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Title: Challenges for stakeholder participation and communication within regional environmental governance. Comparing five environmental risks in the Baltic Sea

Paper submitted for ICES Annual Science Conference 2011, Gdańsk, Poland For theme session R: *Integration of multidiscplinary knowledge in the Baltic Sea to support science-based management*

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Abstract

This paper focuses on challenges for stakeholder participation and communication within regional environmental risk governance (international in a regional context). We focus on environmental risks in the Baltic Sea. Our point of departure is the theoretical and normative assumption that the inclusion of a broad range of actors has the potential to facilitate environmental risk governance in both substantive (inclusion of more knowledge and viewpoints) and democratic (inclusion of different values; improved accountability) dimensions. Yet, research so far has done little to investigate the actual potential and challenges for such broad stakeholder participation and communication in a regional context. Such challenges are substantial, because the countries among the Baltic Sea differ considerably in terms of power relations, cultures, and political histories. The paper focuses on how organizers of stakeholder participation and communication can deal with such and other challenges by comparing such processes (e.g. public hearings, scenario workshops) in five key risk issues concerning the Baltic Sea – marine oil transportations, chemicals, over-fishing, eutrophication and alien species. The analysis is based on case studies undertaken within each issue-area in the international research project RISKGOV – Risk governance of the Baltic Sea. To investigate the content (what is defined as relevant to communicate about) and form (who can take part, when and in what ways) of stakeholder participation and communication processes, we make use framing theory and theories of risk communication.

Keywords: Baltic Sea, Governance, Participation, Communication, Framing

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Introduction

Trans-boundary risks that affect us all over the globe have raised a need for new political and regulatory spaces, political identities and the emergence of a global civil society (Beck 2005; Castells 2008). This transformation of society has among other things made the concept of governance relevant for describing a new situation for governing environmental policies and risk, involving different actors at different levels (Young 2009). Various actors (policy-makers, social scientists, etc.) seem to agree that for societies to be able to manage and govern global risks there is a need for transnational communication and decisions and multi-stakeholder participation, as well as for the increased involvement of citizens – sometimes described as 'good governance' (Whiteside 2006). The Aarhus Convention (1998) emphasizes the role of public deliberation in environmental decision-making as does the EU directive on Environmental Impact Assessments (EIA). The same is emphasized in the European Commission White Paper on European Governance. Such good governance can also be defined as 'reflective governance' and includes aspects as transparency and participation. As a normative model it shares several characteristics with ideas of a deliberative democracy and the public sphere ideal (Habermas 1989). Governance does not imply top-down relations but instead involves citizens and stakeholders in network-like constellations and the communication model underpinning this mode of governance is 'dialogue' (Felt and Fochler 2010). However, in practice there seem to be many difficulties surrounding these ideal models for participation and interaction in the area of risk governance.

The present paper focuses on challenges for stakeholder participation and (risk) communication in a transnational context. Our point of departure is the theoretical and normative assumption that the inclusion of a broad range of actors has the potential to facilitate environmental risk governance in both substantive (inclusion of more knowledge and viewpoints) and democratic (inclusion of different values; improved accountability) dimensions. Yet, we argue that research so far is only in the very beginning to investigate actual instances, as well as the potential and challenges for such broad stakeholder participation, particularly in a regional context. We argue it is valuable exercise to reflect on the challenges involved in putting innovative participatory mechanism into practice. What lessons could be learned from existing attempts? We expect the challenges to be substantial, because the countries among the Baltic Sea differ considerably in terms of power relations, cultures, and political histories. Furthermore, we expect that challenges to broad participation and communication are particularly demanding at the regional, transnational level, because there is, by tradition, a lack of institutions and organizations dealing with cross-national issues. Establishing forms for stakeholder participation could be expected to be easier at the local (municipality), national, European or global (UN) level where arrangements for policy- and decisionmaking are more strongly institutionalized.

The challenges could be expected to accentuate even more to the extent that participatory arrangements even should be cross sectoral. To be sure, such integrative arrangement is not yet in place, but something that indeed is a topic in ongoing discussions surrounding regionalization of marine governance in Europe (Dreyer & Sellke 2011).

The aim of this paper is to analyze the form and content of stakeholder participation and communication in regional marine risk governance. The analysis focus on the following questions:

- Form: who can take part, when in the risk governance process, and in what ways?
- Content: how are issues framed and what is defined as relevant to communicate about?
- What are the institutional arrangements, forms and procedures of risk communication and what about public communication?
- How does the practice of stakeholder participation and communication relate to theory?

We focus on marine environmental risks in the Baltic Sea and we refer to five case studies conducted in the RISKGOV *project Environmental Risk Governance of the Baltic Sea* (see www.sh.se/riskgov). The cases includes descriptions and analyses of governance structures and processes of marine environmental risks in the Baltic Sea in the following five areas:

- Overfishing (case study reported in Sellke et al. 2011)
- Eutrophication (case study reported in Haahti et al. 2011)
- Marine oil transportation (case study reported in Hassler et al. 2011)
- Chemical pollution (case study reported in Udovyk et al. 2011)
- Alien species (case study reported in Lemke et al. 2011)

This paper will not include a summary of these cases (the reader can go to the case study report directly). Suffice to say here is that each case study relies on a number of sources, like: existing available literature; text analyses of policy documents and web-sites from key actors in the respective field; semi-structured qualitative interviews with key-actors in the respective risk area; and participatory observations during relevant conferences, workshops, consultations as well as three roundtable meetings that were arranged by RISKGOV. A jointly developed, inter-disciplinary, analytical framework guided the empirical work for each case study (also available at www.sh.se/riskgov).

Why inclusiveness?

In academic literature on environmental governance and management, it is easy to find a number of **arguments in favor of an inclusive approach**. These arguments relate to both instrumental and normative reasoning. For example, in ecosystem management,

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¹ **Roundtable 1**: Brainstorming roundtable discussion with key stakeholders on the topic "Scientific Uncertainty, Precaution and the Implementation of the Ecosystem Approach to Management for the Baltic Sea". Stockholm, Sweden, March, 2010. **Roundtable 2**: On 'Implications of EU integration for environmental risk governance in the Baltic Sea region', January 13th 2011 at Åbo Akademi, Turku, Finland . **Roundtable 3**: On "Stakeholder participation and communication in Baltic Sea environmental risk governance" which was held as part of the RISKGOV project on 14-15 February 2011 in Stuttgart, Germany.

concepts such as cooperation, public-private partnerships, public involvement, collaborative learning, local decision-making, and co-management have been suggested (cf. Endter-Wada et al., 1998;). Scientific advice can never be completely neutral, balanced or comprehensive, so there are valid arguments for recognizing and explicitly incorporating more socio-economic aspects and stakeholder involvement. Increasing inclusiveness could **generate new knowledge**, **stimulate learning**, and **facilitate capacity-building** in ecosystem management (e.g. Endter-Wada et al., 1998; Olsson, 2004; Hahn et al., 2006).

While the ecosystem management literature tends to focus on collaboration at local level – in close connection with concrete ecosystems – the environmental risk governance literature shares many of the positive undertones, but tends to discuss the multistakeholder topic more broadly from the global to the local level. Also in this literature, scholars tend to assume that many positive effects will follow the inclusion of actors representing different sectors. Such effects include **increasing social and environmental responsibility-taking** and the **generation of new knowledge and understandings**. Broad inclusion may be seen as normatively/intrinsically good because the inclusiveness ideal easily connects with democratic ideals around representation, deliberation, and participation. Inclusiveness is justified by reference to a 'right-to-know' principle. Citizens potentially affected by environmental pollution should be given access to data and processes and be provided room to communicative forums; which is a principle established by the Aarhus convention.

