

## **INTEGRATED MARINE GOVERNANCE: Questions of Legitimacy**

*Jan van Tatenhove*

Environmental Policy Group, Wageningen University

jan.vantatenhove@wur.nl

*Abstract* Marine ecosystems are threatened by multiple economic activities, such as fisheries, commercial shipping, oil- and gas production, offshore windmill parks, and tourism. To find solutions for these problems several countries and the EU are taking initiatives to develop integrated maritime policy. Marine governance is the sharing of policy making competencies in a system of negotiation between nested governmental institutions at several levels (international, (supra)national, regional and local) on the one hand and governmental actors, market parties and civil society organizations on the other in order to govern activities at sea and their consequences. The involvement of multiple actors, multiple levels and the coordination and integration of different sectoral marine activities will affect the legitimacy of integrated marine governance. This paper formulates questions of legitimacy and challenges for integrated marine governance.

### **Introduction**

The development of integrated marine governance has taken central stage on Europe's policy and political agendas. With regard to the marine environment, the European Commission's Strategic Objectives for 2005-2009 state that:

In view of the environmental and economic value of the oceans and the seas, there is a particular need for an all-embracing maritime policy aimed at developing a thriving maritime economy and the full potential of sea-based activity in an environmentally sustainable manner (COM 2005:12, cited in De Santo 2010).

This commitment resulted in the Green paper<sup>1</sup> in June 2006 and after a consultation round of one year with stakeholders in the 'Blue Paper',<sup>2</sup> in October 2007. In the Blue Paper, the Commission proposes an Integrated Maritime Policy for the European Union, 'based on the clear recognition that all matters relating to Europe's oceans and seas are interlinked, and that sea-related policies must be developed in a joined-up way if we are to reap the desired results' (EC 2007:2). According to the Commission, a more collaborative and integrated approach is needed to deal on the one hand with the 'increasing competition for marine space and the cumulative impact of human activities on marine ecosystems' (EC 2007:4), and on the other hand to overcome the inefficiencies, incoherencies and conflicts of use caused by fragmented decision-making in maritime affairs.

With this ambitious Integrated Maritime Policy (IMP) the Commission wants to cover a wide range of issues and seeks to bring together actors from a wide variety of sectors, such as shipbuilding and shipping, ports, fisheries, offshore energy (including oil, gas and renewables), coastal and maritime tourism, exploitation of mineral resources, aquaculture, blue biotech and emerging sub-sea technologies as well as the recreational, aesthetic and cultural uses and the ecosystem services provided.

In fact its [Integrated Maritime Policy] starting point lies in a search for integration over sectors and policy areas both to face challenges posed to the policy areas (such as increasing and conflicting uses of oceans and environmental challenges such as climate change) as well as posing challenges to the marine and maritime sectors to integrate the policy fields. As such the IMP forms an integrative discourse including the entire marine and maritime field of activities, sectors and stakeholders. (Van Hoof and Van Tatenhove 2009:730).

According to the 'Blue Paper' an Integrated Maritime Policy requires a governance framework that applies the integrated approach at every level as well as horizontal and cross-cutting policy tools, such as maritime spatial planning, an integrated approach to data collection processing and delivery, and the coordination of surveillance and monitoring activities and processes (EC SEC 2007:1278). As previous institutional settings have been optimized for classical, non-integrated policies, these policies demand novel institutional arrangements.

In this paper, I will discuss the concept of Integrated Marine Governance (IMG), questions of legitimacy and the challenges to develop an integrated marine governance framework. In section two the theoretical concepts to understand marine governance are discussed. These are policy arrangements, political modernization, governance and legitimacy. Section three, starts with discussing the diversity of sectoral marine policy arrangements, followed by a discussion of Integrated Marine Governance (IMG) and Marine Spatial Planning (MSP) as an elaboration of IMG. Key elements of IMG are the integration of activities in a three dimensional space, with the involvement of representatives of public and private actors (participation), and the sustainable management of marine ecosystems. Section four, discusses integration, participation and sustainable management as building blocks for the development of IMG. In section five, questions of legitimacy are formulated to understand the new governance setting of IMG, followed by formulating challenges for IMG in section six. The paper ends with conclusions (section seven).

## Policy Arrangements, Political Modernization, Governance and Legitimacy

To understand the dynamics of marine governance, the conflicts between sectoral activities and policies on different levels and the way processes of structural transformation influence policymaking on the one hand and interactions in maritime practices on the other I make use of the policy arrangement approach.

The policy arrangement approach has been developed to understand the dynamics of policies, especially processes of change and stability. Central theoretical concepts are policy arrangements and political modernization. The central line of argument of this approach is that the on-going institutionalisation of *policy arrangements* is the result of both the day-to-day interactions of actors in policy practices and long-term processes of social and political change (*political modernisation*). The interplay of interactions in policy practices (agency) and processes of political modernization (structure) results in specific policy arrangements and new forms of governance as an expression of changing relations between state, market and civil society. These changed relations between state, civil society and market and the new forms of governance point to the need of new modes of legitimacy.

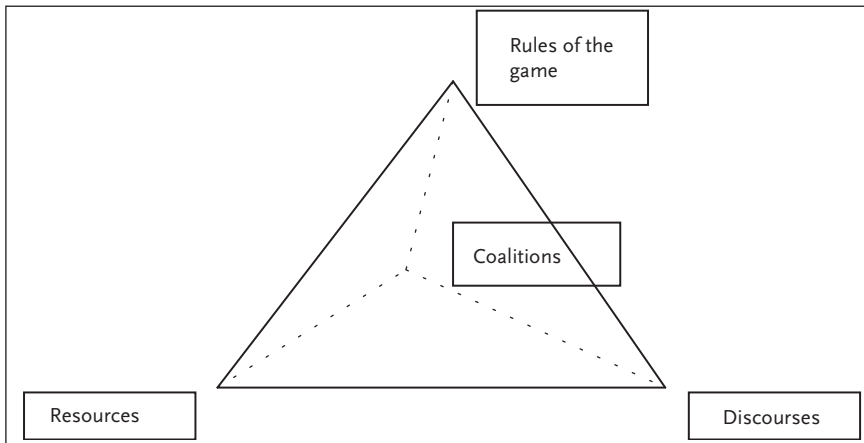
### *Policy Arrangements*

Policy arrangements are defined as ‘the temporary stabilization of the content and the organization of a particular policy domain’ (Van Tatenhove *et al.* 2000; Liefferink 2006). The structure of a policy arrangement can be analyzed along four dimensions, the first three referring to the organizational, the last to the substantial, aspects of policy (Arts *et al.* 2000; Liefferink 2006):

- The actors and their coalitions involved in the policy domain.
- The division of resources between these actors, leading to differences in power and influence, where power refers to the mobilisation and deployment of the available resources, and influence to who determines policy outcomes and how.
- The rules of the game currently in operation, in terms of formal procedures of decision making and implementation as well as informal rules and ‘routines’ of interaction within institutions.
- The current policy discourses, where discourses entail the views and narratives of the actors involved (norms, values, definitions of problems and approaches to solutions).

These four dimensions of a policy arrangement are inextricably interwoven. This means that any change in one of the dimensions induces change on the other dimensions. This relationship is symbolized by the tetrahedron, in which each of the corners represents one dimension (Figure 1).

Figure 1: The tetrahedron as symbol for the connections between the dimensions of an arrangement



### *Political Modernization and Governance*

The concept of political modernization tries to capture those structural transformations in political domains in contemporary societies, which have or may have consequences for day-to-day practices. I define political modernization as the shifting relationships between the state, the market and civil society in political domains of societies – within countries and beyond – as a manifestation of the ‘second stage of modernity’,<sup>3</sup> implying new conceptions and structures of governance (Arts and Van Tatenhove 2006:29). The concept of political modernization expresses the shifting locus and focus of politics. This has resulted in shifting relationships between state, civil society and market due to ‘horizontal’ as well as ‘vertical’ processes. In general, policy and politics are no longer framed within the nation state model alone, but within a diversity of society-centered forms of governance.

