

Chapter 13

Marine Environmental Governance in Europe: Problems and Opportunities

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Introduction

We set out in this book project with the ambitious aim of achieving a better and more comprehensive understanding of the fragmented architecture of marine environmental governance in Europe, focussing on tensions between the Europeanization of regional seas and regionalization of EU policies. The question is – have we learnt anything about the identified key multi-level, multi-sector and multi-actor integration challenges (Kern and Gilek 2015 in this volume), or is the overall understanding of core problems still obscured by the complexity of the interactions? Furthermore, if in fact something has been learnt, can opportunities for improvements in practice be identified?

The answers to such questions can never be simple. As argued by Jentoft and Chuenpagdee (2015 in this volume), the governing system must somehow reflect the complexity and dynamics of the marine social and ecological systems, as well as the anthropogenic and natural pressures put on these systems. This means that contextual factors and temporal dynamics must always be part of our understanding of marine environmental governance and ‘silver-bullet’ type solutions to governance shortcomings will never be fully achievable. Still, we do believe that the in-depth analyses provided by the authors of the individual chapters have made a significant contribution to unravelling and clarifying the complexities of marine environmental governance in Europe. In this concluding chapter we thus highlight and discuss what we perceive to be the main empirical and analytical conclusions of the book in terms of key problems and opportunities of marine environmental governance in Europe.

The structure of the chapter follows a reversal of the logic found in the introductory chapter in that we identify and explore problems and opportunities linked to multi-level, multi-sector and multi-actor integration. This is done through a discussion of similarities and differences in preconditions and governance problems related to Europe’s regional seas. Finally, we reflect on possible pathways for addressing the analysed integration challenges and thereby improving governance structures and processes.

Problems and Opportunities in the Governance of Europe's Marine Environment

The complex marine governance structures and many institutions in contemporary Europe can be viewed from different perspectives. Taking a rear-view look at systems to be governed and preconditions for effective governance in an attempt to better understand why things are the way they are today, it is clear that history matters, as do biophysical, social, cultural and political preconditions. As regards those regional seas where there have been strong and long-standing cooperative structures, relative economic affluence and stable democratic systems, institutions have had opportunities to become stronger. Hence, institutional systems are more developed in the Baltic and North Sea than in the Mediterranean and Black Sea, where differences in these dimensions are considerable. Additionally, the fact that almost all Contracting Parties to the Helsinki and OSPAR Conventions are also EU members means that the EU regulatory machinery can play a much more powerful role in these parts of Europe, compared to the Mediterranean Sea and especially the Black Sea, where the EU has thus far been less influential. However, despite the many differences, there are also important similarities, which might mean that potentials for learning between the regions could be substantial. Above all, the types of environmental problems threatening the integrity of the marine ecosystems are quite similar in all four regions, although their severity differs somewhat. Chemical pollution is a serious threat in all marine regions, although the situation in the Black Sea seems to be somewhat less grave (Knudsen 2015 in this volume). Eutrophication is a serious problem for all, as are the introduction of alien species and negative environmental effects from shipping. Over-fishing of many commercial fish stocks is another problem area in all regions that, furthermore, tends to interact negatively with eutrophication, creating even larger marine areas with anoxic sea floors.

In the following sections we will depart from observed differences and similarities in the four regional seas to discuss problems and opportunities in the governance of Europe's marine environment. One of the most interesting and crucial issues that has emerged in several of the chapters of this volume concerns the extent to which EU regulation, Europeanization and regionalization impede each other and the extent to which they are, or could be, complementary and synergistic. It is to this issue that we now turn.

Coping with Changing Institutional Arrangements at Regional and EU Level

Although the UNEP Regional Seas Programme has been important in establishing regional environmental conventions in the four EU macro regions discussed in this volume, it is fair to state that these conventions have mainly influenced governance outcomes through bottom-up processes and engaged countries in the respective regions. The Helsinki, Oslo/Paris and Barcelona Conventions were set

up already in the 1970s, while the Bucharest Convention was not signed until 1992. They all provide what could be called rudimentary regulatory structures based on what practically amounts to soft law. However, although the updated versions of these structures all adhere to contemporary environmental principles and approaches, such as the Precautionary Principle and the Ecosystem Approach to Management, their actual impact varies considerably between the regions, where more has been achieved in the North than in the South. Based on the findings of this volume, an important factor behind this variation in impact is the extent to which comprehensive action plans such as the Baltic Sea Action Plan (BSAP) and the North-East Atlantic Environment Strategy (NEA Strategy) have been elaborated and agreed upon and – crucially – whether these plans have been sufficiently anchored in the individual member states' political and administrative systems.

