 presents the micro-scenarios used and in Section 5 the (macro-) scenarios are presented. In Section 6 a reflection is given on the findings and the use of the scenario methodology in developing alternative governance models.

2. Building scenarios for governance models

The challenge addressed in this study is how to develop governance models at the regional sea level that will facilitate implementation of the MSFD. More specifically it addresses two issues raised but not detailed in the MSFD: cooperation and participation. Basing on the EU's marine and maritime policies the Ecosystem Approach has policy design implications. Policy development should be regionally (ecosystem) orientated and should be integrated over all sectors and activities [7]. With the process of increased attention for cooperation and integration at the regional level the MS are challenged to jointly develop policies for a specific spatial area which will require a form of unification of policy by MS. Not only are the Member States challenged to bring together complex volumes of policy but also the differing signatures of different sectors [8].

Given the different circumstances in the different regional seas and the numerous activities and sectors operating in Europe's regional seas, no one-size-fits-all solution to these challenges is likely or logical. In order to deal with this variety in circumstances in the regional seas a three step approach was chosen. In the first step, reported in van Leeuwen et al. [5] and Ounanian et al. [9], interviews with key players from government, Regional Sea Convention, industry and the NGO community were held. The main findings were that in all four regional seas institutional change is taking place, although the extent to which differs per regional sea. The institutional ambiguity between the regions differs, with the Baltic Sea having the lowest level of institutional ambiguity and the Mediterranean Sea the highest [5]. In addition 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. Furthermore, it is found that different sectors are unequally prepared to participate in this policy [9]. These results were used as input for the development of scenarios for possible governance models for the 4 regional seas. Based on the analysis of the scenarios 4 alternative governance models were built. These models were presented and discussed during regional sea focus groups in which key informants looked at the applicability of the different models in their regional sea. In this section the scenarios that were built will be presented.

Scenarios, as a prime technique of future studies, have long been used as powerful tools to aid decision-making in the face of uncertainty. The idea behind them is to establish thinking about possible futures which can minimise surprises and broaden the span of managers' thinking about different possibilities [10]. They are extremely helpful in cases where elements of the system cannot be modelled and where subjective interpretations need to be included. The basis of scenario building lies in developing hypothesis about possible futures (foresight) rather than making predictions.

According to De Jouvenel [11] a scenario comprises the following three elements: '(a) the base, nothing more than the representation that we create of the current reality and of the dynamics of the system that we are studying; (b) the paths created in looking at the system according to a time scale, with the knowledge that as we advance, the questions we face will necessarily imply more hypotheses (the "if this, then, that" process). Specifying conditions each time, using deduction, we build the trees of possible futures, potential descendants of the present; and (c) the last images are obtained at different periods, and according to the horizon line of the study, the result of the paths or routes mentioned thus far'. According to Durance and Godet [12] in order for scenarios to be both credible and useful they have to respect the following five conditions: pertinence, coherency, likelihood, importance, and transparency.

Scenarios can contribute to policy decision making by identifying and anticipating potential developments (desirable and undesirable) and information gaps and inconsistencies. Generating 'images of the future' and 'focusing attention on causal processes and decision points' are important ways by which better strategies can be devised to address today's and tomorrow's environmental problems [13].

According to Borjeson et al. [14] scenario typologies explore possible, probable and/or preferable futures. Within this broad definition various approaches for designing scenarios, leading to a large diversity in scenario typology, can be found in the literature [14–17]. Fig. 1 shows a clear overview of the different scenario typologies and outlines three scenario categories and six scenario types [14].

In order to be able to reach the main objective of the MSFD scenarios should answer the question 'What can happen when we act in a certain way?' Explorative strategic scenarios refer to that question. This type of scenarios can be useful in cases where the decision makers may have good knowledge regarding how the system works at present and are interested in exploring a range of possible consequences of alternative developments [14,16] stated that when building explorative scenarios, the process is crucial. Important aspects are awareness raising and stimulation of creative thinking. According to Wollenberg et al. [18] techniques for stimulating creativity include: using extreme outcomes, not only predictable ones; creating disruptions to historic trends; selection

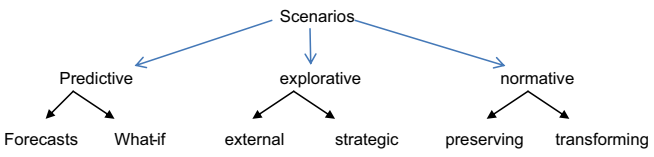

Fig. 1. Scenario typology with three categories and six types.