According to different authors ‘changes have taken place in the forms and mechanisms of governance, the location of governance, governing capacities and styles of governance’ (Van Kersbergen and Van Waarden 2004). Traditionally, governance was associated with government, that is the formal institutions of the state and its monopoly of legitimate coercive power (Stoker 1998). Horizontal and vertical processes have resulted in an erosion of the traditional bases of power of the nation states. The former refers to the blurring of the distinctions between state, market and civil society at the national levels, the latter to a relocation of politics below and beyond the nation state. Governing is more and more a shared responsibility of state, market and civil society actors. Public duties have been transferred to both civil society and the market (Pierre 2000). The market has been challenged to take public responsibility, for example to promote sustainable development and social corporate responsibility (Bendell 2000), while society has been re-politicized (Beck 1994). Besides these ‘horizontal shifts’, the nation-state model has also lost its exclusiveness under the influence of ‘vertical shifts’, like

globalization, Europeanization and regionalization. From the perspective of the nation-state, one can witness a vertical upward trend to the international and supranational level (EU, WTO and NAFTA) and a downward trend to the sub national level (Marks and Hooghe 1996; Hooghe and Marks 2001; Held and McGrew 2002; Mak and Van Tatenhove 2006).

These processes of political modernization reflect different structures and patterns of governance (Kohler-Koch *et al.* 1999; Héritier 2001, 2002; Pierre 2000; Jordan 2001; Hajer and Wagenaar 2003; Van Kersbergen and Van Waarden 2004; Kjaer 2004). Some refer to this as a 'shift from government to governance' or as 'governance without government' (Rosenau 2000; Van Kersbergen and Van Waarden 2004). In general, we are witnessing a shift in the locus and focus of governance (Van Leeuwen and Van Tatenhove 2010). The shift in the locus refers to the emergence of new coalitions of actors and new levels. Interest groups, pressure groups, firms, citizens and other non-state actors enter the arena of policy making. The participation and influence of players from the market and civil society – for example epistemic communities, NGOs or business – has recently increased, at all levels of policy-making (Haas 1992; Kooiman 1993; Princen and Finger 1994; Rhodes 1997). The increase of actors in processes of governance goes hand in hand with the increasingly multi-level character of politics and policy making. Besides a shift in the locus of policy and politics, one can witness a shift in the focus of policy and politics, referring to shifts in the rules of the game and the steering mechanisms developed.

### *Legitimacy*

The multiplication of levels, rules, and actors in practices of governance point to the empirical and theoretical need to find new modes of legitimacy production (Scharpf 2004). In general, legitimacy refers to the acceptance of the political system by citizens, the outcome of policy processes and the quality of policy making. More specifically, legitimacy refers to the notion or perception that the actions and products of a certain entity are wished for and in accordance with a socially constructed set of norms, values, principles and definitions.

Four forms of legitimacy can be distinguished: *input legitimacy*, *throughput or process legitimacy*, *output legitimacy* and *feedback legitimacy* (Scharpf 1999, 2004; Engelen and Sie Dhian Ho 2004; Van Tatenhove 2008a; Edelenbos *et al.* 2009). Input-legitimacy emphasizes 'government by the people'. Political choices are legitimate if they reflect the 'will of the people' – that is, if they can be derived from the authentic preferences of the members of a community. Input-oriented legitimacy thus refers to the reflection of the interests of involved participants in the formulation of politics and policy in a specific institutional setting (polity). The emphasis is on the support of citizens and other stakeholders for politicians and rules of the game, participation of those affected by decisions and representation of interests and preferences. Output legitimacy emphasizes 'government for the people': political choices are legitimate if and because they effectively promote the common welfare of the constituency in question (Scharpf 1999:6). 'Government for the people' derives legitimacy from its capacity to solve problems requiring collective solutions because they could not be solved through

individual action, through market exchanges, or through voluntary cooperation in civil society (Scharpf 1999:11). Institutions of power wielding can be legitimate in the eyes of citizens either because they 'work', 'perform', are able to 'deliver goods' (output legitimacy), or because they result from decisions made according to procedures that include some minimal forms of accountability, such as the rule of law, democracy, or political or economic competition (input legitimacy) (Van Kersbergen and Van Waarden 2004). The democratic dilemma has gone beyond weighing input (government by the people) and output (government for the people) legitimacy and has come to include considerations of throughput and feedback legitimacy. Throughput legitimacy refers to the concern for the quality of the structure and procedure of a policy-making *process* in terms of legality, transparency, fairness, responsiveness, deliberation, openness and efficiency (Risse and Kleine 2007). Throughput legitimacy asks how a decision is taken, who is responsible for them and which issues are at stake. Feedback legitimacy refers to the way politicians and administrators give account to stakeholders about the outcome of policy processes and the quality of the feedback relations. Approval or rejection of the outcomes of political and policy interventions will be new input for the policy making or decision-making process.

In the next section the dynamics of sectoral marine policies is analyzed and the concepts of Integrated Marine Governance (IMG) and Marine Spatial Planning as a special elaboration of IMG are defined and analyzed. After discussing the building blocks of IMG (section four) it is possible to discuss in more detail the consequences for legitimacy (section five).

## **From Sectoral Marine Policies to Integrated Marine Governance**

The shift in locus and focus of governance has also affected the domain of marine policies (Van Leeuwen and Van Tatenhove 2010; Van Leeuwen 2010). For example in the realm of fisheries policies, innovative forms of governance are debated, such as interactive governance (Kooiman *et al.* 2005), co-management arrangements (Jentoft *et al.* 1998; Wilson *et al.* 2003; Raakjaer Nielsen *et al.* 2004; Van Hoof 2009), and new forms of participation (Jentoft and McCay 1995; Raakjaer Nielsen *et al.* 1999; Gray 2005; Jentoft 2007) and legitimacy (Raakjaer Nielsen 2003). In addition, also other maritime activities face changing institutional settings and new relations between public and private actors, resulting in debates about global ocean governance (Friedheim 1999), and regional marine environmental governance (Haas 2000). However, all these sectoral policies have developed separately, resulting in a fragmentation of marine policies.

This section starts with discussing the diversity of sectoral marine policy arrangements on different levels and the co-existence of traditional and innovative arrangements within several sectoral marine policy domains. To overcome the negative effects of the fragmentation of policies and to find solutions for economic, environmental, nature conservation and spatial problems governments more and more take initiatives to develop integrated policies. Integrated Marine Governance and Marine Spatial Planning will be discussed in the second part of this section.

*The Diversity of Sectoral Marine Policy Arrangements on Different Levels*

Not only do sectoral maritime activities have different policy dynamics they developed also separately as policy domains on different governmental levels. For example, fisheries policy is formulated on the EU level and implemented on the national level, the designation and construction of windmill parks and the development of coastal and maritime tourism are mainly a national and sub-national responsibility, while decisions about commercial shipping and offshore oil- and gas production are taken on the international and national level.