In parallel with the Regional Seas development, EU authority has expanded both in regard to *reach* (number of member states in these regions) and *scope* (comprehensive framework directives). The directives – especially the Marine Strategy Framework Directive (MSFD), but also the Water Framework Directive (WFD) in combination with the Common Implementation Strategy (CIS) – provide a level regulatory framework for all EU member states. However, the scope dimension varies considerably, where the Baltic Sea and the North Sea are heavily dominated by EU member states and therefore by EU regulatory structures (Söderström et al. 2015 in this volume, Van Tatenhove and Van Leeuwen 2015 in this volume), while this only holds for the northern shores of the Mediterranean Sea (Suárez de Vivero and Rodríguez 2015 in this volume) and just for an even smaller part of the Black Sea (Knudsen 2015 in this volume). Thus, the scope of EU influence is much more restricted in the latter cases.

Institutional interaction is a topic that has been extensively discussed in the contemporary scholarly literature on international environmental cooperation (Oberthür and Stokke 2011, Van Leeuwen and Kern 2013). It has been shown that international environmental conventions such as the Convention on Biological Diversity and the Climate Convention as well as EU directives may interact in varying synergistic or contradictory ways, either inadvertently or as a result of states promoting national interests by, for example, forum shopping (Gillespie 2002). One of the major conclusions that might be drawn from this volume concerns institutional interaction between, on the one hand, Regional Seas Conventions and the accompanying Regional Commissions and, on the other hand, mainly the MSFD, and how this interaction has shaped governance outcomes. How the interactions between institutions play out in various contexts is an important issue from a policy perspective, since contradictory, overlapping or redundant regulatory structures can cause substantial inefficiencies and lead to institutional tensions (De Santo 2015 in this volume) and so-called *regulatory overload* (Knudsen and Hassler 2013). However, when institutions are adapted to each other, important synergism may evolve that can empower governance structures. Somewhat to our surprise, since most scholarly interest so far has been

placed on conflicting interactions, the case studies in this volume indicate that bottom-up initiatives such as regional action plans can serve as providers of much needed detail in the more general EU framework directives, regarding biophysical indicators as well as coordination, monitoring and implementation facilitation. However, for such synergistic processes to emerge, regional conditions have to be favourable. Comparing the Northern Regional Seas of Europe with the Southern, we see that although rudimentary regulatory structures are largely in place in both, key elements such as regional economic capacity, political will, expertise and geopolitical stability are much more prominent in the Northern Regional Seas. This means that so far, it is primarily the jurisdictional strength of binding directives that have been given additional momentum by regional ambitions to turn words into action.

Before leaving this theme, two additional aspects related to interactions between Regional Seas initiatives, EU directives and global conventions are important to note. First, a powerful opportunity to turn regional conventions into mandatory national law emerges when the EU becomes a full member of these conventions. Depending on circumstances, EU membership in formally binding regional conventions can mean that not only the EU becomes obliged to follow this convention when signed and ratified, but all EU members (not only those who have ratified the Convention) become obliged to follow suit through the mechanism of an immediately binding EU Regulation (Bohman and Langlet 2015 in this volume). This powerful mechanism can become a double-edged sword as 'laggard' states certainly realize what consequences may follow from EU membership in a Regional Convention. Since unanimous decision-making is required in the regional conventions, any member can stop the EU from becoming a full partner to the convention if tighter regulations are perceived to negatively affect national interests. Hence, the non-EU members Russia and Turkey have, presumably to some extent because of these factors, been unwilling to allow the EU to become a full Contracting Party of the Bucharest Convention (Knudsen 2015 in this volume).

Second, depending on where the main regulatory competence resides, individual states, or smaller groups of allied states, can adopt strategies that considerably empower soft laws in regional or global conventions. In issue-areas where the EU has full competence such as in fisheries management, bottom-up government influence is limited. The type of regionalization we see here is rather in the form of Regional Advisory Councils (RACs), where primarily stakeholders and sectoral organizations have a voice. Whether the scope of the RACs will be expanded to cover wider issues within the fisheries/environment domain, and possibly other environmental problems, is an open question (Dreyer and Sellke 2015 in this volume). However, an argument could be made that expansion into areas where the EU does not have full competence would be more problematic. In contrast, in areas where important regulatory mandates remain with the individual states (e.g. marine pollution from land sources), proactive states may use so-called *upload* strategies in attempts to promote specific interests of various kinds by

turning them into binding EU directives or high-impact EU strategies such as the EU Strategy for the Baltic Sea Region (EUSBSR) (Söderström et al. 2015 in this volume). This uploading strategy takes place when countries use regional or sub-regional agreements to empower binding EU directives. For example, it has been an outspoken ambition of HELCOM to upload the Baltic Sea Action Plan to the level of the MSFD in order to increase regulatory clout (Hassler et al. 2013).

