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# Beliefs and behavior in international policy making: Explanations to longitudinal changes in the governance of the Baltic Sea

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**Abstract**

Policy change is often described as a consequence of different types of perturbations. The advocacy coalition framework (ACF) on the other hand advocates that policy changes are accomplished by changes among involved actors' beliefs and behavior. The Baltic Sea Action Plan (BSAP) with its so called ecosystem approach, signed by the countries surrounding the Baltic Sea and the European Community in 2007, is such a policy change. Yet, the causes behind the launch of the BSAP are unknown. By studying involved actors' beliefs and behavior this study shows that the BSAP was caused by a general shift in beliefs among all involved actors rather than by competing beliefs or changed actor behavior. The changed beliefs among the actors is either caused by learning processes or negotiations, however the relationship between these two remains unexplored. No coordinated behavior among the actors could be identified during the analyzed period.

**Keywords:** Policy change, Advocacy coalition framework, Content analysis, HELCOM, BSAP, Baltic Sea

## Introduction

Managing complex problems often requires negotiations and compromises between a diversity of interests. Strong coalitions and alliances are therefore likely to represent an important factor that can enable substantial policy change. Policy change can also be described as either a response to rapid or slow changes within the institution or as a response to a perturbation, like a shock, in the institutional context (Sabatier and Jenkins-Smith 1993; Lindblom 1980; Kingdon 2003; Baumgartner and Jones 2009).

This paper focuses on the launch of the Baltic Sea Action Plan (BSAP), a new policy for restoration and sustainable usage of the Baltic Sea. The BSAP was signed by the ten contracting parties of the Helsinki Commission, HELCOM in 2007 as a means to implement the so called ecosystem approach in the region. HELCOM is the governing body of the Helsinki Convention, signed 1974 by the then seven Baltic Sea states. HELCOM was at this point in time viewed as a great institutional success considering achieving collaboration between eastern and western Europe in the middle of the Cold War (Fitzmaurice 1996; Räsänen and Laakkonen 2008; Valman 2013; Darst 2001).

Traditionally the intergovernmental management performed within and by the HELCOM can be classified as classical command-and-control management. Why the shift from this command-and-control management to the ecosystem approach represents a substantial policy change in how the countries around the Baltic Sea address their shared responsibility towards marine resources. The BSAP differs substantially from previous, fixed targets (i.e. equal 40 % nutrient reduction for all countries) and instead creates clear national targets, with different impacts and costs for the member states. The main novelty of the BSAP is the revisable structure and the concrete ecosystem based nutrient allocation system which specifies the amount of nutrients the countries has to reduce in order to achieve a desired ecosystem status. (Beaumont et al. 2007; Backer and Leppänen 2008; Backer et al. 2010; Lindegren et al. 2009).

However, little has been done to explain why this management shift has occurred and why the BSAP was launched. The launch of this new policy is therefore here explored by studying the actors within the HELCOM and how they have shaped and influenced the policy process preceding the signing of the BSAP. This study uses the advocacy coalition framework (ACF) to study actors' influence on the policy process in the Baltic Sea. To understand actors' influence this study analyze both actor beliefs and actor behavior. Behavior is not only an expression of beliefs but can also be informative regarding voting tactics. Here, actor behavior is studied through reservation patterns made at HELCOM meetings, while beliefs are analyzed through official statements made by the actors in the HELCOM. In the empirical analysis behavior and beliefs are therefore separated.

The outline of this study is further divided into four parts. It starts with the theoretical framework and is followed by a section on the operationalization of 'beliefs' and 'behavior', together with a description of the qualitative and quantitative text analysis that has been used to identify beliefs and behavior within the HELCOM. The empirical analysis then identifies coordination patterns and belief changes over time. The paper ends with a discussion and conclusion on how actors' behavior and beliefs, as well as external perturbations, have influenced the BSAP process.

### The Helsinki commission, HELCOM

As mentioned, HELCOM is the governing body of the Helsinki Convention signed by all states surrounding the Baltic Sea and the EU. The purpose of the Convention and HELCOM is to protect the marine environment of the Baltic Sea from all sources of pollution through intergovernmental cooperation. All decisions made within the HELCOM are made in unison by the contracting parties. These decisions therefore often take years of negotiations. Besides the negotiation process HELCOM only meets once a year and it is the statements made at these meetings that are studied here. This study moreover includes reservations made when negotiating policy recommendations made within HELCOM and the Heads of Delegation group (HoD). The HoD meetings are preparatory meetings occurring about half a year before the HELCOM meetings. These Recommendations, when agreed are then implemented within the respective national jurisdiction in the Baltic Sea region.