This has resulted in different policy arrangements within the sectoral domains. For example, the EU has exclusive competence for the formulation of *fisheries policy*, while the implementation of fisheries policies is left to the individual member states. At the EU level, the Common Fisheries Policy (CFP) is developed in a mixture of intergovernmental and transnational policy arrangements (see Van Hoof and Van Tatenhove 2009:729). Inter-governmental as the CFP accommodates to solve the conflicting interests of the member states; for example the sharing of resources. Supranational as the core competence lies with the institutions of the European Union. Yet concurrently trans-national in its diversity of committees and European agencies in which co-operation between the sub-national, national and supra-national levels is shaped where policy ideas can be deliberated upon, policy proposals can be discussed and policy implementation can be monitored. Examples of the latter are ACFA, the Advisory Committee on Fisheries and Aquaculture, created as early as 1971 to have stakeholder input into the implementation of the rules of the CFP and the formulation of analyses and joint positions. At member state level, fisheries management shows neo-corporatist characteristics. In neo-corporatist arrangements, functional interest organisations, such as fisheries organisations, possess a representational monopoly, co-operating between each other and with the state based on apolitical-economic consensus at the top. The participating organisations are granted privileged influence on public policy-making in exchange for disciplining their constituency (the fishermen) and restraining their demand (Van Hoof and Van Tatenhove 2009:727). Each country has its own specific corporatist signature. The corporatist signature varies from formal structures (such as the Consultative Board in Denmark and the Management Council (*Reguleringsradet*) in Norway), to more traditional structures (the *prud'homies* in France and the Spanish *cofradías*), and informal structure such as the several *overleggen* (an informal mix of discussions and negotiations) in the Netherlands (Van Hoof *et al.* 2005).

As opposed to fisheries, *Commercial shipping* can be defined as an intergovernmental arrangement. Shipping policies are formulated on the international level. In this intergovernmental arrangement, the International Maritime Organization (IMO) and port and flag states play key roles. International conventions regulate for example the environmental effects of shipping. Examples are the 1973 International Convention for the Prevention of Pollution from Ships and the 1979 Protocol to this Convention (MARPOL 73/78) and the United Nations Conventions on the Law of the Sea (UNCLOS). Besides environmental rules, these conventions define the rights and obligations of flag states, port and coastal states (Van Leeuwen 2010). Also in oil- and gas production, states and international organizations

play key roles. Since the end of the 1970s, the OSPAR Convention formulated the environmental standards to protect the marine environment of the North-East Atlantic (for an extensive analysis of the cases of shipping and oil- and gas production see Van Leeuwen 2010).

*The Co-existence of Traditional and Innovative Policy Arrangements Within These Domains.*

Characteristic for each sectoral marine policy domain is the specific co-existence of traditional and innovative policy arrangements. For example, the policy domain of fisheries consists of different policy arrangements, ranging from corporatist and statist policy arrangements (the EU Community Fisheries Control Agency) to more liberal-pluralist arrangements, such as co-management arrangements and Regional Advisory Councils (RAC). The primary role of the regulatory EU Fisheries Control Agency is to organise coordination and cooperation between national control and inspection activities so that the rules of the EU Common Fisheries Policy (CFP) are respected and applied effectively.<sup>4</sup> The Agency is designed to enhance the cooperation between the Member States and third countries and to ensure that legislation is implemented in a systematic, uniform and effective way.

Examples of liberal-pluralist and participatory arrangements are co-management systems and the Regional Advisory Councils (RACS). *Co-management* involves sharing of fisheries management decisions between centralized government agencies and user groups. Raakjaer Nielsen and Vedsmand define co-management as 'a dynamic partnership, using the capacities and interests of user groups, complemented by the ability of the particular fisheries administration to provide enabling legislation and administrative assistance' (1999:21). Co-management arrangement involves delegation of management responsibilities, where user groups take responsibility for management tasks. Co-managements systems are institutional and organizational arrangements (rights and rules), which define the cooperation between the particular fisheries administration and its related user groups, and they vary from government-based management to forms of self-governance. An example of a co-management system are the Dutch 'Biesheuvel groups' (Van Hoof 2009). Primary task of these groups is to manage and to control the quota of their members. Within these groups, fishermen pool their individual quota and their days-at-sea. They remain the owners of their catching rights and days-at-sea, but within the group they can buy, sell or lease quotas and days-at-sea, when they face a shortage or a surplus. The creation of *Regional Advisory Councils* (RACS) was one of the pillars of the 2002 reform of the CFP. The EC was seeking, through this reform, to create the conditions for responsible, well-informed and transparent dialogue with all those actively concerned by the common fisheries policy. The RACS are (regional) arrangements to allow stakeholder participation (representatives of the fisheries sector, environmental organizations, scientists and consumers), in the decision-making process. They are advisory bodies and their opinion is requested on all proposals made by the EC.

Also, in shipping there is a co-existence of traditional and innovative arrangements. The International Maritime Organization – with a central role of flag and port states, and a growing influence of the EU – has regulated shipping

traditionally. New initiatives are taking place outside IMO and the EU. Examples are the Clean Ship Concept developed by the environmental NGO the North Sea Foundation to trigger debates about the future of shipping and The Green Award<sup>5</sup> (Van Leeuwen 2010). The Green Award is awarded to individual ships that meet the Green Award requirements. Currently over 200 ships carry the Award and ports in some countries (the Netherlands, Belgium, Lithuania, Spain, Portugal, South Africa and New Zealand) have started to give a differentiated port fee to ships that carry a Green Award.

#### *Integrated Marine Governance: A Definition*

In general, governance refers to a society-centered way of governing or steering, accentuating coordination and self-governance, manifested in different types of policy arrangements. These policy arrangements are an expression of new inter-relations between state, civil society and market (Van Tatenhove *et al.* 2006). I define Marine Governance as the sharing of policy making competencies in a system of negotiation between nested governmental institutions at several levels (international, (supra) national, sub-national) on the one hand and state actors, market parties and civil society organizations of different maritime activities on the other in order to govern activities at sea and their consequences (Van Tatenhove 2008; Van Leeuwen and Van Tatenhove 2010).

More specifically, marine governance is about:

- Processes of marine policy making, which take place in different policy arrangements. These marine policy arrangements consists of different coalitions which mobilize discourses and resources, and define rules of the game (on different levels);
- The way stakeholders mobilize discourses and how these discourses influence the definition of problems, which solutions are legitimate and which rules of the game are negotiable;
- The power relations between these actors and how power balances between the actors in a coalition influence participation (inclusion and exclusion);
- The institutional setting (or system of rules of the game) in which maritime policies take place.

#### *Marine Spatial Planning*

Marine Spatial Planning (MSP) is 'a process of analyzing and allocating parts of the three-dimensional spaces to specific uses, to achieve ecological, economic and social objectives that are usually specified through the political process; the MSP process usually results in a comprehensive plan or vision for a marine region' (Ehler and Douvere 2007; Douvere 2008). Specific for MSP is the balancing and integration of sectoral activities<sup>6</sup> in a three dimensional marine space; a) on the surface (fisheries, shipping, dredging, oil- and gas platforms, windmill parks and recreation); b) in the water column (fisheries (pelagic gear), dredging, recreation and oil- and gas production; c) on the seabed (pipelines, fisheries (benthic gear), dredging, oil- and gas winning).

In November 2008 the European Commission published its Roadmap for Maritime Spatial Planning.<sup>7</sup> MSP is a key instrument for IMP. It helps public authorities and stakeholders to coordinate their action and optimize the use of marine space to benefit economic development and the marine environment (EC 2008:2). The rationale for developing MSP is that the increased activity on Europe's seas leads to competition between sectoral interests, such as shipping and maritime transport, offshore energy, ports development, fisheries and aquaculture and environmental concerns.

MSP is a tool for improved decision-making. It provides a framework for arbitrating between the competing human activities and managing their impact in the marine environment. Its objective is to balance sectoral interests and achieve sustainable use of marine resources in line with the EU Sustainable Development Strategy. MSP should be based on the specificities of individual marine regions or sub-regions. It is a process that consists of data collection, stakeholder consultation and the participatory development of a plan, the subsequent stages of implementation, enforcement, evaluation and revision' (EC COM (2008)791final: 2-3).