Summing up the problems and opportunities linked to multi-level challenges in the governance of Europe's marine environment, it is clear that although much has been achieved, conditions differ substantially between the four regions, most prominently, the multi-faceted differences between the North and South. Fairly similar institutional frameworks have been established by Regional Seas Conventions with accompanying Commissions and crucial EU directives and strategies. However, it is only in the North that synergies have strengthened between comprehensive bottom-up regional initiatives and, particularly, the MSFD. The prospects for positive development in the South are mixed. All four regional seas share similar environmental problems and thus preconditions for fruitful knowledge sharing and institutional learning between North and South are already in place. Nonetheless, a further expansion of the EU to include additional Mediterranean or Black Sea countries does not seem likely in the near future and geopolitical tensions, as well as internal political strife in Northern Africa and parts of the Black Sea region, certainly make successful bottom-up environmental strategies difficult to achieve.

Combining Sectoral with Integrative Approaches: EAM and New Science-policy Interfaces

Several chapters in this volume confirm an ongoing shift from a traditional, sector-based approach focussed on handling particular resources (e.g. commercial fish) or sources of contamination (e.g. hazardous chemical substances), towards a more integrative and ecosystem based approach (e.g. De Santo 2015 in this volume, Gilek et al. 2015 in this volume, Hammer 2015 in this volume). However, opinions on the degree of shift that has occurred, and, in particular, on the associated problems and opportunities of the contrasting approaches, differ somewhat between chapters. For example, Gilek et al. (2015) and Hammer (2015) argue that implementation of the MSFD has already promoted a significant shift towards sector integration and an ecosystem-based approach to management (at least in the Baltic and North Seas). These authors also argue that the opportunities of such a sector-integrated approach, in terms of coping with uncertainties and stakeholder conflicts, as well as promoting a 'new' and more 'integrative' role for science, are already considerable as exemplified by recent developments in the International Council for the Exploration of the Sea, ICES (even though several enduring challenges and possible improvements also are identified). Similarly, Gilek et al. (2015) contend that recent developments in the EU Common Fisheries Policy (CFP) and in the EU chemicals regulation REACH also exhibit indications

of institutional reforms promoting wider knowledge and stakeholder inclusion at the science-policy interface (in the case of the CFP) as well as improved coping with uncertainties (REACH and CFP). In contrast, whilst agreeing that the MSFD provides the foundation for an ecosystem-based approach, De Santo (2015) identifies and explores several significant integration challenges and tensions that need to be addressed for the MSFD to realize its potential to catalyse the development of more integrative approaches such as Marine Spatial Planning (MSP). Examples of such challenges include tensions between policy objectives (e.g. economic development and environmental management) and between various institutions linked to the EU, Member States, Regional Seas Conventions and non-EU members, as well as undeveloped integrated science support, especially in the Mediterranean and Black Seas.

It is not surprising that different studies of complex multi-sector governance arrangements give rise to slightly diverging pictures. Still, in relation to the aim of this section to identify problems and opportunities with sector integration in European marine governance, several recurring issues can be distinguished in the chapters of this volume.

First, the inclusion of the *Ecosystem Approach to Management (EAM)* as a core requirement in the implementation of several important EU Directives (e.g. MSFD, WFD), as well as regional seas action plans (e.g. in the Baltic and North Seas), has clearly been instrumental in placing specific knowledge about the marine environment and its sensitivity at the heart of marine governance. However, a closer look at the action plans presents a more nuanced picture with many lasting scientific, legal and institutional challenges, as well as clear indications of a slower rate of EAM implementation in the South (Black Sea and Mediterranean) than in the North (Baltic Sea and North Sea) (Bohman and Langlet 2015 in this volume, Gilek et al. 2015 in this volume). Furthermore, when looking specifically at progress in terms of sector integration, even more challenges and problems can be observed. To begin with, even though definitions of EAM usually include a reference to necessary trade-offs between societal use of the ecosystem and ecosystem integrity, the main implementation tools are firmly based on the ecological dimension of sustainability, thus more or less neglecting social and economic dimensions of sustainability (as e.g. observed for the HELCOM BSAP by Gilek et al. 2013). Linked to this is the observation that many of the eleven descriptors for Good Environmental Status (GES) in the MSFD can be seen as still largely building on a sectoral approach with their focus on, for example, commercial fish, eutrophication, chemical contaminants and energy (e.g. De Santo 2015 in this volume). This questions the extent to which interdependencies among environmental risks and pressures can be considered in current marine governance arrangements in Europe. Hence, there is clearly a need to further develop forums for cross-sectoral cooperation addressing not only environmental management, but also the social and economic dimensions of sustainability and interdependencies between environmental pressures. Some positive developments in this direction can be observed, for example in the Baltic Sea through the

recently established HELCOM stakeholder forums on fisheries/environment and agriculture/environment as well as the joint HELCOM VASAB working group on MSP. However, it is too early to tell whether or not these initiatives will positively shape governance outcomes (Hassler et al. 2013), while progress in relation to the other European Seas (especially in the South) is even less evident (Gilek et al. 2015 in this volume).