The environmental governance literature also discusses substantive/instrumental reasons for inclusiveness. Finding alternative channels for democratic participation and representation is particularly important when traditional forms of democratic representation are seen as incapable of dealing with urgent issues. Like the ecosystem management school, governance theorists maintain it is usually very difficult for the members of a single organization or a single discipline to know the ultimate combination of strategies to use when trying to deal with environmental problems. On this basis, several scholars argue for more inclusive policymaking (see Lafferty/Meadowcroft, 1996; Glasbergen et al., 2007; Stirling 2009, Renn & Schweizer 2009; for example). Groups with different concerns, knowledge, and experiences may be able to shed light on different aspects of the problem and stimulate reflection. Benefits may also result as an effect of co-operation as such, including the mutual respect, understandings, learning, and trust among the groups that may result from the cooperation. Cooperation as such may also lead to the empowerment of participants as well as a sense of 'broad ownership' of a process among them, and such empowerment and ownership may, in turn, facilitate implementation of rules and policies (e.g. Glasbergen, 2002; Bäckstrand, 2006). Indeed, better implementation is among the most recurrently expressed hopes, found in our cases. In general, we can note clear tendencies towards increasing the "sectors" or "stakeholders" to a greater extent, and there is an expressed hope that such increasing inclusiveness would be a means towards coping with an implementation deficit in the environmental risk governance of the Baltic Sea.

All our cases are thematically related to the global discourse on Sustainable Development, with its strong insistence on integrating social, economic, and environmental dimensions. This concept gives strong normative and instrumental

motives for the broad inclusion of actors, including civil society actors, in local and international policy-making (Baker 2006; Glasbergen et al. 2007).

Broad stakeholder participation and communication are also emphasized in many EU related policy processes. We have already mentioned the Aarhus convention, EIAs, the EU environmental action programs, and we can add the European Commission White Paper on European Governance, the Water Framework Directive (WFD) which was one of the first European regulations that explicitly demand a high degree of involvement of non-state actors in the implementation. The Marine Strategy Framework Directive (MSFD) sets requirements for providing access to environmental information and public consultation. Also the Maritime Policy is very interesting as regards broad participation (Udovyk et al. 2011), as it seeks integration and participation across sectors (shipping, oil and gas extraction, fisheries, and conservation). The new chemicals regulation, REACH, provides room for civil society organizations to participate in discussion of the chemicals to be authorized (ibid). In the overfishing case, it was noted that the CFP (Common Fisheries Policy) was revised soon after the millennium shift by recognizing the need for increasing stakeholder participation. Better knowledge, better enforcement, incentives to behave responsibly, and better implementation were among the expressed visions (Sellke et al. 2011, Linke et al. 2011). As a consequence, a new institution called the Regional Advisory Council (RAC) was established (further described and analyzed below). Interestingly, this innovation also feed new ideas and discussion to establish a new kind of "super-RAC", which would include a broad line of stakeholders of the various marine and maritime sectors, forming part of or co-operating with a kind of integrated regional marine management body (Dreyer & Sellke 2011). We also note that increasing space for various non-state actors are given in such organizations as the Helsinki Commission (HELCOM; on this organization, see text box 1 in appendix) and the International Maritime Organisation (IMO) (Hassler et al. 2011).

Also participating stakeholders are likely to endorse participation. They can take part in "multi-stakeholder" arrangements for a number of reasons: to make an impact in the policy-making, to protect their interests and concerns, to learn about policies and matters, to develop their social networks, or to make themselves visible and increase their own status, for example (Tamm Hallström & Boström, 2010, Ch 7). Stakeholders may participate in such arrangements with the aim to check what other actors in the network, or regulatory space more broadly, are thinking and doing. Participation can thus be seen as a way to keep an eye on other stakeholders.

However, the positive benefits with multi-stakeholder work do not come automatically. And such arrangements may be difficult to set up and organize in the first place. Scholars accordingly also present problems and challenges relating to broad inclusion. Some of the more central recurrent topics include power imbalances and representation biases (Endter-Wada, 1998; Biermann *et al.*, 2007, von Malmborg, 2003); the risk of cooptation or capture of public interests by private actors (Cutler *et al.*, 1999); the patience, effort, and management skills needed to develop mutual trust among participating actors with previously antagonist relations (Olsson *et al.*, 2004; Boström, 2006); cumbersome decision-making and the risk of stalemate in dialogue and negotiations (Tamm Hallström & Boström 2010); communication barriers due to different cultural traditions; and the

accountability deficits of inclusive arrangements (Glasbergen et al. 2007; Boström & Garsten, 2008).

In general, many good reasons for broad participation are discussed in the literature, and they are often echoed in broad policy documents; not the least such within marine environmental risk governance. However, practice is not the same as policy. Below, we will take a closer look into how and to what extent the participatory ideal is manifested in our focused cases. Based on findings from our cases, we will discuss a number of **challenging and critical issues** for the successful organizing of broad stakeholder participation and communication, **with a particular focus on the regional transnational level** (the Baltic Sea region).

Forms of stakeholder participation and communication in marine regional environmental governance

Various forms

Various forms and structures of stakeholder participation and communication appear in our cases. There are numerous examples of both formal and informal participation, communication and interaction:

First, there are traditional forms of participation and communication such as lobbying, NGO campaigning and informal contacts. We note a considerable amount of such activities. It appears to be only the IAS-case in which we do not find any systematic campaign-focus among environmental NGOs (Lemke et al. 2011). Also in the chemicals case, it was shown that there were quite few actors, with the exception of some NGOs, that had a primary focus on taking initiatives for improving the risk management of chemicals. In the oil transportation case, "personal contacts and lobbying are described as extremely important" (Hassler et al. 2011:54). This is perhaps unsurprising, yet an important observation as it to some extent reflects a lack of other more formal channels for stakeholder participation. It is reported in this case study that cooperation in a vertical direction is much more developed than cooperation among stakeholders in a horizontal direction (ibid. p. 55). For example, an environmental NGO is cooperating with HELCOM, IMO, and EU, but not with other environmental NGOs, industries, or shipowners. Such patterns prevent the development of transnational social networks and common understandings and framings. Likewise, there is a lack of regional and transnational networks and communicative structures for information to and/or involvement of the public.

Another traditional form of participation is to provide stakeholder comments to drafts of policy documents (the Swedish term "Remiss"). For example, the REACH legislation enables civil society organizations to provide such input regarding the chemicals to be authorized. However, although traditional channels for stakeholder influence are still very important, there are certain limitations with such forms in terms of stakeholder communication. Again, such a channel does not provide stakeholders with a forum in which they can meet and discuss topics and develop common framings. Indeed, REACH

was to some extent criticized by environmental NGOs because, among other things, it does not provide sufficient public involvement and enough access to data (Udovyk et al. 2011.).