## Policy change and the advocacy coalition framework

The ACF is often used when policies have changed – similar to the recent policy change in the Baltic Sea – and is also commonly used to study environmental policy making (Weible et al. 2009). The ACF sets out to explain policy change over time by studying interactions between actors within a specific policy subsystem and the advocacy coalitions these actors are engaged in (Sabatier 1999; 1988; 1998; Sabatier and Jenkins-Smith 1993). According to the ACF policy change is driven by so called policy-oriented learning among actors, external or internal perturbations or shocks or as 'negotiated agreements' (Sabatier and Weible 2007; Sabatier and Jenkins-Smith 1993).

According to the ACF literature a *policy subsystem* consists of actors who share a concern for a specific policy problem, such as eutrophication or fishing, and who seek to influence public policy in that specific domain over a period of time (Sabatier 2007; Weible and Sabatier 2009). Apart from this functional dimension of the policy subsystem, the definition also includes a territorial dimension (Sabatier and Weible 2007). This study focuses on the launch of a new policy in the Baltic Sea region, the BSAP, within the HELCOM. This study therefore does not follow the ACF's strict definition of a policy subsystem, which only relates to one specific policy problem. Several authors have had problems with the commonly used policy subsystem definition at the international level (Farquharson 2003; Litfin 2000; Sewell 2005) and as the policy problems overlap and are interrelated within this study (e.g. eutrophication affects biodiversity). This study uses the political mandate of the HELCOM, that is the protection of the Baltic Sea marine environment from all sources of pollution (Helsinki Commission 2016) as the policy subsystem.

Actors' *belief system* is described by the ACF as a hierarchical tripartite: the deep core beliefs, the policy core beliefs and the secondary aspects of beliefs. The deep core beliefs include basic ontological and normative beliefs, such as social equality, individual freedom, and individual rights and duties. The next hierarchical level is the policy core beliefs, which is described as the 'glue' that holds coalitions together. The policy core beliefs represent basic normative and empirical commitments; including shared values, perceptions of causes and effects, seriousness of the problem, and basic policy preferences. The secondary aspects of a coalition's beliefs involves views on specific elements of the policy subsystem, including perceptions of the desirable regulations or budgetary matters, design of specific institutions and actor's performance, or seriousness of specific aspects of the problem that the coalition wants to solve. Deep core beliefs are in general resistant to change (and difficult to study), whereas beliefs in the policy core and the secondary aspects of beliefs are easier to change. Changes come about in the secondary aspects of beliefs when, for example, new experiences or new data are available. Policy core beliefs change as the normative and empirical commitments change over time (Zafonte and Sabatier 1998; Sabatier and Jenkins-Smith 1993; Weible and Sabatier 2009).

An important difference in relation to the standard ACF template is that the so called deep core beliefs are not considered in this study. The reason for this is that statements made at the international HELCOM level, used here to study beliefs, rarely address deep core beliefs such as equality, freedom and individual rights. Both policy core and secondary aspects of beliefs are coded but not separated in the empirical analysis of this study. The two belief levels are further discussed in the end of this study.

*Advocacy coalitions* consist of aggregated groups of actors within a policy subsystem who share a set of beliefs and who collaborate over time. Changes in advocacy coalitions over time have been described as an indicator of greater policy change (Sabatier 2007; Matti and Sandström 2011; Nohrstedt 2011). This study examines whether the beliefs of actors have changed during the process leading up to the BSAP and whether there has been any change in the coordination of behavior of different actors. Most ACF studies tend to primarily consider changes in beliefs, with only a small number of studies including both beliefs and behavior to explain policy change (Weible et al. 2009). This study sees no reason in only studying actors' beliefs since beliefs and behavior are intertwined.