Second, *Marine Spatial Planning (MSP)* has recently been given increased prominence in Europe and world-wide in response to the problems of fragmentation of marine regulation, increasing pressures upon the seas and tensions between sectoral and stakeholder interests and knowledge claims (e.g. Jentoft and Chuenpagdee 2015 in this volume). MSP has also been identified as the central approach to give effect to the EU Integrated Marine Policy and the associated Blue Growth Strategy that promotes more intensive utilization of marine resources to facilitate the growth of maritime economies, while improving ecological conditions in line with the MSFD. However, while policy documents on a conceptual level explain Blue Growth as building on the related foundations of sustainable development and the ecosystem approach, it remains to be seen how it can be implemented in practice (e.g. Van Tatenhove 2015 in this volume). A fundamental question linked to this is whether or not policy approaches and mechanisms can be developed to facilitate higher degrees of multi-sector integration, and if win-win outcomes in terms of Blue Growth and good environmental standards are achievable.

Some progress in developing marine spatial plans and implementing MSP can be seen in a number of countries (e.g. Germany and the Netherlands) (e.g. Van Tatenhove and Van Leeuwen 2015 in this volume). However, development of transboundary and regional sea level MSP is still in its infancy in Europe, although there are, for example, processes apparent in the Baltic Sea to develop pan-Baltic coordination of MSP in line with the HELCOM MSP roadmap from December 2013. Furthermore, while optimizing sector and policy integration is a laudable ambition in MSP, knowing the limits of integration and the different and specific forms it takes may be equally important, since MSP can be seen as a 'wicked' problem where consensual outcomes among stakeholders are likely to be elusive and where problem definitions are contested, solutions are less than ideal, always preliminary, and never given (Rittel and Webber 1973, Jentoft and Chuenpagdee 2009, Jentoft and Knol 2014).

Several interesting ideas on how to address these MSP challenges and thereby increase opportunities for sector and policy integration are identified and explored in this volume. Jentoft and Chuenpagdee (2015), for example, develop a general framework based on the idea of interactive governance proposing that identification of potential improvements relating to MSP processes and outcomes (i.e. governability using their terminology) should be based on a three-step process considering system properties, institutional capabilities and stakeholder interactions. Essentially their argument is that all of these aspects need to be considered to develop a context-specific MSP approach. In this way, they maintain

that MSP should be seen rather as an approach or catalyst that triggers interactive learning and not a strictly defined tool or solution. The issue of institutional capacity building is further developed by Van Tatenhove (2015), who, based on a thorough analysis of the scientific literature, outlines a typology of the dimensions of institutional capacity building, and subsequently uses this to explore integration opportunities for MSP in European marine governance. A key conclusion in this analysis is that further development of MSP in Europe requires a particular focus on institutional design and capacity building at the regional seas level. For example, as argued above for EAM, there is a need to further strengthen integrated marine governance arrangements consisting of coalitions of governmental and sector representatives, scientists and a range of NGOs and other interest groups. The challenge is to establish governance arrangements that promote constructive decision-making processes that involve interested parties in a way that is democratic and legitimate. How this can be accomplished, is a wicked problem in itself, always easier said than done, also because it is a sensitive issue, as Dreyer and Sellke (2015 in this volume) point out in their chapter 'Who qualifies as legitimate stakeholders? And how urgent are their concerns?' MSP is therefore deemed to remain a work in progress where such questions must be clarified even before the planning process starts.