Implementation of MSP is the responsibility of the Member States. In its roadmap, the Commission formulated the following benefits for MSP. 1) Joint work on MSP provides a framework for coordinating sectoral approaches. It increases the effectiveness and coherence of EU and national policies, reducing economic costs of non-coordination. 2) Maritime activities have a cross-border dimension. The role of the EU is to promote a common approach among Member States that take account of cross-border impacts. 3) For the Internal market, MSP provides a basis for simplified permit systems and for reducing the costs of regulatory and administrative procedures, providing a transparent and reliable planning framework. 4) Work on MSP on EU level provides an appropriate forum for Member States to discuss and develop a holistic approach to the management of maritime activities in line with ecosystem requirements.<sup>8</sup>

Marine spatial planning is a form of multi-level governance, because there is cross-border cooperation between different (governmental) levels, international, European, shared sea, national and sub-national to integrate activities and to find solutions for user-user and user-environment conflicts<sup>9</sup> within a certain region or sub-region. Marine spatial planning is firstly influenced by formal *international rules*, for example UNCLOS (United Nations Convention on the Law of the Sea),<sup>10</sup> the Convention on Biological Diversity<sup>11</sup> and IMO (International Maritime Organisation). Second, marine spatial planning is influenced by *regional conventions*, such as OSPAR, the North Sea Conferences, The Helsinki Commission (HELCOM),<sup>12</sup> The Mediterranean Action Plan,<sup>13</sup> and the Bucharest Convention of 1992 to protect the Black Sea marine environment. Third, Marine spatial planning is influenced by the *sectoral marine policies and other EU regulations*, such as the Marine Strategy Framework Directive (MSFD),<sup>14</sup> The Water Framework Directive (WFD),<sup>15</sup> The Habitats Directive and the Birds Directive (NATURA 2000),<sup>16</sup> The Strategic Environment Assessment Directive (SEA),<sup>17</sup> and the Common Fisheries

Policy (CFP) and the EU ICZM Recommendation.<sup>18</sup> Depending on the problem definition and the involved maritime activities in a specific region, realizing integrated marine governance initiatives has to deal with the different policy dynamics of the diversity of policy arrangements of the different sectoral policy domains.

Not only the EU, but also several countries all over the world have initiated integrated marine spatial planning processes. Within the EU several member states have developed approaches to marine spatial planning (see Ehler and Douvère 2007; Douvère 2008; EC COM (2008) 791 final). In the Netherlands, the ministry of Transport, Public Works and Water Management has developed an Integrated Management Plan for the North Sea 2015.<sup>19</sup> In the UK both government and NGOs have developed initiatives, such as the Marine and Coastal Access Bill (Department of Environment, Food, & Rural Affairs) and MPAs in the context of marine spatial planning (WWF). The UK Marine Bill is an overarching legislative policy framework, which sets up a maritime planning system for all UK waters.<sup>20</sup> The German Federal Maritime and Hydrographic Agency has published the Spatial Plan for the North Sea. The Belgian Science Policy Agency has published a MSP Marine Spatial Planning. In this 'Master Plan' zoning is used to allocate marine space for specific maritime uses. Norway has developed an Integrated Management Plan for the Barents Sea and the sea area off the Lofoten Islands. It provides a framework for sustainable resource use and for existing and new activities. France introduced the *schéma de mise en valeur de la mer* for Lake Thau in the Mediterranean and the Arcachon Basin in the Atlantic. The schema focuses on coastal zone development and includes measures such as zoning of activities, and identifies areas for particular maritime uses. Finally, Denmark, Germany and the Netherlands Wadden Sea secretariat developed a Trilateral Wadden Sea Plan.

Also outside Europe several countries have taken integrated marine governance initiatives. Integrated management is a central theme of Australia's Oceans Policy (AOP). Improving integration across sectors and jurisdictions has been identified in the Regional Marine Planning Process under AOP undertaken in 2000-2 and commitments to a National Coastal Policy made in 2002 (Foster and Haward 2003).

### **Building Blocks for Integrated Marine Governance**

The current fragmentation of sectoral marine policies makes it difficult to reconcile competing uses of the oceans and the seas and to define priorities. The development of Integrated Marine Governance (IMG) is a possibility to overcome problems of fragmentation. As we have seen several countries have taken initiatives to develop integrated plans, while the EU wants to develop Integrated Maritime Policy, with Maritime Spatial Planning (MSP) as a cross sectoral tool.<sup>21</sup> However, many of these initiatives are still in an initial phase and Integrated Marine Governance still has to be developed.

The central question of this section is how to realize IMG? And what could be considered as building blocks for integrated marine governance? Key elements

of Integrated Marine Governance (IMG), and MSP are the integration of activities in a three dimensional space, with the involvement of representatives of public and private actors (participation), and the sustainable management of marine ecosystems. More specific, IMG presupposes an integration of different bodies of knowledge, an integration of sectoral activities and policy domains, such as fishing, shipping, non renewable and renewable energy production (oil- and gas production and wind mill parks), sand extraction, and nature conservation, to realize a sustainable use of marine resources, and the cooperation and involvement of market parties, civil society actors and governmental actors (UN, EU, national and sub-national) in a given marine region. The building blocks integration, participation, and sustainable management are based on innovative initiatives within fisheries governance, shipping governance and integrated coastal zone management.

### *Integration*

Integration related to IMG refers to the process in which sectoral marine activities are integrated in a separate space. Analytically a distinction can be made between three forms of integration: integration of policy aspects (content, instruments and planning), the direction of integration (internal, external, horizontal, vertical) and stages of integration (form differentiation to integration) (Janssens and Van Tatenhove 2000). To realize Integrated Marine Governance the content of the policies of different governments and other (private) actors have to be integrated in a specific area. Therefore, ecosystems in marine regions, instead of sectoral marine activities, are starting point of policy making. A building block could be forms of collaborative region-oriented policy making<sup>22</sup> (Innes and Booher 2003) or reflexive policy making (Pestman and Van Tatenhove 1998; Grin 2010) which can deal with novel problems, which cannot be dealt with in the institutions of the sectoral maritime policy domains. Characteristic for this kind of planning is an integration of the content, an integration of different governance levels and an integration of sectoral policy domains, resulting in an integrated marine policy. In these reflexive planning arrangements, coalitions of state, civil society and market actors have the possibility to mobilize resources and change the rules of the game in order to realize a sustainable management of activities in a marine region. Lessons could be learned from already existing integrative marine planning and management initiatives, such as integrated marine and coastal management (Bennet 2000; Foster and Haward 2003), integrated site planning (Gilman 2002), regional planning initiatives in coastal zones (Davis 2004), and forms of ecosystem based management approaches (Curtin and Prellezo 2010). Ecosystem based management takes into 'account the interconnectedness and interdependent nature of the components of ecosystems, and the fundamental importance of ecosystem structure and functioning in providing humans with the broad range of services that are taken for granted' (Curtin and Prellezo 2010:2).

### *Participation*

Participation refers to the involvement of agents, such as citizens, NGOs and other stakeholders in politics and planning (Van Tatenhove and Leroy 2003). The

integration and coordination of sectoral activities presuppose a degree of stakeholder involvement in the planning and mapping of activities on a regional basis. This is a process in which the experiences with the negotiations within the RACS could potentially play an important role (see also Degnbol and Wilson 2008). More specific, to become a participatory building block for IMG negotiations and stakeholder participation in the RAC should be extended to other marine sectors and be developed to what I like to call Integrated Marine Governance Councils (IMGC).<sup>23</sup> These Integrated Marine Governance Councils would allow the involvement of representatives of sectoral maritime activities in processes of region-oriented marine governance and marine spatial planning. In these Councils not only representatives of fisheries, shipping, and energy production are represented, but also representatives of the involved nation states, the EU, international organization (IMO), regional conventions (OSPAR, HELCOM, *et cetera*), coastal regions (local and sub-national governments). In these integrative governance arrangements policy is formulated and implemented in negotiation between representatives of all sectoral activities and the governmental actors. Important is the institutional embedding of the negotiation results within the IMCO and the decisions taken on the level of nation states and the EU.