Second, one rather common way to address the call for more stakeholder participation has been to provide new types of stakeholders' access as 'observers' to policy-making arenas. We find this development in the EU (see e.g. Udovyk et al. 2011 p. 49), HELCOM (which cover all cases; see text box 1 in appendix) and in IMO (mainly the oil-case; Hassler et al. 2011). Thus, non-governmental actors can gain access as observers in such policy- and rule-setting processes that are principally intergovernmental. In relation to UN forums, NGOs may attend meetings in case they have a consultative status with Economic and Social Council or are accredited to the register of the Commission on Sustainable Development. They are allowed to distribute reports to State Parties, which is however not the same as freely taking part in a dialogue. Also in relation to IMO, accredited NGOs could raise an issue directly, but most of the times it is seen as preferable to first go through a lower level IGO such as HELCOM (Hassler et al. p.13).

Compared to lobbying and other traditional forms for stakeholder participation, granting stakeholder access as observers implies a somewhat more institutionalized form. Some none-state actors are accepted as legitimate political players. Lobbying can be a difficult power strategy for NGOs, particularly when a policy-making process is fragmented and appear in a number of different arenas, which is often the case in EU-policy making (e.g. Haahti et al. 2011 p. 52). Therefore, granting access to decision-making forums could be appreciated. In the case of HELCOM this is very important, because it is the key regional intergovernmental organization dealing with marine environmental risks. Nevertheless, just being granted access as observers could still be seen as a restricted type of stakeholder participation if no other types of forms exist beyond this level. For example, interviewees commenting on the eutrophication case (Haahti et al. 2011) considered the current system as "highly unsophisticated" as regards stakeholder participation in risk assessment and management, because any form of substantial stakeholder involvement or even a thorough assessment of socio-economic consequences were missing.

A third form of stakeholder participation commonly discussed in literature is **public-private partnerships**, which is a form that has been promoted by the UN for instance (see Glasbergen et al 2007, Bäckstrand 2006, von Malmborg 2003). Although a variety of forms exist (Glasbergen et al. 2007), we could identify only a few examples surrounding regional environmental governance in our focused cases. One example in the eutrophication case is a small group of actors representing science and HELCOM, which collaborated closely for developing a user-friendly, computer-based decision support system. This support system aimed at identifying cost-effective strategies to counteract eutrophication of the Baltic Sea (Haahti et al. 2011 p. 34-36). This was however a tightly integrated project in which just a few actors took part, thus many other stakeholders were in effect excluded. In the same case, a couple of other projects are mentioned: The Baltic Compass (Comprehensive Policy Actions and Sustainable Solutions for Agriculture in the Baltic Sea Region) and the Baltic DEAL project (Putting Best Practices in Agriculture into Work). The latter includes participants representing science and farmers.

Such types of projects focus on specific issues, within a limited time frame ('project mind-set'; Casual Vifell & Soneryd, 2010). Accordingly, they can be useful for clearly defined and delimited goals and have potential to foster mutual learning among those (few) involved. However, they are not designed for developing a more permanent, encompassing, and broad democratic stakeholder communication.

Fourth, a more ambitious and institutionalized arrangement for broad stakeholder participation and communication is found within **Regional Advisory Councils**. The Regional Advisory Councils (RACs) were established by the EU in 2003 for developing fishing policies and regulations (Sellke et al. 2011; Dreyer & Sellke 2011). They are not constructed as decision-making forums, but as complementary advisory organs for the EU decision-making. A stated aim is to increase stakeholder participation and facilitate dialogue and consensus-making among participants. The task is to provide consensus recommendations to the EU Commission on strategic policy decisions, by drawing on the practical knowledge and experience of the RAC participants. The RAC participants can also take own initiatives to propose ways for dealing with problems they consider need to be addressed.

The RACs are organized geographically, as the Baltic Sea RAC and are novel in that they reflect an attempt at creating a regional governance arrangement for stakeholder input. Discussions have emerged whether to expand this model to a more integrative model for all marine/maritime issues on the regional level. As Dreyer & Sellke (2011) argue, there has historically been a bias towards participation by parties having a clear economic stake in the management decisions, in the fisheries and other sectors. However, since the 1990s in Europe, this bias has more and more been the subject of debate and critical review. The EU's implementation of the ecosystem-based approach, within for example the Water Framework Directive and the Marine Strategy Framework Directive, as well as the growing pressure exerted by environmental NGOs, have made it increasingly obvious and a topic of debate that resource users are only one part of the entity of affected and (potentially) interested parties. In parallel, Dreyer & Sellke (2011) argue that 'regionalization' has become a buzzword in debates around a new reform of the European Common Fisheries Policy (CFP). The European Commission seeks to decentralize management and shift more responsibilities to regions and the industry. In this regionalization discussion, a central questions is what could and should be the role of the RACs in a regionalized European fisheries management system. It is in this policy context that discussions about a fundamental change in the organization of regional stakeholder involvement have emerged. Ideally, it is argued, an extended RAC could allow for the representation of a much greater diversity of stakes and stakeholders - in relation to several interconnected marine/maritime issues - throughout the entire governance process.

Fifth, we should also address **alternative participatory structures** within regulatory efforts developed by private actors (business, NGOs). There is **self-regulation** by and for industries and there are **co- or hybrid-types of regulation** for industries but by multistakeholder constellations including both industry representatives and civil society organizations (Young 2009). During the latter two decades we in various sectors seen a proliferation of various standards developed by either industries themselves or NGOs or by them collaborating (or collaborating with public actors). Labelling and certification is

among the most apparent examples (such as the Marine Stewardship Council in the fishing sector; e.g. Pattberg 2007; Boström & Klintman, 2008; Tamm Hallström & Boström 2010). In the cases with more "diffuse" risks and fragmented regulatory/institutional structures, such as the chemicals case, we note that stakeholder involvement to a large extent occur through other channels, such as self- or co-regulation (see Boström et al. 2011). However, this type of participation seems rather absent and marginal when it comes to regional environmental risk governance of the Baltic Sea.

In sum, while various forms for stakeholder participation and communication exist, our overview of these forms indicates that the strong and rising demand for inclusive governance is far from being met. Among the most innovative models are the RACs, particularly as there are serious discussions to expand such RACs for regional participatory governance encompassing several marine/maritime sectors. In what follows, we will further analyze conditions for participation and communication by looking more closely at both form and content.

Who can take part, when, and what roles for the participants?

Who?

There is not one model of stakeholder participation, and this is even more true on the transnational political and regulatory scene. New rules, new stakeholder categories, and new roles have to be negotiated and formulated within transnational policy and regulation; and new types of contradictions emerge (Beck 2005). Terms such as "inclusiveness", "broad participation", "stakeholder involvement", and "participatory governance", "inclusive governance" may indicate that *any* type of actor that has an interest in an activity or are affected by it should be invited to the relevant policy process. In an integrated approach to marine/maritime management, a multitude of uses of Europe's seas and oceans that are all embedded in wider marine ecosystems should be taken into account. Still, even with much less ambitions, it is rarely, if ever, the case that all potentially relevant stakeholders actually are involved.