Finally, linked to the development of integrative policy approaches such as EAM and MSP, there is a push towards developing a *new and more 'integrative' role for science and the use of science-based advice*. In line with this 'policy push', several scholars argue from a theoretical perspective that complex and uncertain risks and pressures linked to environmental governance, such as contamination and resource use, require new forms of science support built on wider knowledge inclusion and extended peer review, as well as coping with irreducible uncertainties (cf. Udovyk and Gilek 2013). In their analysis of science-policy interfaces linked to the MSFD and the CFP, Gilek et al. (2015) and Linke et al. (2014) also observe what appears to be a shift from highly sector-based science-policy interaction, often complicated by stakeholder conflicts and the contested status of scientific uncertainty, towards a more open relationship between science, politics and other actors in society (at least in the Baltic and North Seas). This shift is exemplified by recent developments in the international scientific organization ICES. It can be seen to be expanding its traditional role as a key provider of science-based advice for commercial fisheries in Northern Europe (e.g. Baltic and North Seas) to also address scientific issues relating to MSFD implementation and associated integrative approaches such as EAM and MSP. Despite this general trend connected to the MSFD, a more detailed analysis also reveals a parallel occurrence of almost sector-specific expert communities in several sectors (such as chemicals management, maritime risks etc.), as well as a general lack of state-of-the-art treatment of uncertainties. Clearly, even though such parallel scientific support structures linked to specific GES Descriptors in the MSFD and specific EU regulations on, for example, chemicals or fisheries can ensure that the best available scientific evidence is used, there is certainly also a

risk that scientific disagreements can aggravate stakeholder conflicts. This means that, in order to provide more integrated scientific support for implementing EAM and MSP, there is a need to further develop interdisciplinary and cross-sectoral collaboration forums for achieving integrated science-based advice, preferably at the regional seas level. As previously concluded, addressing this requirement is particularly pertinent in the Mediterranean and Black Sea where scientific support is still comparatively undeveloped and fragmented (Knudsen 2015 in this volume, Suárez de Vivero and Rodríguez 2015 in this volume).

Towards New Actor Constellations: Increasing Influence of Stakeholders and the Public?

There is no simple way to involve stakeholders, particularly at higher scales of organization such as regions and macro-regions, in a process that is deliberative, representative and democratic. This is a classic challenge in democratic theory and practice, expressed as a conflict between integration and aggregation (March and Olsen 1989); the former referring to a process that involves exchange and deliberation, the latter a process of summation, as when votes are cast and counted. This is a problem that is felt within, for example, the RAC system in fisheries management, where representatives from both industry and civil society are supposed to deliberate and reach consensus on issues where they all have different and to a large extent diverging interests. An additional challenge, no less complicated, is that in situations of conflict where decisions need to be made, some have more at stake than others, which is to be addressed by weighing of representation. In this particular case of stakeholder involvement, the fishing industry is represented more strongly in the RACs and hence has a louder voice and more votes than other stakeholders. Therefore, other stakeholder groups often find the process unfair (Linkø and Jentoft 2013). Given this, and other reasons related to representation and power, consensus on matters up for discussion and decision-making may be unrealistic, as Dreyer and Sellke (2015 in this volume) argue. Instead, it may be more realistic and fruitful in the long term to focus less on consensus and more on developing inclusive arenas promoting learning through exchange of stakeholder critique, input and advice (Voss et al. 2006).

Inclusive marine governance unavoidably raises issues related to social justice, both with regard to distribution and procedure. There is a real danger that differences in power between sectors and actors may impact on the distribution of resources and spatial opportunities. A consequence being that some stakeholder groups risk further marginalization. For example, traditional small-scale fishers may have reasons to fear the power of the oil and wind energy industries in the context of MSP. They might not have the requisite resources to effectively pursue their claims to particular spaces, even if they can claim to have had made much longer use of those spaces. Creating a level playing field in marine governance under such conditions is a governability problem as far as justice is concerned, something that institutional designs for participation and decision-making must

plan for. This suggests that marine governance and MSP are not only technical issues, but also highly political ones, where conflicting stakeholder interests and power differentials matter in determining outcomes. Consequently, advisory councils, marine spatial planning processes and the co-production of knowledge do not ensure justice unless they are designed and exercised with the necessary built-in checks and balances.

Furthermore, what makes governability and increasing stakeholder influence extremely challenging to achieve in the move from government to governance are, apart from a not uncommon democratic deficit at all scales and institutions, the complex differences in preconditions, system properties and stakeholder interactions among countries, regions and sectors (Jentoft and Chuenpagdee 2015 in this volume). As described in the chapters of this book, there are considerable variations between countries and sectors, since governing systems and practices have roots in different regimes and ideologies. Europeanization, through the EU inclusion of Eastern European countries, has almost certainly significantly counteracted this heterogeneity, but major differences and institutional tensions remain among countries, regions and sectors (e.g. Van Leeuwen et al. 2012, De Santo 2015 in this volume). For instance, one would assume that stakeholder inclusion and deliberation in marine governance would be much easier in the context of the North Sea than in, for example, the Baltic Sea or the Mediterranean areas. The countries that share this ocean space exhibit similar political cultures and participate in common institutional frameworks linked to various EU directives. Nonetheless, differences in governance cultures and practices have also here hampered coordination and stakeholder cooperation in, for example, MSP (Van Tatenhove and Van Leeuwen 2015 in this volume). A pessimistic interpretation of these observations would be that, if inclusive and deliberative marine governance is extremely hard to achieve even for the North Sea, it is quite unlikely that this could be realized for other regional seas, at least in a foreseeable future (cf. Jentoft and Knol 2014). Still, based on the chapters of this book, it is possible to identify some signs of progress as well as opportunities for improvements linked to stakeholder involvement and influence. These are discussed below.