#### *Sustainable Management*

One of the instruments to realize sustainable management of marine ecosystems is the designation of Marine Protected Areas (MPA). MPAs have been defined by IUCN, the World Conservation Union, as: '[a]ny area of intertidal or subtidal terrain, together with its overlying water 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' (IUCN 1988). Marine Protected Areas are specified areas in which there is partial or total protection from fishing and other potentially damaging impacts (for example dredging, drilling). Objectives are stock maintenance or recovery habitat restoration, protection of non-target species, and development of recreational and educational activities and promotion of scientific understanding. There are many examples of the planning and implementation of individual MPAs (Gleason *et al.* 2010). As a building block for the implementation of IMG at a regional scale it is more beneficial to move beyond individual MPAs to more carefully designed networks of ecologically-connected MPAs at larger scales that can help to sustain and to restore marine populations (Sala *et al.* 2000; Gleason *et al.* 2010) Networks of well-designed and well-managed MPAs may provide more resilience than individual MPAs, will protect better a range of habitats and will sustain more marine populations across a larger geographic region (WWF Germany 2009; Gleason *et al.* 2010). The selection of a network of MPAs depends on what to protect (what Good Environmental Status has to be realized), and how to deal with the different activities in that maritime region. Therefore, the designation of a network of MPAs cannot be based on biological factors alone but also depends on the interests of involved stakeholders, the conflicts between different activities and jurisdiction of the governments involved.

In sum, IMG requires a reflexive (region-oriented) policy arrangement based upon a network of well-designed MPAs (eco-system based management)

in which stakeholders from different sectoral marine activities negotiated about the formulation and implementation of integrated marine policy in Integrated Marine Governance Councils.

### **Legitimacy of Integrated Marine Governance**

The development of Integrated Marine Governance based on the principles of integration, participation and sustainable management has consequences for the legitimacy of integrated marine policy arrangements. Based on the forms of legitimacy introduced in section two the following questions can be formulated. First, do marine policy arrangements represent all the interests' involved (input legitimacy)? Second, will the marine policy arrangement provide solutions for the problems as defined by the participants and do the participants accept the results and outcomes of the negotiations (output legitimacy)? Third, is the policy-making process transparent, are the rules clear about who is allowed to participate, and do participants know their roles and responsibilities (throughput legitimacy)? Fourth, does a 'marine policy arrangement' render account to other decision-making and policy arrangements (feedback legitimacy)?

To understand the legitimacy of integrated marine governance arrangements in more detail it is important to understand both the actions of involved actors in policy practices and the institutional setting in which policy and politics takes place (Edelenbos *et al.* 2009). March and Olson distinguish between two logics of action: the logic of consequentiality and the logic of appropriateness (March and Olson 1989, 2004). The logic of consequentiality refers to the rational choices made by individuals. Individuals who act on the basis of the logic of consequentiality or anticipatory action ask their selves the following questions, what are my alternatives, what are my values, and what are the consequences of my alternatives for my values? They choose the alternative that has the best-expected consequences for their individual or collective objectives. To act in conformity with rules that constrain conduct is then based on rational calculation and contracts, and is motivated by incentives and personal advantage. According to March and Olson (2004) human action is not only about pursuing a self-interest, but is driven by rules of appropriate or exemplary behavior, organized into institutions. Institutions give order to social relations and reduce flexibility and variability in behavior. The logic of appropriateness is a perspective on how human action is to be interpreted. Action, policy making included, is seen as driven by rules of appropriate or exemplary behavior, organized into institutions. The appropriateness of rules includes both cognitive and normative components (March and Olsen 1995:30-31). Rules are followed because they are seen as natural, rightful, expected, and legitimate. Actors seek to fulfill the obligations encapsulated in a role, an identity, a membership in a political community or group, and the ethos, practices and expectations of its institutions. Embedded in a social collectivity, they do what they see as appropriate for themselves in a specific type of situation (March and Olson 2004). To create order in policy analyses Hemerijck (2003) formulated four core questions about policy. These questions

were based on the logics of actions and two criteria of democratic legitimacy. Inspired by Hemerijck (2003) I have formulated eight central questions of legitimacy, based on the four forms of legitimacy and the two logics of action as formulated by March and Olson (see table 1). These questions make it possible to describe and to analyze democratic and political legitimacy of integrated marine governance arrangements, both on the level of the choices the individual actors make in marine governance arrangements and on the level of the institutional embeddedness of these marine governance arrangements.

Table 1: *Eight central questions of legitimacy for integrated marine governance arrangements*

|                           | <b>Input legitimacy</b>   | <b>Throughput legitimacy</b>  | <b>Output legitimacy</b>   | <b>Feedback legitimacy</b>  |
|---------------------------|---|---|--|---|
| Logic of consequentiality | Are all the relevant participants been selected to formulate solutions for the problems?              | Does the process design of marine governance arrangements result in solutions for the problems? | Are the results of the integrated maritime policy arrangements in accordance with the desired outcomes of the actors involved? | Is there consensus and clearness about the political choices among the representatives of the different sectoral marine activities? |
| Logic of appropriateness  | Do forms of cooperation connect to the interests, expectations, norms and values of the participants? | Does the process design fit with the institutional rules of the game?                           | Do public and private actors show their decisiveness? Are the outcomes political and administrative feasible?                  | Are there enough institutional mechanisms to involve the right actors and to translate the results?                                 |

To understand the legitimacy of integrated marine governance arrangements I focus on the legitimacy of the selection of stakeholders, the process design and architecture, the relation between process design and institutional rules, the outcomes of maritime spatial planning processes, the feasibility of the outcomes and the feedback of the results with the involved participants in different stages of the policy-making process.

The eight questions provide a framework to discuss the changes in forms of legitimacy when integrated marine governance arrangements are developed. They also provide a guideline for the design of integrated marine governance arrangements. To illustrate this framework I take the (imaginary) example of designing an Integrated Marine Governance Council to find a solution for environmental, spatial, economic, and biodiversity problems at the North Sea. On the level of negotiations in the Council the following questions are relevant which sectoral representatives need to be selected to formulate the problem definitions and solutions, who selects these representatives (for example the European Commission), is the participatory process design suitable for generating and selecting solutions and do these solutions meet the interest and wishes of the sectoral activities. On the level of the institutional embedding of the Integrated

Marine Governance Council relevant questions are: how are the results of the negotiations translated in formal decision-making? How will that affect the decisions and policymaking processes within the sectoral policy domains and are the policy results accepted by the involved governments and other stakeholders?

With these questions of legitimacy it is possible to understand the changing setting of integrated marine governance in more detail and it gives more insight in the governance capacity of coalitions of actors within integrated marine policy arrangements given the complex institutional setting in which the outcomes of negotiations have to be decided upon or implemented.

### **Challenges for Integrated Marine Governance**

The current fragmentation of EU policies into sectoral policies makes it difficult to reconcile competing uses of the oceans and the seas and to define priorities. To overcome these problems of fragmentation several countries and the EU have taken different integrated marine governance initiatives. Integrated Marine Governance presupposes an integration of different bodies of knowledge, the integration of different activities and policy domains, and the cooperation of private and governmental actors on EU, national and sub-national levels. In other words, integrated marine governance is more than fisheries governance, shipping governance or integrated coastal zone management, while in each policy domain the co-existence of traditional and innovative arrangements differs due to its specific governance dynamics. When looking at the EU and member states initiatives and marine practices we can formulate several challenges.