### Policy change

As mentioned briefly above, policy change within a policy subsystem is by the ACF understood as a three way processes: First, policy-oriented learning within an advocacy coalition can lead to policy change. Policy-oriented learning refers to changes in the advocacy coalition's belief system, which results from new experiences and/or new information. Secondly, significant external or internal perturbations or shocks on the subsystem can cause policy change due to for example redistribution of resources or policy failures. Failures caused by internal perturbations will boost the minority coalition's policy core beliefs, while the same failure will decrease the dominant advocacy coalition's conviction in their own policy core beliefs. This boost versus reduced conviction can cause shifts in advocacy coalitions and hence cause policy change. Thirdly, when the actors cannot agree on a change but still agree that keeping status quo is unacceptable, this is referred to as a 'negotiated agreement' or a 'policy stalemate'. To get out of such a deadlock the actors start an intensive negotiating process by building trust, introducing consensus decision rules, and appointing a neutral chair for the process (Sabatier and Weible 2007; Sabatier and Jenkins-Smith 1993).

In short, the ACF literature proposes that policy change is either caused by learning and/or by perturbations on or in the policy subsystem. It further describes that policy change is caused by belief change and/or by a reshuffle of the way in which actors are coordinated. The change in how actors are coordinated is either a consequence of the changed beliefs or a consequence of perturbations. This study therefore focus on changes within actors involved in the BSAP policy process and their respective beliefs and behavior. Beliefs and behavior together provides insight into both processes of policy-oriented learning and policy stalemates. Hpwever, this study does not include materials external to the HELCOM, and thus external perturbations have not been verified. However, external perturbations are often discussed within the HELCOM, hence perturbations of different kinds will be discussed as a driver of policy change in the Baltic Sea region.

### Methods and materials

HELCOM take decisions through consensus, which makes a final decision unsuitable for identifying beliefs and behavior. Rather than studying advocacy coalitions coupled to the final decision, this study instead focuses on coalition formations during the negotiation processes prior to decisions.

Official documents derived from HELCOM constitute one part of the empirical basis for this study. These documents include statements by contracting parties and observers at the annual HELCOM meetings 1980–2010 ($n = 170$ statements). These statements are used to track beliefs. All reservations made at the HELCOM and the HoD meetings where analyzed ($n = 290$) to study actors' behavior. Voting behavior is commonly used to track actor behavior (e.g. Segal and Spaeth 1996). The reservations are here also understood as representations of policy positions among the actors.

The statements and the reservations were analyzed using WordSmith Tools 5 (Scott 2008). Word frequency lists (referred to as 'wordlists') were developed for all individual statements. These wordlists made it possible to compare the content of the statements between different actors as well as between different periods. Qualitative content analysis were also used including in-depth reading, sorting, interpreting and coding both statements and reservations. The coding frame was developed using both inductive and deductive approaches (Krippendorff 2004; Neuendorf 2002). The coding frame for identifying beliefs in the analyzed statements where developed inductively using NVivo 10 (2012). In addition to this was a random selection of 30 statements coded, ten from each decade (1980–1989, 1990–1999, 2000–2010). A total of 16 codes were developed to define broader issues related to nature conservation, pollution, fishing and shipping. Each code represents a concern or an issue that is brought up in the statements. The codes were then used to identify actors' different beliefs, for example the pollution code include how actors relate to pollution. To make the coding process coherent throughout the material the codes where then used as 'search terms' in a deductive manner.

A second source of empirical information was derived from expert interviews. Six interviews were conducted with HoDs representing Sweden, Finland, Poland and Germany, as well as the observers Coalition Clean Baltic (CCB) and the World Wide Fund for Nature (WWF), all of whom were active during the launching process of the BSAP. The interviews are classified as elite interviews with a semi structured setting (Kvale and Brinkmann 2009). The interviews were conducted to verify the results obtained from the quantitative assessment of actor beliefs and behavior. The interviews made with the HoDs of Sweden and WWF were made face to face and the other four interviews were made using Skype. All interviews were recorded and then transcribed, coded with the same coding frame that was developed for the statements, and analyzed in NVivo 10 (2012).