This relates, firstly, to the *capabilities* for taking part among stakeholders. Biermann et al. (2007) who observed huge imbalances in UN-led multi-stakeholder partnerships for sustainable development discuss this in terms of a participatory deficit. Their analysis shows that NGOs face difficulties in sustaining their activities within such partnerships. Boström and Tamm Hallström (2010) analyze the challenges among NGOs to take part in transnational regulatory activities by focusing on their material, cognitive, social and symbolic resources. The global or transnational scale of participatory processes accentuates the need to mobilize such resources simultaneously as it is extra difficult to mobilize them (ibid; Smith 2008). It is not just the "travel budget" and other expenses that increase, but there is also a set of other obstacles - cultural, linguistic, social - due to the fact that civil societies have traditionally been developed at the national state level in relation to nation states. For instance, we note from our cases that channels for transnational networking and communication is at best in an early developing stage (As always, NGOs such as WWF, Greenpeace play an important role for the creation of such networks). In the oil transportation case, for example, it was noticed that vertical interaction was much more developed than horizontal interaction. Different temporalities (whether stakeholder participation is arranged for a limited time period or if it occurs

repeatedly over time within a sector or policy issue, such as within RACs) too affect the conditions for participation for various stakeholders (Boström & Tamm Hallström 2010; Casula Vifell & Soneryd 2010).

Second, participatory habits and procedural rules set by those actors that design the arrangement and invite the stakeholders affect the *institutional conditions* for stakeholder participation. While, for instance, the RACs represent the call for inclusive governance, they are not organized to allow for the equal representation of all types of stakeholders surrounding fisheries issues. Two thirds are allocated to representatives of the fisheries whereas on third for other interest groups affected by EU's Common Fisheries Policy, which could be environmental NGOs, consumer groups, or sport fishers, for instance. Fisheries scientists and policy-makers cannot take part as "stakeholders" but as "expert observers" (Linke et al. 2011: 134). The former groups is however well represented in the governance structure through another advisory organ: the International Council for the Exploration of the Sea (ICES).

It is noticeable that the HELCOM require *expertise* as a rule to allow for participation, which reflects its tradition of being an organization mainly driven by science. Environmental NGOs such as WWF, Birdlife International or the Coalition Clean Baltic are welcome only so far they embody the correct expertise. The fact that these and other organizations may represent important environmental (and social) *values* is thus not considered, and in effect defined as irrelevant. The participatory rules reflect only instrumental reasons for participation (input of useful knowledge) and not normative (input of values) (cf. Stirling 2009).

Within IMO it was defined that NGOs can acquire consultative status if they "have the capability to make a substantial contribution to the work of IMO". These NGOs are supposed to be "truly international" with members from a broad geographical scope and not one region only. Currently, there are 79 organizations having such status. Seven of these are environmental NGOs, including Friends of the Earth, WWF and Greenpeace.

In discussions about stakeholder inclusion, the public as a category is often neglected or implicitly seen as represented by various governmental or non-governmental actors. The results from the case studies show that actors differ in their view on public risk communication. While some consider involvement of the public fundamental, others rather underline the importance of expert knowledge. A Russian expert in the chemicals case for example states: "The resolving of such specific problems as hazards risk assessment require professional knowledge, thus these questions cannot be decided by the general public." The actor reflecting the most on issues of communication and involvement of the public is generally the NGOs; something that is particularly evident in the fisheries case.

What roles?

Related to the institutionalized rules for participation are also the types of roles participants are assumed to play. It is not uncommon that actors participating in arenas aimed for stakeholder dialogue do not actually know why they are there. What are they supposed to do? What is the goal of the stakeholder communication? The following quote is picked from the chemicals case (Udovyk et al. 2011 p.33):

"the role of the various actors in the risk governance still seems not to be well defined. Many respondents expressed an interest in guidelines better defining the relationship between the scientists, decision makers and stakeholders, for example in the framework of the WFD. "We need to clarify our roles" as mentioned by an interviewed expert from an authority"

Various types of roles in relation to stakeholder participation have been implied in our previous discussion:

- Voicing (an interest, value; through lobbying, campaigning)
- Advising (based on expertise)
- Deliberating (among different groups)
- Deciding (some degree of voting power)
- Monitoring (assessing environmental conditions; assessing performance against promises)
- Consuming responsibly (among everyday consumers and among public and private procurement organizations)

It seems that most existing forms described in our overview earlier favor a model in which stakeholders are assumed to play an **advisory role**, in which they assist policy-making by their expertise and experiences. This could be seen as a functionalist interpretation of inclusion of civil society in policy-making (in contrast to a more critical interpretation). An important goal with the RACs were also that participants should get an opportunity to engage in a dialogue; and thus a chance to develop some social learning and mutual understanding. For example, in the overfishing case, an interviewee from the German Fisheries Association stressed that the BS RAC was a forum for entering into real dialogue with other stakeholders, scientists and Commission officials, which was seen as something very different from previous forms, in which stakeholder representatives just bring statements to the European Commission (Sellke et al. 2011:29).

While social critique is not endorsed as a positive value that institutions such as RAC should encourage (rather channel and resolve), in effect, stakeholders may be able to voice their critical concerns through such participation. While the observer status does not give NGOs formal voting power, it could give them access to the discussions and to key social networks. As a consequence they could enhance both their social and monitoring power (Boström & Tamm Hallström 2010). Through monitoring power, NGOs can increase their ability to assess performance against promises/principles/objectives (Keck and Sikkink 1998; Smith 2008). Indeed, some NGOs have developed a talent for combining "insider" and "outsider" participation strategies (Boström & Tamm Hallström 2010). Stakeholders that participate as observers in HELCOM, EU processes, or IMO may gain insight, experience, and knowledge about policies, regulations, and strategies. They develop expectations and learn what they should look for when evaluating practices. One interesting example is around the designation of the Baltic Sea as an PSSA (Particularly Sensitive Sea Area) under the auspices of IMO. Environmental NGOs such as Greenpeace pressured for its adoption and now refer to it in their communication about risk prevention measures.

When reflecting about the participants' roles, it is important to ask to whom and to what a particular stakeholder represent. In transnational policy and regulation, inclusiveness are

referred to as a positive model to increase "representation of societal interests". Yet, it is often unclear exactly what and who various stakeholders are assumed to represent (Van Rooy, 2004; Jordan & van Tuijl, 2006; Tamm Hallström & Boström 2010:119-24). Certainly, business association may represent their membership organizations. But who does WWF represent? All people in the globe? Animals? Future generations? What often is the case in transnational policy and regulation is that notions of "interest representation" are mixed up with notions of "expertise representation" and "national representation" (or any other type of territorially defined representation). The very same actor may be seen as embodying all principles.

- A. Representative from expertise
- B. Representatives from member states
- C. Representatives from stakeholders

Often the implicated roles are blended, such as within the RACs; which can create some confusion among participating actors. Is the role of participants to provide expertise or to push their interests? The assumption is usually both, but the issue could easily be ambiguous for the participants. Issues of representativity will much likely always be an intensely debated topic in novel transnational policy-making and rule-setting processes (cf. Tamm Hallström & Boström, 2010), because there are few templates to follow.

When?

An important question is to ask in which phase of the policy cycle or assessment process the stakeholders are invited to take part. Linke et al. (2011) who investigated stakeholder participation in the BS RAC discussed a general mismatch between the purpose (knowledge inclusion) and the governance stage at which RACs are formally positioned (see also Sellke et al. 2011). The revision of the EU's Common Fisheries Policy included the aim to increase stakeholder participation 'at all stages of the policy from conception to implementation' (ibid. p. 134). Yet, in practice the stakeholders could only discuss matters that were already (scientifically) framed by other actors. Accordingly, their activities were "restricted to providing views on pre-defined management proposals informed by the results of a scientific advisory process [within ICES]" (ibid. p. 140). Linke et al. (2011) suggest that if the aim is to enhance the knowledge base of risk management along several dimensions (biological, ecological, social, economic), stakeholders need to be included much earlier in the process; already when the problem framing takes place. The same pattern was observed in the chemicals case. Several interviewees called for more inclusion of economic and societal perspectives already during risk assessment (Udovyk et al. 2011: p. 33).