The first challenge is to understand the relation between the different maritime activities and the dynamics of the maritime policy domains, how they influence each other and what are the enabling and constraining conditions for integration?. How are levels connected? What are the similarities and differences between different maritime policy arrangements? How do they influence each other and what consequences will this have for realizing integrated maritime policy and maritime spatial planning?

The second challenge is to understand the institutionalization of integrated marine governance arrangements as the interplay of interactions in policy practices and processes of structural transformation. In other words: how are the dimensions of integrated marine policy arrangements (coalitions, the rules of the game, the mobilization of discourses and resources) influenced by the interplay of structural processes of transformation (political modernization) and negotiations in marine policy practices? How does the (structural) institutional setting influence the institutionalization of marine governance arrangements? What are the consequences for participation, power relations and finding solutions for defined problems?

The third challenge is to understand the enabling and constraining conditions for integrated marine governance arrangements. There is a pressing need for environmental protection and an integral management of marine activities. Integration could be realized for example at the level of ecosystems

(the North Sea, the Baltic Sea, the Black Sea and the Mediterranean). This kind of maritime region-oriented policy should deal with a diversity of activities and the specific dynamics, institutional rules, power relations and actors on multiple levels of each policy domain. The development of an integrated marine policy takes place in a context of already existing institutionalized maritime policy domains with their specific relations of power. It is therefore important to understand the enabling and constraining conditions of the sectoral policy arrangements to realize integrated marine policies, more specific maritime spatial planning. How can existing policy arrangements, such as RACS and MPAS, be developed to collaborative planning arrangements? And what could be learned from integrated and labeling initiatives of market and civil society actors, such as Marine Stewardship Council and the Clean Ship Concept in developing legitimate integrated marine governance arrangements.

The fourth challenge is to understand new forms of legitimacy in marine governance, because of the changes in the institutional setting, the institutionalization of new arrangements and the co-existence of arrangements of different marine policies. By combing four forms of legitimacy and two perspectives on human action it is possible to understand the democratic and political legitimacy of integrated marine governance arrangements both on the level of the choices of actors and on the level of the institutional embeddedness of these governance arrangements. For example, the development of Maritime Spatial Planning Councils (MSPC) could enhance the input and throughput legitimacy of integrated marine governance, while the integration of different sectoral activities with the designation of MPAS can improve the output legitimacy.

The fifth challenge concerns the design of legitimate and accountable (integrated) marine governance arrangements. What are the problems? Who defines them? What outcomes are legitimate? What are the rules for participation? Who selects stakeholders and to what extent are actors involved in decision-making? Do they have the possibility to change the rules of the game? Do existing institutional rules hamper the design of innovative governance arrangements? Special attention should be given to the role of information in the design of marine governance arrangements.

## Conclusions

In this paper, I presented an integrated marine governance framework. To overcome the fragmentation of sectoral marine policies and to find solutions for environmental problems in an integrated way several countries and the European Union have already taken initiatives to develop integrated marine policies. However, these initiatives are in an initial phase, and there is little experience with trans-boundary cooperation to develop integrated marine policies and marine spatial planning for specific marine regions. The core elements of integrated marine governance are the sharing of policymaking competencies by governmental, market and civil society actors at several levels. Based on an analysis of innovative initiatives in sectoral marine activities I elaborated upon participation, integra-

tion and sustainable management as building blocks of integrated marine governance. The development of integrated marine governance arrangements has consequences for the legitimacy of integrated marine polices. With the eight questions of legitimacy formulated in section five it is possible to find out what kind of legitimacy problems could occur in integrated marine governance arrangements and which steps are needed to find solutions for these legitimacy problems. Finally, I formulated challenges for the development and design of integrated marine governance and how to deal with the enabling and constraining conditions for integrated marine governance.

## Notes

- 1 EC, COM (2006) 275 final: 'Towards a future Maritime Policy for the Union: A European vision for the Oceans and the Seas'
- 2 EC, COM (2007) 575 final.
- 3 Inspired by Beck (2000) we make a distinction between the first and the second stage of modernity. The first phase of modernity is closely linked to the project of modernity itself. The dominant discourse is the 'manageable society'. This is reflected in the centrality of the nation-state and the regulatory state. The second phase of modernity is closely linked to what some call post-modernity, and others late or reflexive modernity.
- 4 <http://cfca.europa.eu/pages/home/home.htm>
- 5 The Green Award Foundation has been initiated by Rotterdam Port and the Dutch Ministry of Transport, Public Works and Water Management, but currently has a committee with members from industry associations, ports associations, an environmental NGO and a classification society (Van Leeuwen, 2010:100).
- 6 These sectoral activities range from fixed static place bound structures (for example oil rigs and wind farms) to temporary dynamic activities (for example surface and submarine navigation and fisheries).
- 7 EC, COM (2008) 791 final.
- 8 'The sea is a complex ecosystem that cuts across administrative borders. For balanced long-term management, the whole ecosystem and its determining factors must be taken into account' (EC, 2008:3).
- 9 User-user conflicts are conflicts between competing sectoral claims for space. Examples are conflicts between fishing and shipping; between fishing and the construction of windmill parks, and between oil- and gas production and fishing or shipping. User – environment conflicts refer to all those conflicts between economic maritime activities and marine ecosystems.
- 10 Adopted in 1982, entered into force in 1994. The European Community and all EU Member States are party to UNCLOS. Relevant UNCLOS rules are the right and interests of flag states, coastal states and port states; the division of seas and oceans into maritime zones and the principle of freedom of navigation.
- 11 For an extensive analysis of the international legal framework for especially maritime spatial planning, see Maes (2008). Maes analyses the rights and duties towards exploitation and protection of the marine environment under the jurisdiction of coastal states as reflected in two important global conventions, the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity. Both Conventions provide the main legal framework for marine spatial planning that has to be taken into account in planning at the regional and the national level.
- 12 HELCOM protects the marine environment of the Baltic Sea since 1974.
- 13 The Mediterranean Action Plan is adopted in 1975, under the UN Environment Programme. The MAP is to be implemented through the Barcelona Convention. The Convention's recently adopted ICZM Protocol (signed in Madrid, 21.01.2008) requires contracting parties to establish a common framework for integrated management of the Mediterranean coastal zones (EC, COM (2008) 791 final).
- 14 MSPD is the environmental pillar of the IMP and requires Member States to achieve a good marine environmental status by 2020, to apply an ecosystem approach, and to ensure that pressure from human activities is compatible with good environmental status (GES). MS are required to cooperate where they share a marine region or sub-region and use existing regional structures for coordination purposes, including with third countries.
- 15 WFD requires Member States to publish River Basin Management Plans (RBMP). MS have established water bodies that must cooperate to ensure WFD compliance with regard to transboundary river basin districts.
- 16 Natura 2000 requires MS to identify and protect areas for the conservation of species or habitats they host. The designation of coastal and marine special areas of conservation is ongoing.