### Identifying beliefs

The approach used for identifying beliefs and changes in actor's beliefs in the HELCOM is based on the assumption that actors with the same beliefs will hold, and give voice to, similar beliefs in statements issued at meetings. Changes within beliefs over time, and especially preceding the BSAP, can thus be seen as possible explanations for the BSAP. The analysis to identify changing beliefs is designed to detect gradual, but homogenous, displacements and shifts in policy beliefs that affect all actors. For this purpose changes in aggregate measures of beliefs derived from the statements are analyzed over the period 1980–2010. All 170 statements were also used to make wordlists using WordSmith Tools 5. The wordlists are sorted by frequency so that the content of the statements could be compared. The wordlists strengthen the reliability, which otherwise is somewhat weak in hand-coded statements. Wordlists are easily replicable

and by choosing to only analyze nouns, policy relevant words were identified. The wordlist comparison highlights issues where actors have similar policy preferences. Wordlists were made for all actors that have made statements in the HELCOM. This means that for each actor there are three wordlists, one per period (1980–1989, 1990–1999 and 2000–2010). The three periods chosen represents the three decades when the HELCOM have been active. The division into the three decades also captures three important historical phases that may have influenced possible coalition structures – the cold war, the period after the dissolution of the Soviet Union and the reunification of Germany, and the preparation phase of the BSAP.

The wordlists contain all words that are mentioned more than three times in the statements. After the wordlists where made, they were organized under two of the codes in order to quantify the beliefs. The codes concerning 'pollution'and 'nature conservation' were the only two codes used to compare actors' beliefs. The two codes were chosen since these two lies at the heart of the HELCOM. 'Pollution' and 'conservation' are two themes closely related but still managed differently within the HELCOM. If beliefs are shared at all, these two themes are likely to portrait such belief cohesion. Each actor where then given a value between 0–1. In a final step of the analysis the codes 'pollution' and 'nature conservation' for each actor were subjected to a hierarchical cluster analysis using Ward's method and Squared Euclidean distances. The Euclidean measure is a distance or dissimilarity measure commonly used for continuous variables sharing the same measurement scale (Everitt et al. 2001).

### Identifying behavior

This study has used reservation patterns among state actors in order to identify how they behave. Reservations within the HELCOM are noted in the meeting minutes as footnotes. In the footnote it is stated who made the reservation and what the reservation covers. The reservations are however seldom a straight "yes" or a "no" to a suggestion but contain change alternatives for the suggested policy. In this sense the reservation pattern also show the actors' policy positioning (beliefs).

Non-state actors have made very few reservations, and these actors are thus disregarded in this part of the study. If actors make the same reservation at the same point in time it is assumed that this is indicative of a coordinated behavior. By noting the actors that made the *exact* same reservation at one particular meeting, a table of reservation patterns was created. By carefully reading through the reservations, the contracting parties' 'pet projects' became visible, which ultimately shows the interrelation between beliefs and behavior.

Changes in behavior (reservation pattern) among actors are tracked over time by noting if actors start or stop making the same type of reservations. 'The type' of reservation referes to the content of the reservation which also is coded according to the coding scheme described earlier.

Few reservations were made before the 2000 and these years are therefore excluded from the analysis. The remaining material is divided into three time periods, 2000–2005, 2006–2007 and 2008–2010, representing the period before the signing of the BSAP (2000–2005), the period when the BSAP was heavily debated and signed (2006–2007), and the period after the signing (2008–2010). It is interesting to analyze the

period after the signing of the BSAP in order to find if coordinated behavior remains, or if a new structure of coordinated behavior develops in the wake of the BSAP. The reservations were then structurally analyzed with a network analysis tool (UCINET, Borgatti et al. 2002).

## Empirical analysis

### Identifying the actors

The actors within HELCOM were identified using the statements from the yearly Commission meetings 1980–2010. Thirty different actors were identified[1], including nation-states, NGOs and IGOs.

### Tracking beliefs

Cluster analysis is here used to find clusters of similar beliefs among the 30 actors in HELCOM during 1980–2010. The results suggests that there actually is no shared beliefs between the actors during any time of the analyzed period (1980–2010). The hierarchical cluster analysis did produce groups, but it is important to note that a hierarchical cluster analysis will always partition observations in a data set into groups without giving any criteria for assessing the "significance" of these groups (Aldenderfer and Blashfield 1984; Everitt et al. 2001). The validation of groups must therefore be made manually, and when considering the small to non-existent group mean differences in the two belief variables (pollution and nature conservation) that were uncovered during all time periods, the main conclusion is that there have never been shared beliefs within HELCOM.