Based on the findings from our case studies it is also obvious that the public, generally, is not involved or addressed in the risk assessment phase but rather (if anywhere) in the risk management or implementation phase. The area of risk assessment thus generally does not include dialogue with the public and as for communication this phase mainly is about informing the public. "Overall, interviewees did not see a need for more specific public participation within the governance process. Communication with the public was mainly seen in terms of information providing." (Sellke et al. 2011 p 26). Some of the interviewees, such as on representing DG Mare, saw the different parliaments as representatives for the public, thus emphasizing that there is no need for further public

involvement in the governance process. In the chemicals case we found a comment from a Russian scientist, which is probably representative for many actors with a tradition in risk assessment activities: "People just want to be secured. They don't want to get involved in the chemicals assessments" (p. 49). While this argument may sound intuitively sensible, it neglects the possibility that "people" can either communicate directly with policy-makers or be represented by a broad array of stakeholders and social movements, also outside of the representative parliamentary arena. Linke et al. (2011) furthermore concludes something which is more or less true for all five cases investigated: "There is a lack of opportunities for scientists and stakeholders to enter into mutual exchange in the process of producing knowledge and advice" (p.141). This leads to our next topic about what stakeholders can or should talk about in the governance arrangements.

Content: What can participants talk about? - or [dis]agree about?

Framing

An important issue regarding what to talk about is policy actors' and participants' framing of the issues and what is defined as the problem or issue at stake. Another interesting question is if the problems are already framed by those that invite stakeholders, or if the discussions are also open for the very framings of the problem. In many ways framing also is related to the question of 'who' gets to participate (see above) since those who define the issue at stake, at least implicitly, also defines who the stakeholders are.

In various academic literature (policy analysis, social movement theory, risk communication), scholars have paid attention to the critical role of framing. The definition of *framing* that Martin Rein and Donald Schön provide is instructive:

[F]raming is a way of selecting, organizing, interpreting, and making sense of a complex reality to provide guideposts for knowing, analyzing, persuading, and acting. A frame is a perspective from which an amorphous, ill-defined, problematic situation can be made sense of and acted on (Rein & Schön, 1993, p. 146).

According to Entman (1993) framing is about promoting a certain problem definition, causal interpretation, moral evaluation and treatment recommendation. The use of certain keywords and a particular discourse is an important part of the framing process. Different cultures have different frames that will affect the way of thinking and acting. An important aspect of the framing concept is also to consider what frames omit and what is not included in the (dominating) frame(s).

Frames can be widely shared among a great number of actors, or they can be more specific to a certain subset of actors. Actors refer to frames that are common in the general environmental discourse, for example, biodiversity, sustainability, and the precautionary principle – frames that are collectively recognized and used as a reference in communication about environmental issues. Thus, framing occurs in a discursive context (cf. Steinberg, 1998) while organizations may make different interpretations of them. The policy analysts can use framing theory to analyze both the explicit frames that

policy actors construct, and the more implicit and hidden assumptions and understandings (Fischer, 2003).

Frame analysis is useful to investigate how actors involved in risk reducing policies and in risk communication may or may not develop common understandings of problem situations (Rein & Schön 1993). Regarding environmental risk governance of the Baltic Sea, we can see concepts such as 'overfishing', 'alien species', 'oil spills', and so on as frames that different actors - scientists, policy-makers, campaigners, citizens, etc - attach various meanings to. Frames may help people to communicate with each other and develop mutual understanding and collaboration, while people at the same time also develop conflicting arguments through framing.

We can see that a frame such as 'overfishing' can stir up conflicts rather than serving as a tool for development of mutual understanding. The interviews carried out in the overfishing case (Sellke et al. 2011 p. 26) indicated that there were greatly divergent meanings attached to the term of 'overfishing'. The European Commission uses the term "overfished" with respect to the concept of maximum sustainable yield (MSY), whereas overfished to others could be used as a rhetorical tool to claim that stocks were near to collapse. Moreover, 'overfishing' can be defined economically, socially, or environmentally and according to a long-term or short-term view, depending on the actors' agenda (ibid. p. 28).

Our case studies reveal a dominating quite narrow scientific-technocratic risk framing of the issues. For instance the eutrophication study reported a tight interplay between scientific assessment and management, in which just a handful of people took part and managed to translate science more or less directly into political action and management. The authors conclude that "the major governance frameworks like HELCOM's BSAP and the EU directives rely almost exclusively on scientific knowledge in the form of indicators to define their management objectives like good ecological/environmental statuses." (ibid. p. 44) It is no wonder we, in this case, find a great deal of consensus among the exclusive core policy group. The reporters of the case study continues: "There is however also an awareness that this system is too fragile and highly unsophisticated because it is basically missing any form of broader stakeholder involvement or even a thorough assessments of the socio-economic consequences" (ibid. p. 58-9).

A narrow scientific-technocratic framing enables an exclusive risk communication within a small group of risk assessors and managements. This narrow framing is found in other cases as well. Informants during the 3rd RISKGOV roundtable in Stuttgart, with experiences from RACs in the fisheries cases, told about a rather scientific/technical 'language' within these RACs and that quite few spoke much while most participants remained silent. This narrow framing became a communication barrier or a 'silencer' in the discussions, since some actors feel excluded by this discourse.

We see in each risk case a strong tradition in risk assessment based on natural science; and the key challenge seems to be to find conceptual tools to facilitate dialogue among broader groups. Groups stick with their distinct framings, and based on these separate framings they provide incompatible risk assessments and valuations. Despite 'Sustainable Development' (with its three pillars) there seems to be a lack of discourses that truly

serve to integrate environmental, social, cultural, and economic concerns in the debates. Also the "ecosystem approach to management", which is currently endorsed by EU and HELCOM, seems unable to achieve this. Interviewees from the case studies attached very different meanings to that concept, if they even had heard of it.

Furthermore, actors stick with different epistemic frames (Linke et al. 2011). Regarding the Baltic Sea RAC, fishermen accused environmental NGOs to overuse and amplify scientific advice (from ICES) to argue for conservation measures (Linke et al. 2011 p.137; Sellke et al. p. 25). Linke et al. (2011) argue that the different stakeholders in the RAC use distinctly different epistemic frames, with the result that they, for example, make completely different evaluations of the scientific advice of ICES. "The local knowledge of fishermen is based on their daily experiences and expressed in a qualitative, narrative way while fisheries science is concerned with quantification and its implementation into existing numerical models by using a highly technical language" (ibid. p. 138).

The institutional context of the framing process

The governance structures in general with their institutions and organizations are to a considerable extent part of the process of defining the problem. Thus, framing processes are always related to an institutional context. Form affects content. Within the established arrangement for stakeholder participation and communication, there are also rules for how communication should be performed and there may be explicit or implicit rules for what stakeholder can talk about. Transparency issues, including access to information, are important. The policy leaders may also define the goals and agendas of the communication.