- 17 SEA requires an environmental assessment of certain plans and programmes, consultation provisions (including cross-border) assessment of alternatives, and measures to prevent and/or mitigate adverse effects.
- 18 This recommendation (2002/413/EC, OJ L148) sets out common principles (including coherence of spatial planning across the land-sea boundary) and calls MS to develop ICZM strategies. It encourages MS to cooperate with neighbouring third countries.
- 19 The objective of this plan is 'to enhance the economic importance of the North Sea and maintain and develop the international ecological and landscape features by developing and harmonising sustainable spatial-economic activities in the North Sea, taking into account the ecological and landscape features of the North Sea' (Ministry of V&W 2005:1)
- 20 <http://www.defra.gov.uk/marine/legislation/>
- 21 The Commission launched two preparatory actions, one in the Baltic Sea (as part of the EU Strategy for the Baltic Sea Region) and one in the North Sea/North East Atlantic, aiming at developing cross-border cooperation aspects of MSP, as well as a study on the potential of maritime spatial planning in the Mediterranean Sea and the economic benefits of MSP (EC, COM (2009)540 final).
- 22 Collaborative policy making is a 'way to establish new networks among the players in the system and increase the distribution of knowledge among these players. This includes knowledge of each other's needs and capabilities and of the dynamics of the substantive problems in society (...). Collaborative planning, we contend, has emerged as a highly adaptive and creative form of policymaking and action in the Information Age. It is an emerging mode of governance' (Innes and Booher 2003:36).
- 23 Also Foster and Haward (2003) introduce the idea of such kind of Councils. They see Integrated Management Councils (IMCs) as one possible means of addressing the need for integrated oceans management. These IMCs would representative group of all interests within a certain 'bioregion'.

## References

- Anker, H.T., V. Nellemann, S. Sverdrup-Jensen  
 2004 Coastal zone management in Denmark: ways and means for further integration. *Ocean & Coastal Management* 47:495-513.
- Arts B., P. Leroy, J. van Tatenhove  
 2006 Political Modernisation and Policy Arrangements: A Framework for Understanding Environmental Policy Change. *Public Organization Review: A Global Journal* 6(2):93-106.
- Arts, B., J. van Tatenhove  
 2006 Political Modernisation. In: B. Arts and P. Leroy (Eds.), *Institutional Dynamics in Environmental Governance*. Dordrecht: Springer:21-43.
- Beck, U.  
 1994 The Reinvention of Politics: Towards a Theory of Reflexive Modernization. In: U. Beck, A. Giddens and S. Lash (Eds), *Reflexive Modernization. Politics, tradition and aesthetics in the modern social order*. Oxford: Polity Press:1-55.
- Beck, U.  
 2000 The cosmopolitan perspective: sociology of the second age of modernity. *British Journal of Sociology* 51(1):79-105.
- 1999 *World Risk Society*. Cambridge: Polity Press.

- Bendel, J. (Ed.)  
2000 *Terms of Endearment. Business, NGOs and Sustainable Development*. Sheffield: Greenleaf Publications.
- Bennet, R.  
2000 Coastal planning on the Atlantic fringe, north Norway: the power game. *Ocean & Coastal Management* 43:879-904
- Curtin, R., R. Prellezo  
2010 Understanding marine ecosystem based management: A literature review. *Marine Policy* (2010) doi:10.1016/j.marpol.2010.01.003
- Davis, B.C.  
2004 Regional planning in the us coastal zone: a comparative analysis of 15 special area plans. *Ocean & Coastal Management* 47:79-94
- De Santo, Elizabeth M.  
2010 Whose science?' Precaution and power-play in European marine environmental decision-making. *Marine Policy* 34:414-420
- Degnbol, D., D. Clyde Wilson  
2008 Spatial Planning on the North Sea: A case of cross-scale linkages. *Marine Policy* 32:189-200.
- Douve, F.  
2008 The importance of marine spatial planning in advancing ecosystem-based sea use management. *Marine Policy* 32:762-771.
- EC, European Commission  
2009 Progress report on the EU's Integrated Maritime Policy. Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, Brussels, 15.10.2009 [COM(2009)54ofinal]
- 2008 Roadmap for Maritime Spatial Planning: Achieving Common Principles in the EU, Brussels, 25.11.2008 [COM(2008)791final]
- 2007 An integrated maritime policy for the European Union. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the committee of the regions, Brussels, 10.12.2007 [COM(2007)575final].
- 2007 An integrated maritime policy for the European Union. Commission staff working document accompanying document to the communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the committee of the regions, Brussels, 10.10.2007 [SEC(2007)1278]
- 2006 Towards a future Maritime policy for the Union: A European vision for the oceans and seas, Brussels, 7.6. 2006 [COM(2006)275final, Volume II – ANNEX]

- Edelenbos, J., P.J. Klok, J.van Tatenhove  
 2009 The institutional embedding of interactive policy making. Insights from a comparative research based on 8 interactive projects in the Netherlands. *The American Review of Public Administration* 39(2):125-148.
- Ehler, C., F. Douvere  
 2007 Visions for a Sea Change Report of the first international workshop on Marine Spatial Planning. Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC manual and guides no. 48, IOCAM Dossier no. 4 Paris: UNESCO
- Engelen, E.R., M. Sie Dhian Ho (Red.)  
 2004 *De staat van de democratie. Democratie voorbij de staat. WRR-Verkenningen*. Amsterdam: Amsterdam University Press.
- Foster, E., M. Haward  
 2003 Integrated management councils. A conceptual model for ocean policy conflict management in Australia. *Ocean & Coastal Management* 46:547-563.
- Friedheim R.L.  
 1999 Ocean governance at the millennium: where we have been where we should go. *Ocean & Coastal Management* 42(9):747-65.
- Gilman, E.  
 2002 Guidelines for coastal nad marine site-planning and examples of planning and management intervention tools. *Ocean & Coastal Management* 45:377-404.
- Gleason M. *et al.*  
 2010 Science-based and stakeholder-driven marine protected area network planning: A successful case study from north central California. *Ocean & Coastal Management* xxx:1-17.
- Glenn, H., P. Wattage, S. Mardle *et al.*  
 2009 Marine protected areas – substantiating their worth. *Marine Policy* 43(3):421-430.
- Gray T.S. (Ed.)  
 2005 *Participation in fisheries governance*. Dordrecht: Springer
- Grin J.  
 2010 Understanding Transitions form a Governance Perspective. In: J. Grin, J. Rotmans and Johan Schot, *Transitions to Sustainable development. New Directions in the Study of Long Term Transformative Change*. New York/London: Routledge:223-320.
- Haas, P.M.  
 2000 Prospects for effective marine governance in the nw Pacific region. *Marine Policy* 24(4):341-8.
- 1992 Introduction: Epistemic Communities and International Policy Coordination. International Organization 46(1):1-35.

- Hajer, M.A., H. Wagenaar (Ed.)  
2003 *Deliberative Policy Analysis. Understanding Governance in the Network Society*. Cambridge: Cambridge University Press.
- Held, D., A. McGrew (Eds.)  
2002 *Governing Globalization. Power, Authority and Global Governance*. Cambridge: Polity Press.
- Hemerijck, A.  
2003 Vier kernvragen van beleid. *Beleid en Maatschappij* 30(1):3-19
- Héritier, A.  
2001 New modes of governance in Europe: policy-making without legislating? Max Planck Project Group, Preprint 01/14, Bonn.
- Héritier, A. (Ed.)  
2002 *Common goods: reinventing European and international governance*. Lanham: Rowman & Littlefield Publishers.
- Hooghe, L., G. Marks  
2001 *Multi-Level Governance and European Integration*. Lanham/Oxford: Rowman & Littlefield Publishers.
- Innes J.E., D.E. Booher  
2003 Collaborative policymaking: governance through dialogue. In: M.A. Hajer and H. Wagenaar (Eds.), *Deliberative Policy Analysis. Understanding Governance in the Network Society*. Cambridge: Cambridge University Press:33-59.
- IUCN  
1988 General Assembly Resolution 17.38. Protection of the Coastal and Marine Environment adopted 9 February 1988, para 2b.
- Janssens J., J. van Tatenhove  
2000 Green Planning: From Sectoral to Integrative Planning Arrangements? In: J. van Tatenhove, B. Arts and P. Leroy (Eds.) *Political Modernisation and the Environment: The Renewal of Environmental Policy Arrangements*. Dordrecht/Boston/London: Kluwer Academic Publishers:145-174.
- Jentoft S., B. McCay  
1995 User participation in fisheries management. Lessons drawn from international experiences. *Marine Policy* 19(3):227-46.
- Jentoft S., B.J. McCay B.J., D.C. Wilson  
1998 Social theory and fisheries co-management. *Marine Policy* 22:423-36.
- Jentoft S.  
2007 Limits of governability: institutional implications for fisheries and coastal governance. *Marine Policy* 31(4):360-70.
- Jordan, A.  
2001 The European Union: an evolving system of multi-level governance ... or government? *Policy & Politics* 29(2):193-208.
- Kjaer, A.M.  
2004 *Governance, Key Concepts in the Social Sciences*. Cambridge/Malden: Polity Press.