However, even though the covariance of beliefs among the actors that where found when analyzing the statements quantitatively was weak, aggregate belief change over time was discovered among the actors when using qualitative text analysis and coding of statements made by the actors within HELCOM. It seems as if the number of areas of concerns among actors have increased from one or two major concerns (e.g. oil pollution and hazardous substances in the 1980s) to comprising several concerns today (e.g. different sources of pollution, nature protection, loss of biodiversity, eutrophication, shipping, and climate).

Beliefs have changed over time, but within HELCOM the beliefs seem to have changed in unison and not through partisan battles over policy implications. The statements made within HELCOM show that the beliefs of the actors have shifted from specific hazardous substances to, in more recent statements, concern nature protection and biodiversity. During the 1980s the contracting parties often stated how they, in their respective country, were developing strategies to combat such hazardous substances. In the mid-1980s the Finnish delegation for example states: *"An important area where joint results have been reached is that of measures and recommendations for maritime safety and oil combatting./.../Another noteworthy area is that of the recommendations to restrict the use of PCBs and ban DDT."*[2] Similarly, the Soviet Union at the same time also declared a ban of PCB and DDT by the statement *"The use of DDT and PCB was fully forbidden."*[3]

During the 1980s and the beginning of 1990s the debate on PCB and DDT also helped make the problems of other hazardous substances visible in the region. One

example of this is that the Swedish delegation during this period brought up the concern of pollution from ships in the Baltic Sea, stating *"Accidental spills from ships of hazardous substances other than oil, seem to have occurred only rarely. Damage from such spills, however, may be more serious both to human beings and the environment than oil spills. I therefore believe that we must pay increased attention to response to such accidents."*[4]

The shift from specific hazardous compounds to talk about nature protection and biodiversity started during the 1990s. The first statement on biodiversity is made as a suggestion by the WWF to the HELCOM in 1991: *"On the holding of a seminar on Nature Conservation and Biodiversity in the Baltic region in cooperation with HELCOM, in order to get the international regional cooperation on nature conservation in the region started".*[5] Many more statements made by all contracting parties except Russia during the 1990s and the 2000s concerns biodiversity, particularly in the context of nature protection or conservation.

Using quantitative content analysis and aggregating the beliefs of all actors, using sub-categories to the variables 'pollution' and 'nature conservation' that is also used in the cluster analysis, show that joint beliefs regarding environmental protection (sub-category to nature conservation) and eutrophication (sub-category to pollution) has increased rapidly since the 1990s (see Fig. 1). Beliefs regarding hazardous substances or toxins receded during the 1990s but are again spreading, probably as a reaction to that dioxin in oil-rich fishes in the Baltic Sea still is a big concern in the region (see e.g. Pandelova et al. 2008; Miller et al. 2013). The decrease of the belief concerning 'other sources of pollution' suggests, in line with the quotes above, that specific pollutants are less frequently discussed today than they were during the 1980s.