Given the complexities and the multiple and conflicting stakes that together make problems and challenges inherently 'wicked', marine governance in Europe (and elsewhere) is deemed to be a work in progress where outcomes are unpredictable. Goals often lack the clarity and precision that can provide the direction needed. The planning process is going to be one of incremental change or even a process of 'muddling through' (Lindblom 1959) because a strictly technical/scientific process is not possible. Goals are never given once and for all but are rather subject to ongoing negotiation among public and private stakeholders from various sectors and at different scales. What was originally envisioned is not necessarily what one ends up with as the operative goals, i.e. those that are actually acted upon. Rather, goals are likely to be introduced, deliberated, scrapped and replaced by new goals throughout the planning process as experiences are gained and ambitions adjusted to better fit what is

accomplished. This lack of linearity within marine governance should not come as a surprise. Organization theorists have been highlighting it for decades (see for example Cyert and March 1992), while it has been empirically validated in the case of MPAs (Marine Protected Areas) (Jentoft et al. 2011). In fact, rather than indicating a flawed process ridden by conflict and indecisiveness, ‘muddling through’ may be the outcome of a rational process adaptive to shifting circumstances and influenced by interactions and experiential learning. The involvement of RACs in fisheries management can, despite continuing problems of representation, power dynamics and limited mandates, exemplify such an incremental development process (Dreyer and Sellke 2015 in this volume). Hence, in spite of the fundamental challenges, adaptive processes, as observed in the RAC development, indicate that there are opportunities to facilitate the creation of forums that cut across sectors and scale in a way that allows for the proactive participation of public and private stakeholders.

How to create such a constructive and integrated deliberation process is, however, a fundamental challenge in need of more focussed attention by all interested parties, especially if the EU, as it has suggested, gets more serious in ‘shifting the burden of proof’ (Linke and Jentoft 2013). The mandates and roles of deliberative forums and processes are also in need of significant clarification. For example, the question is to what extent the RACs should remain in a strictly advisory role or if mandates should be expanded to involve deeper responsibilities. Associated to this is a clear risk that stakeholders will end up frustrated, to the extent that they might see their efforts as a waste of time, if they cannot see the impact of their advice on decisions made at EU levels or by national governments. But the RACs are just for one sector, whereas the real difficulties in implementing a holistic ecosystem approach to management (EAM) as required by the MSFD involve relationships and interactions between sectors that require some form of integration (e.g. Hammer 2015 in this volume). It is hard today to envisage institutions that are ‘all-inclusive’, that integrate everything and everyone at the same time, especially if built on bottom-up mechanisms that involve stakeholders from all relevant sectors. The transaction costs of representation and negotiation may simply be too high. An alternative, as explored by Dreyer and Sellke (2015 in this volume), could be to develop a more inclusive and deliberative advisory function in European marine governance through a ‘tiered’ structure combining sectoral sub-divisions and overarching integrating forums. This set-up could possibly increase the likelihood for fruitful deliberation, rapprochement and bridge-building among disparate social groups. At the same time it might allow for the required incremental learning, context-dependent considerations and scale-dependent adjustments (cf. Gilek et al. 2015 in this volume). Clearly, development and coordination of governance arrangements at the level of Europe’s regional seas (i.e. regionalization) could nurture opportunities for moving towards more inclusive and deliberative marine governance (Söderström et al. 2015 in this volume, Van Tatenhove and Van Leeuwen 2015 in this volume). Ultimately, in line with the EU principle of

subsidiarity, this regionalization could provide a means for achieving a higher degree of congruence between the 'system-to-be-governed' and the 'governing system' (Jentoft and Chuenpagdee 2015 in this volume). However, as was also explained in several of the chapters, the development and outcomes of such regional-level marine governance forms will always be dependent on multi-level interactions where EU institutions as well as national governance structures and processes are of importance.

The different chapters of this book have adopted rather different perspectives on European marine governance. This is not surprising, given the different political, administrative, social, economic and cultural settings in the Regional Seas covered. However, a common theme that has emerged is the perceived need for improved integration as a vehicle to increased effectiveness and efficiency as well as better-adapted institutional structures for stakeholder deliberation to facilitate institutional coordination and learning. We close the book by addressing this issue.