An interesting example is the call from policy-makers that the RACs should present consensus reports rather than disparate voices. Yet, if the stakeholder communication is supposed to result in a consensus report we can expect certain challenges in the process to provide common understandings. This was confirmed in a study by Linke et al. (2011). Their analysis of Baltic Sea RAC revealed that disparate voices were rather amplified than eliminated. They focused on the discussions and reports around TACs and found few agreements among the stakeholder groups on these issues. The BSRAC appeared unable to provide consensus reports: "the BSRAC seems to have developed rather a 'culture of not agreeing' than of finding consensus over the years". To be sure, one important reason is that actors participating in the RACs - the fishing sector, sport fishing interest, the environmental community - are not very used with expressing common interests. Rather, the history is burdened with controversies and mutual mistrust among such groups.

The very idea to disseminate "consensus" advice does not fit easy among a group with distinct interests. Some (potentially) participating groups, including the environmental NGOs could be described as *social movement organizations* that engage in a cultural or political conflict with social critique and societal change as the main aim. Key strategies would be to push for significant reform in both policy and practice. Members of such organizations do not expect the movement leaders to discuss and formulate far-reaching compromises with opposing interests (Boström & Tamm Hallström 2010). We can also expect that neither will members of business associations automatically endorse such

compromises. The drive for consensus (advice) stem from those decision-makers within policy-making and management that are authorized to balance and aggregate various interests and concerns. One could interpret this (functionalist) demand for consensus reports as a way to delegate this act of balancing and aggregation. If RAC are to be further developed and encompass more stakeholders in several sectors, we can certainly expect that such challenges will multiply.

Risk Communication

Risk Communication and the Public

Due to societal changes like globalization and deregulation, decision-making and politics take new patterns. Trans-boundary risks that affect us all over the globe have raised a need for new political spaces, political identities and the emergence of a global civil society (Castells 2008). This transformation of society has among other things made the concept of governance relevant for describing a new situation for governing environmental policies and risk, involving different actors at different levels. According to Renn (2008) risk governance consists of four phases: pre-assessment; appraisal; evaluation, and management. Risk communication is in different ways included in all of these. Communication thus is considered as one of the main aspects of risk governance.

Various actors (policy-makers, social scientists, etc.) seem to agree that for societies to be able to manage and govern global risks there is a need for transnational communication and decisions and multi-stakeholder participation, as well as for the increased involvement of citizens – sometimes described as 'good governance' (Whiteside 2006). The Aarhus Convention (1998) emphasizes the role of public deliberation in environmental decision-making as well as the EU directive on Environmental Impact Assessments (EIA). It is also emphasized in the EU sixth action program on the environment (EC 2002) and the European Commission White Paper on European Governance. This good governance can also be defined as 'reflective governance' and includes aspects like transparency and participation. As a normative model it shares several characteristics with ideas of a deliberative democracy and the public sphere ideal (Habermas 1989). Governance does not imply top-down relations but instead involves citizens and stakeholders in network-like constellations and the communication model underpinning this mode of governance is 'dialogue' (Felt and Fochler 2010).

Generally, research in the area of environmental risk governance has focused on stakeholder communication mainly in terms of participation (with close connection to the area of public deliberation issues) but our experiences and results from this project points to the importance of widening the stakeholder-concept and to acknowledge the importance of citizen/public communication. Communication as it is used in this context includes on the one hand exchange of information and on the other hand dialogue/interaction. These two forms resemble the two main models for communication and even if they are rough instruments for analyzing communication processes and there

are obvious overlaps between the two, it is relevant to distinguish between them in analyses of governance activities.

Our results clearly show that the actors differ in their view on public risk communication. While some consider involvement of the public fundamental, others rather underline the importance of expert knowledge. A Russian expert in the chemicals case for example states: "The resolving of such specific problems as hazards risk assessment require professional knowledge, thus these questions can not be decided by the general public." The actor reflecting the most on issues of communication and involvement of the public is generally the NGOs; something that is particularly evident in the fisheries case.

Based on the findings from our case studies it is also obvious that the public generally is not involved or addressed in the risk assessment phase but rather (if anywhere) in the risk management or implementation phase. The area of risk assessment thus generally does not include dialogue with the public and as for communication this phase mainly is about informing the public. "Overall, interviewees did not see a need for more specific public participation within the governance process. Communication with the public was mainly seen in terms of information providing." (Sellke et al. 2011 p 26). "Risk assessment has become a dominant tool for informing risk managers and general public about the different options for protecting public health and the environment." (Udovyk et al. 2011, p 47). Again some of the interviewees like for example. DG Mare saw the different parliaments as representatives for the public, thus emphasizing that there is no need for further public involvement in the governance process.

In the field of risk communication (and environmental communication in general) the public appears in two main roles: the role as citizen and the role as consumer, and the sometimes conflicting interests between these roles are of great importance for the work towards a sustainable society. The public in their role as consumers are often considered more important than is their role as citizens. Several actors in the chemicals case and in the IAS case for example address the responsibility of the public as consumers. In the case of hazardous chemicals, consumers are put forward as responsible for speeding up the process of change, like in this quote by a Swedish EPA representative: "We have to think in another way, in a way we design our products. We need chemicals but in the same way we need to think about consequences. I am talking about consumer awareness about real costs. As agency and politicians we are constantly working with these issues but if you need a quick change the public has to act." (Udovyk et al. 2011, p 85).

According to Agenda 21 for education in the BSR, it is important for the work towards a sustainable society to equip citizens with education and training and to raise public awareness. It is however never discussed or specified how public awareness should be raised and whose responsibility this is. It is clear from our results that generally scientists do not feel responsible for communicating to or with the public. Instead civil society actors and NGOs, or different authorities mainly take on public communication. Also the media may play an important role.

Institutionalized Risk Communication

Institutional risk communication is about vertical as well as horizontal communication and can for example be about communication in and between different authorities,

industries, and scientists and from those actors to the public. The main finding from our cases seems to be that there are few, if any, actual examples of systematic institutionalized (public) risk communication concerning the BSR. There is also a lack of regional and transnational networks and communicative structures for information to and/or involvement of the public.

In many cases, HELCOM is identified as the main actor in risk communication and the organization among other things serve as a communicative platform between different actors and interests. In the eutrophication case e.g. HELCOM and the Baltic Sea Action Plan are seen as the main players at the authority level (Haahti et al. 2011). The structure within HELCOM makes it possible for stakeholders and NGOs to communicate and contribute with knowledge. According to the case study report on chemical pollution, EU and HELCOM are identified as platforms of communication for politicians and authorities, but not for independent single scientist or laboratories. The European Environmental Agency (EEA), the European Green Spider Network and IMPEL are other organizations or networks with an aim to distribute information and communicate about risks.

There is of course also communication within and among the different organs of the EU but in general the complexity of the organization creates difficulties in communication inside EU. This is for example noted in the eutrophication case (Haahti et al. 2011). Communication between authorities at a national level is much about informal communication and personal contacts and networks. In the case of hazardous chemicals a Swedish EPA representative state: "It is all about personal contacts." (Udovyk et al. 2011, p 88).

Communication and lack of tools and platforms for successful communication is often identified as a barrier for risk management and implementation. According to for example the case study report on IAS the cooperation and communication between the most important stakeholders is still unsatisfactory. The somehow weak communication between the main players together with the lack of public debate is identified as the main reasons for low public awareness on the IAS issue (Lemke et al. 2011).