**Fig. 1** Aggregated beliefs over time in percentage
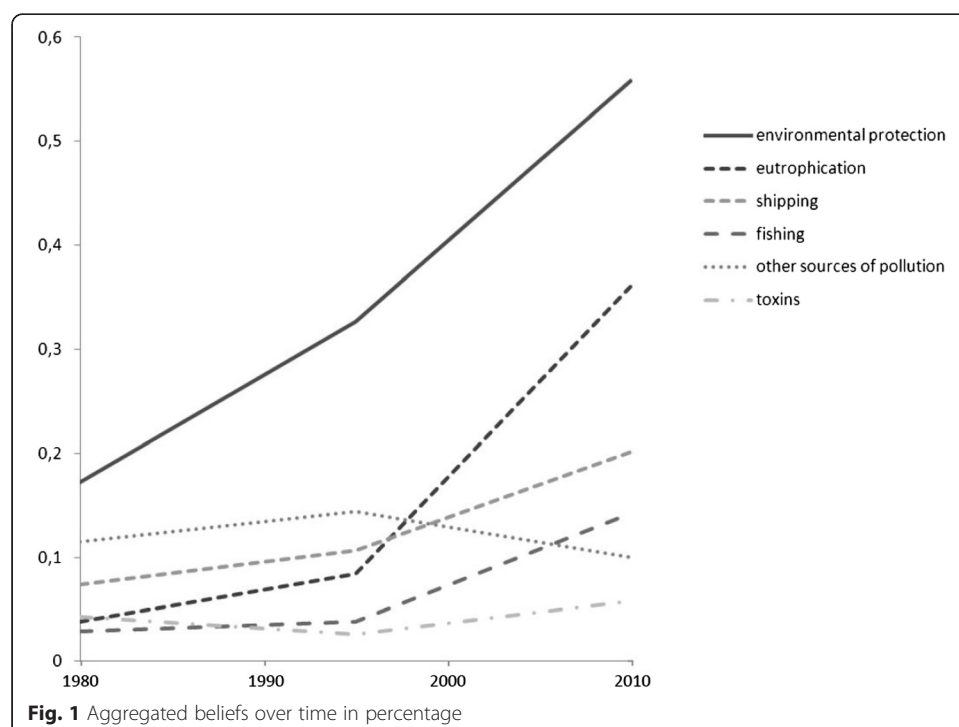
**Tracking behavior**

The reservations made at the HELCOM and HoD meetings are mainly made by state actors, why the NGO's and IGO's are not as well represented in this part of the study compared to the analyzed statements. Denmark, followed by Russia, were the dominating countries measured by the number of reservations made at the meetings (60 and 58 reservations respectively, representing 40 % of the total number of reservations). The lowest numbers of reservations are made by Estonia, Finland and the European Community (represented by the European Commission).

Pollution, followed by eutrophication, are the dominating themes wherein reservations are made and thus the reservations also embody the beliefs of actors. Here the beliefs represented in the reservations are coded using the codes developed for the reservations. Denmark stands out as the country that make most reservations concerning nature protection, while the European Commission often make reservations related to fishing[6].

The reservations are divided into three time periods, 2000–2005, 2006–2007 and 2008–2010 representing the period before, during and after the signing of the BSAP. If two or several actors make a reservation at the same point in time, they are understood as linked. If several actors make simultaneous reservations they will be grouped together as a cluster in a network. The closer the actors are displayed in the network, the more similar are their reservation pattern (behavior).

Reservation patterns during the period preceding the BSAP (2000–2005), see Fig. 2, suggests that most actors share at least some reservations with other actors. The size of the nodes represents the number of shared reservations. As Fig. 2 shows, Poland and Denmark share most reservations with other actors whereas e.g. Finland and Latvia only share a few reservations with the other actors, why they are placed at the bottom and top of the network with a small node representing few reservations. The actors with a central position in the network (Denmark, Russia, Estonia, Sweden and Poland) have more reservations in common than the actors in the peripheries of the network.



**Fig. 2** Reservations made 2000–2005
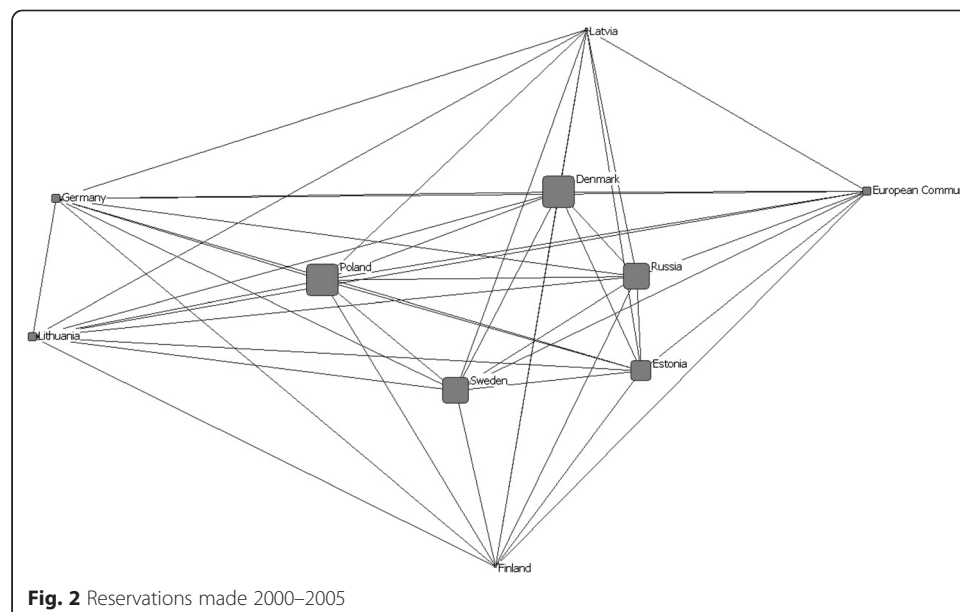
During the period when the BSAP was prepared and signed (2006–2007) no clusters of actors making the same reservations could be identified (see Fig. 3). Sweden, Latvia and Denmark are centrally positioned as a consequence of that they share many reservations with *all* the other contracting parties whereas the actors in the outskirts of the network only share a few reservations with other actors. Finland and Estonia have the fewest links to the other actors, which means that they share very few reservations with the others. The Baltic Farmers Forum on Environment (BFFE) is an association of Farmers around the Baltic Sea. This group does not share any reservations with other actors and can be found in the upper left corner of Fig. 3.