The Importance of Integration in Future European Marine Governance

Based on the findings of this book, we conclude that several dimensions of integration linked to multi-level, multi-sector and multi-actor governance challenges will most likely play a key role if future European marine governance is going to be effective, efficient, democratic and sustainable. As explained in this chapter, the complexities of both the 'system-to-be governed' and the 'governance system' imply that 'silver bullet' types of solutions to governance shortcomings will never be fully achievable. Rather, the required integrative turn identified in this volume needs to be adaptive and incremental rather than radical, in order to allow for necessary adjustments, adaptation, reflexivity and institutional learning between the regional seas of Europe. It is, however, equally important to identify the context-dependent limits of integration and the different and specific forms it takes. The basic argument here is that 'forced' integration may obfuscate rather than resolve differences, among important actors such as governments, sectoral organizations, stakeholders and providers of scientific support.

Despite the fundamental challenges, several opportunities for improved integration have been identified. In relation to multi-sector challenges we have, for example, identified situations where EAM and MSP have fostered improved integration of knowledge and sectoral perspectives. The optimistic observer can also interpret the setting up of the RACs in fisheries management as a potential first step towards developing more inclusive and deliberative marine governance in Europe.

Returning to the key objective of this book – to investigate the tensions between the Europeanization of regional seas and the regionalization of EU policies – it is clear that there are opportunities for synergies despite tensions. In

fact, integration between, on the one hand, regional initiatives such as HELCOM and OSPAR and, on the other, EU directives and strategies identifying potential synergies could increase governance efficiency and effectiveness. This means that such regional organizations could play even more important roles than they do today in elaborating how EU directives could be adapted to local conditions as well as strengthening monitoring and compliance. At the same time, the EU could provide well-needed coherence at the pan-European level. However, it should also be noted, that conditions for institutional learning between North and South need to be improved to stimulate this development. Comparing North and South, it is clear that there are substantial differences between the regions. To effectively reduce the sizes of these inconsistencies, institutional learning needs to be interactive and adapted to regional contexts rather than unidirectional and predetermined. Even though HELCOM and OSPAR may serve as valuable examples, conditions in the South are far too different from those in the North to make the application of blueprints possible. By making institutional learning reflexive, governance can be improved in all four regions.

In this reflexive learning process we believe that the 'good governance' concept (European Commission 2001), with its set of meta-principles (on e.g. openness, participation and accountability) is useful in setting standards for what governing institutions at various scales should strive for. Similarly, well-established and commonly accepted principles in environmental policy such as those addressing precaution, polluter pays and equity offer additional criteria for assessing governance systems and needs for reform (e.g. Karlsson 2006). Our argument here is that, even though contexts between the Northern and Southern seas in Europe differ to the extent that institutional designs cannot be replicas of each other, good governance and environmental policy principles would apply generally and equally in both contexts. The fact that these principles are perhaps more challenging and would be more time consuming to realize in the Mediterranean and Black Sea in comparison to the Baltic and North Sea does not make them irrelevant. One should of course be flexible and adaptive with regard to institutional design and how to operationalize these principles, but not with respect to their adoption. Thus, if strived for in both settings, one may over time see that governance systems will converge while allowing them to remain embedded in regional contexts, which they would have to be in order to be legitimate, just and effective. The former is about their acceptance among stakeholders and their willingness to comply. Justice is about distribution of resources and space as well as due process. Effectiveness concerns the basic governance concerns, one of them being good environmental status and the way to realize it most cost-effectively. Thus, marine governance must be multipurpose and multidimensional. It must be able to realize many things at the same time, things that are not necessarily compatible but require choices that are hard and where science can only help a bit of the way. This is also why marine governance is as much about process as about outcome. Indeed the two are intimately linked and must be thought of in parallel.

References

- Bohman, B. and Langlet, D. 2015. Float or Sink for Europe's Seas? The role of law in marine governance, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- Cyert, R. and March, J.G. 1992. *A Behavioral Theory of the Firm*. Second edition. Oxford: Wiley-Blackwell.
- Dahl, R.A. 1991. *Democracy and its Critics*. New Haven, CT: Yale University Press.
- De Santo, E. 2015. The Marine Strategy Framework Directive as a Catalyst for Maritime Spatial Planning: internal dimensions and institutional tensions, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- Dreyer, M. and Sellke, P. 2015. The Regional Advisory Councils in European Fisheries: An appropriate approach to stakeholder involvement in an EU integrated marine governance?, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- European Commission. 2001. European Governance: A White Paper, COM(2001) 428.
- Gilek, M., Hassler, B., Engkvist, F. and Kern, K. 2013. The HELCOM Baltic Sea Action Plan: challenges of implementing an innovative ecosystem approach, in *Political State of the Region Report 2013 – Trends and Directions in the Baltic Sea Region*, edited by B. Henningsen, T. Etzold and A.-L., Pohl. Copenhagen, Denmark: Political Baltic Development Forum, 58-61.
- Gilek, M., Karlsson, M., Udovyk, O. and Linke, S. 2015. Science and Policy in the Governance of Europe's Marine Environment: The impact of Europeanization, regionalization and the ecosystem approach to management, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- Gillespie, A. 2002. Forum shopping in International Environmental Law: The IWC, CITES, and the management of cetaceans. *Ocean Development & International Law*, 33(1), 17-56.
- Hammer, M. 2015. The ecosystem management approach. Implications for marine governance, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- Hassler, B., Boström, M. and Grönholm, S. 2013. Towards an ecosystem approach to management in regional marine governance? The Baltic Sea context. *Journal of Environmental Policy & Planning*, 15(2), 225-245.
- Jentoft, S. and Chuenpagdee, R. 2009. Fisheries and coastal governance as a Wicked Problem. *Marine Policy*, 33, 553-560.