- Kohler-Koch, B., R. Eising (Eds.)  
1999 *The Transformation of Governance in the European Union*. London and New York: Routledge/ECPR Studies in European Political Science.
- Kolk, A.  
2000 *Economics of Environmental Management*. Edinburg : Pearson Education Ltd.
- Kooiman, J.  
2003 *Governing as Governance*. London: Sage.  
1993 Governance and Governability: Using Complexity, Dynamics and Diversity. In: J. Kooiman (Ed.), *Modern Governance, New Governance-Society Interactions*. London: Sage.
- Kooiman J., M.Bavinck, S. Jentoft *et al.*  
2005 *Fish for life: interactive governance for fisheries*. Amsterdam: Amsterdam University Press.
- Liefferink, D.  
2006 The Dynamics of Policy Arrangements: Turning Round the Tetrahedron In: B. Arts and P. Leroy (Eds.), *Institutional Dynamics in Environmental Governance*. Dordrecht: Springer:45-68.
- Maes, F.  
2008 The international legal framework for marine spatial planning. *Marine Policy* 32:797-810.
- Mak, J., J.P.M. van Tatenhove  
2006 Introduction: Informality in a future EU. *Perspectives on European Politics and Society*, 7(1), 1-7.
- March, J.G., J.P. Olson  
2004 The Logic of Appropriateness. Arena Working papers WP 04/09  
1995 *Democratic Governance*. New York: Free Press.  
1989 *Rediscovering Institutions: The Organizational basis of politics*. New York: Free Press.
- Marks, G., L. Hooghe, K. Blank  
1996 European Integration since the 1980s. State-Centric Versus Multi-Level Governance. *Journal of Common Market Studies* 34(1):343-378.
- Pestman, P., J. van Tatenhove  
1998 Reflexieve beleidsvoering voor milieu, ruimtelijke ordening en infrastructuur? – Nieuwe initiatieven nader beschouwd. *Beleidswetenschap* 1998(3):254-272.
- Pierre, J.  
2000 Introduction: Understanding Governance. In: J. Pierre (Ed.), *Debating Governance; Authority, Steering, and Democracy*. Oxford: Oxford University Press.
- Princen, T., M. Finger (Eds.)  
1994 *Environmental NGOs in World Politics. Linking the global and the local*. London: Routledge.

- Raakjaer Nielsen, J., T. Vedsmand  
1999 User participation and a institutional change in fisheries management: a viable alternative to the failures of 'top-down' driven control?' *Ocean & Coastal Management* 42(1):19-37.
- Raakjær Nielsen J.R., P. Degnbol, K.K. Viswanathan *et al.*  
2004 Fisheries co-management-an institutional innovation? Lessons from South East Asia and Southern Africa. *Marine Policy* 28(2004):151-60.
- Raakjær Nielsen J.R.  
2003 An analytical framework for studying: compliance and legitimacy in fisheries management. *Marine Policy* 27(2003):425-432.
- Rhodes, R.A.W.  
1997 *Understanding Governance: Policy Networks, Governance, Flexibility and Accountability*. Buckingham: Open University Press
- Risse, T., M. Kleine  
2007 Assessing the Legitimacy of the EU's Treaty Revision Methods. *Journal of Common Market Studies* 45(1):69-80.
- Rosenau, J.N.  
2000 Change, Complexity and Governance in Globalizing Space. In: J. Pierre (Ed.), *Debating Governance, Authority, Steering and Democracy*. Oxford: Oxford University Press: 167-200
- Sale, E. *et al.*  
2002 A general model for designing networks of marine reserves. *Science* 298:1991-3.
- Stoker, G.  
1998 Governance as theory: five propositions. *International Social Science Journal* 50(15):17-28.
- Scharpf, F.  
2004 Legitimationskonzepte Jenseits des Nationalstaats. *MPIfG Working Paper*, 35. Cologne.  
1999 *Governing in Europe. Effective and Democratic?* Oxford: Oxford University Press
- Van Hoof, L.  
2009 Co-management: an alternative to enforcement? *ICES Journal of Marine Science* Advance Access published online on October 4, 2009 doi:10.1093/icesjms/fsp239
- Van Hoof L. *et al.*  
2005 Sharing responsibilities in fisheries management, part 1—final report. Den Haag: LEI; 2005 Rapport LEI 7.05.05.
- Van Hoof, L., J. van Tatenhove  
2009 EU Marine policy on the move: The tension between fisheries and maritime policy. *Marine Policy* 33(4): 726-732.

- Van Kersbergen, K., F. van Waarden  
 2004 'Governance' as a Bridge between Disciplines: Cross-Disciplinary Inspiration Regarding Shifts in Governance and Problems of Governability, Accountability and Legitimacy. *European Journal of Political Research* 43(2):143-171.
- Van Leeuwen J.  
 2010 *Who greens the waves? Changing authority in the environmental governance of shipping and offshore oil and gas production*. Doctoral dissertation. Wageningen: Wageningen Academic Publishers.
- Van Leeuwen, J., J. van Tatenhove  
 2010 The Triangle of Governance; the interplay of polity, policy and politics in marine governance. *Marine Policy* 34(2010):590-597.
- Van Tatenhove J., B. Arts, P. Leroy (Eds.)  
 2000 *Political Modernisation and the Environment: The Renewal of Environmental Policy Arrangements*. Dordrecht/Boston/London: Kluwer Academic Publishers.
- Van Tatenhove, J. P. Leroy  
 2003 Environment and Participation in a Context of Political Modernisation. *Environmental Values* 12(2003):155-74.  
 2000 The institutionalisation of Environmental Politics. In: J. van Tatenhove, B. Arts, P. Leroy (Eds.), *Political Modernisation and the Environment: The Renewal of Environmental Policy Arrangements*. Dordrecht/Boston/London: Kluwer Academic Publishers:17-33.
- Van Tatenhove, J.  
 2003 Multi-level Governance and the 'institutional void: the interplay between frontstage and backstage politics. Paper communicated at Workshop 21 'Assessing Emergent Forms of Governance: European Public Policies Beyond the 'Institutional Void'', ECPR Joint Sessions of Workshops, University of Edinburgh, 28 March – 2 April 2003
- Van Tatenhove, J., J. Mak, D. Liefferink  
 2006 The Inter-play between formal and informal practices. *Perspectives on European Politics and Society* 7(1):8-24.
- Van Tatenhove, J.  
 2008 Innovative forms of Marine Governance: a reflection. Presentation at the Symposium: On Science and Governance, 7 March 2008, Wageningen University.  
 2008a How to Deal with Legitimacy in Nature Conservation Policy. In: J. Keulartz, G. Leistra (Eds.), *Legitimacy in European Nature Conservation Policy*. Case Studies in Multilevel Governance. Dordrecht: Springer:101-108
- Wilson D. C., J. Raakjær Nielsen, P. Degnbol P. (Eds.)  
 2003 *The fisheries co-management experience: accomplishments, challenges and prospects*. Dordrecht: Kluwer Academic Publishers.

wwf Germany  
2009

*Towards a Good Environmental Status. A network of Marine  
Protected Areas for the North Sea.* Frankfurt: wwf Germany