The pattern, if any, of coordination appears to change after the signing of the BSAP in 2007 (see Fig. 4). Half of the actors share a similar reservation pattern and are centrally placed in the network, whereas the rest of the actor group is dispersed in the network. Particularly Denmark and Poland share many reservations. The figure suggests that the signing of the BSAP resulted in a division between the countries with the highest nitrogen reduction requirements according to the BSAP (Denmark, Poland, Russia, Sweden) and the countries with the lowest (Finland, Lithuania, Germany, Latvia, and the European Community. Note that the EU actually has no nutrient reduction requirement at all according to the BSAP).

In sum, the network analysis suggests that most reservations are done by actors in solitude rather than in clearly identifiable coalitions, but potentially with a changing pattern after the launch of the BSAP. This lack of coordinated behavior is also confirmed by the interviews that suggests that coordinated behavior and strong cooperation between the actors are missing or is weak. Such cooperation, if it occurs, is identified by the interviewees as volatile and ad hoc and primarily directed to collaboration around particular projects or problems rather than more substantive policy cooperations around perceived major problems (e.g. eutrophication or hazardous substances). This could potentially also explain why the reservations and the clusters of actors related to these issues, changed in all three analyzed periods. According to one



**Fig. 3** Reservations made 2006–2007

**Fig. 4** Reservations made 2008–2010
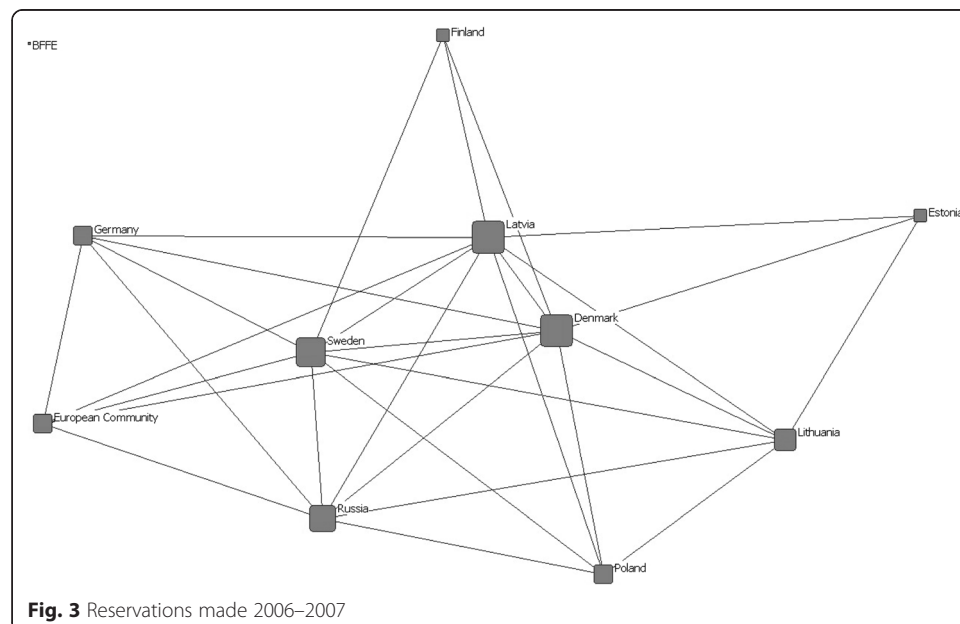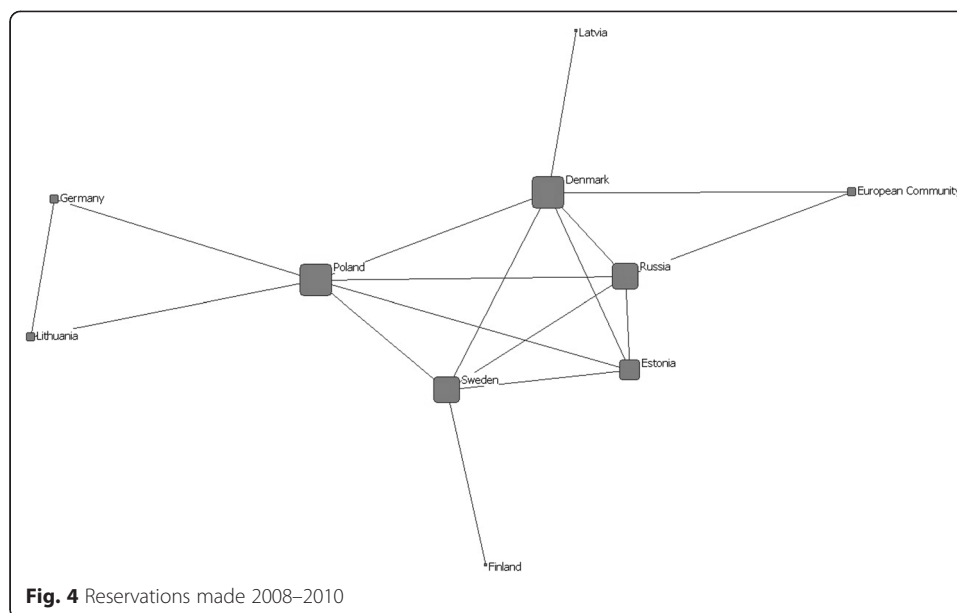
of the interviewees; *"You will not be assigned to do anything, but you can take on the tasks that you are interested in running."* (Interviewee no. 2, 2012-10-18). Another interviewee confirmed this, expressing: *"It's of course obvious that you are responsible for the issues that you think are most important."* (Interviewee no. 1, 2012-10-16). The actors can voluntarily sign up to lead a specific projects and tasks alone or together with another actor and in this way craft, and influence, the policy process related to that specific issue. According to the interviewees' collaboration between actors happen but it seldom involves more than two actors and seldom exceeds a specific project, disproving long term collaborations akin to coalitions.