- Jentoft, S., Chuenpagdee, R. and Pascual Fernandez, J.J. 2011. What MPAs are for? On goal formation and displacement. *Ocean and Coastal Management*, 54(1), 75-83.
- Jentoft, S. and Knol, M. 2014. Marine spatial planning: risk or opportunity for fisheries in the North Sea? *Maritime Studies*, 12(13), 1-16.
- Jentoft, S. and Chuenpagdee, R. 2015. The 'New' Marine Governance: assessing governability, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- Karlsson, M. 2006. Science and norms in policies for sustainable development: Assessing and managing risks of chemical substances and genetically modified organisms in the European Union. *Regulatory Toxicology and Pharmacology*, 44, 49-56.
- Kern, K. and Gilek, M. 2015. Governing Europe's Marine Environment: key topics and challenges, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- Knudsen, O.F. and Hassler, B. 2011. IMO legislation and its implementation: accident risk, vessel deficiencies and national administrative practices, *Marine Policy*, 35(2), 201-207.
- Knudsen, S. 2015. Marine Governance in the Black Sea, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- Lindblom, C.E. 1959. The Science of 'Muddling Through'. *Public Administration Review*, 19, 79-88.
- Linke, S. and Jentoft, S. 2013. A communicative turnaround: Shifting the burden of proof in European fisheries governance. *Marine Policy*, 38, 337-345.
- Linke, S. and Jentoft, S. 2014. Exploring the Phronetic dimension of stakeholders' knowledge in EU fisheries governance. *Marine Policy*, 47, 153-161.
- Linke, S., Gilek, M., Karlsson, M. and Udovik, O. 2014. Unravelling science-policy interactions in environmental risk governance of the Baltic Sea: comparing fisheries and eutrophication. *Journal of Risk Research*, 17(4), 505-523.
- March, J.G. and Olsen, J.P. 1989. *Rediscovering Institutions: The Organizational Basis of Politics*. New York: The Free Press.
- Oberthür, S. and Stokke, O.S. (eds) 2011. *Managing Institutional Complexity: Regime Interplay and Global Environmental Change*. Cambridge, MA: The MIT Press.
- Rittel, H.W.J. and Webber, M.M. 1973. Dilemmas in a general theory of planning. *Policy Sciences*, 4, 155-169.
- Suárez de Vivero, J.L. and Rodríguez, J.C. 2015. Marine Governance in the Mediterranean Sea, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.

- Söderström, S., Kern, K. and Hassler, B. 2015. Marine governance in the Baltic Sea: current trends of Europeanization and regionalization, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- Udovyk, O. and Gilek, M. 2013. Coping with uncertainties in science-based advice informing environmental management of the Baltic Sea. *Environmental Science and Policy*, 29, 12-23.
- Van Leeuwen, J., Van Hoof, L. and Van Tatenhove, J. 2012. Institutional ambiguity in implementing the European Union Marine Strategy Framework Directive. *Marine Policy*, 36, 636-643.
- Van Leeuwen, J. and Kern, K. 2013. The External Dimension of European Union Marine Governance: institutional interplay between the EU and the International Maritime Organization. *Global Environmental Politics*, 13(1), 69-87.
- Van Tatenhove, J. 2015. Marine Governance: institutional capacity building in a multi-level governance setting, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- Van Tatenhove, J. and Van Leeuwen, J. 2015. Marine Governance of the North Sea: patterns of regionalization, in *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?*, edited by M. Gilek and K. Kern. Farnham, UK: Ashgate Publishing.
- Voss, J.-P., Bauknecht, D. and Kemp, R. (eds). 2006. *Reflexive Governance for Sustainable Development*. Cheltenham: Edward Elgar.