The risk area with the most established forms for (regional) risk communication is fisheries and the Regional Advisory Councils. The RACs are non-governmental institutions set up by representatives from the fishing industry and different environmental groups and is often put forward as a good example of stakeholder participation. Seen from the perspective of a broad inclusion being the ideal for risk governance, the concept of stakeholders in itself can be seen as problematic as it means that it is presupposed what issues are at stake and who is to be seen as holding a stake in that issue. Actually governance structures in general with their institutions and organizations, at least to some extent are part of the process of defining the problem and an actual result of a framing of the issues and risks at hand. Thus, the institutional context is also part of the framing process.

The German Fisheries Association stressed during an interview that the BS RAC is a forum for 'entering into real dialogue with other stakeholders, scientists and Commission officials" (Sellke et al, 20011, p 23). In the risk cases analyzed in the RISKGOV-project

it is obvious that so far the most successful form of regionalization is in the area of fishing with the RACs as the main example of regionalized advice procedures. According to Larimore (referred in Jesperson 2004) four main things work to make regionalization successful: strong leadership, customer confidence, communication and common agendas.

Different forms of communication

Risk communication can be formal as well as informal and we are able to identify both of these forms in our case studies. Formal communication channels add legitimacy to the governance process while informal communication mainly works as a way to build trust and coalitions. There are also differences between the different risks and while formal communication is the major channel in the oil case and the IAS case, the interviewees in the fisheries case underscores the importance of informal communication and personal networks.

Renn (2008) identifies four different forms or kinds of risk communication: documentation, information, dialogue and involvement, and we find examples of all these in our cases. As is seen in the cases of oil transportation, overfishing and eutrophication (Hassler et al, 2011; Sellke et al, 2011; Haati et al, 2011), generally communication from authorities to a wider public comes in form of information and can be characterized as a one-way communication, using different kinds of statements, press releases and reports. Two-way communication between and among different stakeholders, scientists and authorities are usually established in different projects. Science provides important input for risk assessment and governance. In the case of overfishing it is noted that there exist no working mechanisms for feedback from management back to science.

There are also different means and tools for communication like labels, documents, reports, articles, laws and regulation, webpages, meetings and seminars, etc etc. Different actors use different forms of communication and while scientist for example work a lot with reports, articles, etc, NGOs focus more on communication with the public and makes more use of webpages. HELCOM also work a lot with active communicating through their webpage. For actors in the sphere of chemicals, the Swedish Chemicals Agency (Kemi) has a widely used website with a large number of databases and up-to-date information. In the area of fisheries industry representatives have designed a website with the aim to deliver information to the public. This is according to the interviewees mainly a response to the media framing of overfishing (Sellke et al, 2011).

WWF employs a traffic-light system as a way of informing the public (or in this case the consumers) about the sustainability of fishes in the supermarket. In relation to consumers, things like green-marketing, certification and labeling could also be seen as tools for bringing information to the public. A special form of communication (however directed mainly to the employees) used in the case of hazardous chemicals (Udovyk et al, 2011) is the so-called MSDSs (Material Safety Data Sheets).

In many cases different actors like for example NGOs engage in lobbying activities in the EU and national forums for decision-making. Non-governmental organizations can also in themselves work as communicative links between other actors like the industry and

other stakeholders in the chemicals case. There are a number of research projects concerning governance of risks in the BSR and to the extent that these projects include researchers as well as other actors and stakeholders, they can also be seen as a communicative platform and fora for deliberation.

It is often said that the one-way communication model (transmission model or sender-receiver model) has been more or less abandoned on behalf of other more inclusive and dialogic models, but the findings from our case studies clearly show that both these models are in practice and guide different actors work with (public) risk communication. It is also interesting to note that when discussing communication as dialogue and interaction, actors in our cases mainly speak about participation in different (often top-down initiated) deliberation activities. One important issue in relation to this is the question of the nature of dialogue and participation, and if it always requires a copresence (in time and/or space). In the digitalized network society there are a number of possibilities to 'meet' and communicate with the help of different virtual platforms.

Communicating uncertainty

According to Entman (1993) framing is about promoting a certain problem definition, causal interpretation, moral evaluation and treatment recommendation. The use of certain keywords and a particular discourse is an important part of the framing process. Different cultures have different frames that will affect the way of thinking and acting. An important aspect of the framing concept is also to consider what frames omit and what is not included in the (dominating) frame(s).

Many aspects influence the communication process and together with framing we can also mention issues of trust and credibility (Renn, 2008). There is a link between credibility and uncertainty in that uncertainty has to be communicated in order to make advice credible. There is however no consensus regarding the issue of how uncertainty should be communicated. In the fisheries case for example the understandings of uncertainty differ between ICES and DG-Mare (Sellke et al, 2011).

The approach to uncertainty also differs between different actors. In the fisheries case the industry representatives in general reject the precautionary principle, while the NGO representatives is much in favor of that particular approach as a way of dealing with uncertainties. The NGO representatives saw however an underlying problem in communicating uncertainty to the fishers. WWF Poland has for example initiated a roundtable with fishers and scientists with the specific aim to communicate scientific uncertainties to stakeholders like fishermen and to promote long-term planning. In the interviews, NGO representatives identified communication of scientific results from ICES as the main problem for a successful management (Sellke et al, 2011).

As for the Ecosystem Approach to Management approach, an interesting reflection from the case of overfishing (Sellke et al, 2011) coming from the NGO representatives, is that communication actually could be improved by an EAM since it create a common agenda and discourse. Of course it is also part of a framing process and a way of expressing power to define what EAM really is and whether or not it is a 'utopian vision' as some claims or a fruitful way forward and the only possible way to reach the goal of a sustainable development, as is claimed by others.

Popularization of Scientific Knowledge

As been stated before, risk governance processes are characterized by a scientific/technocratic discourse and this has been pointed out as a possible obstacle to effective risk management and implementation. There is a need for common agendas but also for a common 'language' and as part of making the communication process inclusive and transparent, this scientific knowledge has to be 'translated'. During the 3rd roundtable on stakeholder communication and participation held in Stuttgart 2011, it was for example mentioned that the language used in the RACs are quite scientific and technical and that this has become a communication barrier or a 'silencer' in the discussions, since some actors feel excluded by this discourse. In the case study report on chemicals it is stated that also in HELCOM the activities are scientific and technologically intensive.

In theories on (public) science communication, media and journalists are often defined as the main mediators in the communication process. In order to describe how journalists communicate science to the public the concept of popularization is frequently used. This, for some equals a critical view where to popularize means to actually distort scientific knowledge; while for others, popularization simply refers to a process of adjusting the message. What is pointed out is that popularization tends to include a reduction of complexities and thus also a tendency to make scientific knowledge appear more certain than it is (Hornmoen, 2009; Stocking, 1999). Media tend to simplify often provide simple casual explanations of risks, thus reducing complexity (Boholm, 2008).

The issue of creating a common language is also important for the question of how scientific advice can be transferred into the management sphere. In the area of risk communication, different laws and regulatory documents can be seen as tools for creating a common language if it establishes common objectives and a common terminology.

The role of the media

There seem to be different obstacles to public participation and communication in environmental governance and decision-making. First there are the structural factors, including for example lack of opportunities and resources to participate. The other main problem seems to be a lack of interest from the public (Zavetoviski et al. 2006), something that at least in part could be explained by a difference in agendas between scientists, policy-makers and citizens. Previous studies of communication in marine governance procedures, clearly underlines the importance of common agendas. Experiences of stakeholder communication and participation say that it is difficult to recruit citizens to participate in deliberative procedures like hearings. One possible reason is that the issues are not part of the public common agenda. Here the media as part of the public sphere can play a crucial role.

The line of argument for the importance of common agendas can briefly be described as follows: Placing a certain (risk) issue on the agenda may enhance (public) engagement and increase possibility and quality of (public) participation, which will in the end result in improved (risk) management and policy implementation. In this process media and communication is of utmost importance.

So far there are no influential transnational (e.g. European) media or a public sphere with a role in governance and political communication. Also there are no media covering different regions (like e.g. the Baltic Sea or Mediterranean area). Thus we in the BSR have a situation where an arena for environmental risk governance can be identified and with regional actors and networks like HELCOM and the Union of the Baltic Cities (UBC) and also a regional or international public that according to the European Commission's white paper on European Governance in the name of 'good governance' should be involved and invited to participate in decision-making procedures. But at the same time there are obvious obstacles for public deliberation and participation on risk issues in Europe and different regions in Europe since there are important parts of the public sphere missing and there seem to be no common agenda or arenas for public participation.

Online media offer spaces and platforms were citizens may engage in dialogic communication. These so-called new media have often been described as more inclusive, with the capacity to create new spaces for communication and as driving forces in the trans-nationalization of the public sphere. New digital communication technologies can also allow social environmental movements to embrace new ways and models to empower citizens. However, other perspectives underline the political economy also of these new media and claim that they merely contribute to a consolidation of traditional power structures.

To discuss the role of media in contemporary politics (and risk governance) the concept of *mediatization* can be of use. Mediatization refers to a situation where media has become the main frame of reference in society. Media influences how politics is framed and perceived and set the terms of action for different actors and stakeholders (Mazzoleni and Schulz, 1999; Schulz, 2004). The 'media logic' (cf. Altheide & Snow, 1979) becomes the logic of public discourse and also limits certain actors with a different kind of logic.

Another concept with relevance for understanding the relationship between media and society and to analyze the role of media in public discourse and political communication is *agenda-setting* (cf. McCombs and Shaw, 1972). The basic idea with this concept is that there is a relationship between the amount of attention a certain issue receives in news media, and the extent to which the public considers this issue to be of special importance. While agenda-setting theory mainly focuses on which issues are reported, in the context of media studies framing is about how issues are presented (Weaver, 2007). A frame is the dominant perspective on the object/issue at stake and how it is defined in terms of problem, cause, solution, etc (see e.g. Entman, 1993). During the pre-assessment phase the problem issue is defined through a framing process. Risks with low-probability and high-consequences generally receive more media attention and are evaluated as high risk by the public (see e.g. Fiorino, 1989).

Previous studies of how news media frame environmental risks in relation to the Baltic Sea among other things shows that eutrophication together with overfishing receives the most media attention (Jönsson, 2011). The issue of hazardous chemicals on the other hand receives relatively little attention in news media and is not on top on the public

agenda. When in media the chemical risk according to the interviewees is framed rather narrowly as a problem mainly related to health problems with eating contaminated fish. As an expert from SYKE puts it in relation to the case of hazardous chemicals: "If it is not in the public and media; it is not at the politicians mind."

Discussion: Challenges for participation and communication at the regional transnational level

In general, we note a fairly big gap between ideal and practice when it comes to broad stakeholder participation and communication of environmental risk governance of the Baltic Sea. This is perhaps not very surprising. Yet, it is important to start learning more about innovative attempts and the challenges involved, not the least if the normative aim is the strengthening of such governance. Indeed, we do not see much evidence of a real reflection on participatory and communication activities and the forms that are used.

One part of the challenge is the history and the general lack of policy and regulatory structures at the transnational, regional level. HELCOM is less than 40 years old. Like states themselves, civil societies have grown within the container of the nation-states (Beck 2005) and are only beginning to establish transnational networks. Forms for horizontal interaction among groups are generally lacking (also with the exception of such NGOs as Coalition Clean Baltic). HELCOM and other governance arrangements seems, at least so far, not to be a sufficient means to foster such horizontal interaction.

Other parts of the challenge have to do with existing forms and quality of the participation and communication. As our analyses show, the forms are currently quite fragmented and only allows for some restricted inclusion of various stakeholders, with the RAC presenting the most innovative models. The RACs are novel in that they reflect an attempt at creating a regional governance arrangement for stakeholder input, something that is absent in the other cases.

We can also notice a dominant functionalist view of participation in which stakeholders are at the service for policy. They should bring their knowledge to the policy (not values or social critique) and they should facilitate implementation (closing the implementation gap). To be sure, such instrumental goals are important, but do not cover all reasons for inclusiveness discussed in academic literature. Indeed, social critique can be an important driving force for improved environmental governance. We have moreover paid attention to the rather narrow scientific-technocratic framings that is a key obstacle for risk communication among a broad set of stakeholders.

While interviewees in most cases in various ways discussed the lack of sophisticated forms for systematic stakeholder participation, it should be emphasized that the interviews carried out in the overfishing case indicated a general support for the idea of the RACs (Sellke et al. 2011), including the aims for which they were established. Yet, perspectives differed from different countries and different groups regarding the issue whether the RAC should receive an even broader mandate within EU's Common

Fisheries Policy (beyond having merely an advisory function). For instance, certain groups representing "other interests" declined support for such a broader mandate, because they considered economic interests to be overrepresented. These groups include environmental NGOs such as the Coalition Clean Baltic, the Fisheries Secretariat, and the WWF. A regional marine management organization or arrangement would need to include a much wider diversity of stakeholders than the RACs, the so far most ambitious institutionalized structures, currently do (Dreyer & Sellke 2011). One could expect that increasing the scope (covering more sectors) and mandate of such forums for stakeholder participation would create huge legitimacy challenges if not a number of procedural rules discussed in this paper (regarding representation, consensus advice, etc) was reconsidered.

The analysis of our cases clearly show a far from ideal situation for how risk communication is conducted. Risk communication activities are for example not firmly anchored into the organizational structure of the institutions responsible for risk assessment and/or risk management; is not understood as an integral component of the entire risk regulation/governance process. It is also clear that there is no real reflection on communication activities and whether the precise form of communication and use of mediums for communication reflect the nature of risks under consideration, their context and whether they arouse, or could arouse, societal concern.

According to Agenda 21 for education in the Baltic Sea Region, it is important for the work towards a sustainable society also to equip citizens with education and training and to raise public awareness. It is however never discussed or specified how public awareness should be raised and whose responsibility this is. It is clear from our results that scientists, in general, do not feel responsible for communicating to or with the public. Instead civil society actors and NGOs, or different authorities mainly take on public communication. Also the media may play an important role. These issues will be addressed further in a coming paper on risk communication and public participation in Baltic Sea risk governance.

Finally, it is also interesting to note that when discussing communication as dialogue and interaction that actors in our cases mainly speak about participation in different (often top-down initiated) deliberation activities. One important issue in relation to this is the question of the nature of dialogue and participation, and if it always requires a copresence (in time and/or space). In the digitalized network society there are a number of possibilities to 'meet' and communicate with the help of different virtual platforms.

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Appendix

Text box 1. The Helsinki Commission (HELCOM)

The Helsinki Commission (HELCOM)

HELCOM is the international secretariat under the Helsinki Convention, which was established in the early 70ties to protect the marine environment of the Baltic Sea. It is thus the most important regional organization for this task. All Baltic Sea countries are members. HELCOM is responsible for the implementation of the Helsinki Convention and is thus engaged in monitoring and