However, according to the interviewees the development of the BSAP follows an opposite behavioral pattern. Instead of everyone working by themselves all actors worked together during the preparation of the BSAP and everyone was keen on contributing to this policy change; *"There was a general consensus that we should do something."* (Interviewee no. 3, 2012-10-19) and *"Everyone had realized that there was a problem. Everyone can probably endorse the description of the problem in the Baltic Sea."* (Interviewee no. 1, 2012-10-16).

The interviewees stress that the initiative with the BSAP and the preparation of it was made as a joint effort as reflected in this statement: *"It was a collective decision by all the ministers/.../so, you cannot say that anyone alone initiated the BSAP, all Baltic Sea states where involved."* (Interviewee no. 2, 2012-10-18). Further, the process of the development of the BSAP is described as: *"It's a work, or the result of the work, the product, of all contracting parties"* (Interviewee no. 6, 2012-11-08).

### Discussion

At the international level of policy making it is hard to use the strict definition of advocacy coalitions why this study, rather loosely has applied the ACF. Few earlier studies combines both behavior and beliefs to explain policy changes. Despite the methodological difficulties and weak guidance from the ACF framework how to analyze and

identify actors' beliefs and behavior the empirical analysis of behavior, using reservations made at HELCOM meetings, show that actors in HELCOM are uncoordinated throughout the entire analyzed period (1980–2010). The studied reservation pattern and the interviews made with Heads of Delegations (HoDs) in HELCOM suggests that actors work independently without any concern about what other actors might think or if any other actor would like to join in specific tasks and projects. When collaborations do occur they take the form of bilateral cooperation about specific tasks or projects. This ad hoc behavior builds on specific tasks and projects rather than overarching policy developments seem to be characterizing for HELCOM. Bearing in mind the recent changes in coalitions showed in the period after the signing of the BSAP (Fig. 4) it is not unlikely that new collaborations and structures for implementing policies will change in the future as a response to the implementation of the BSAP. The implementation of the BSAP is in many ways decisive for the future of the HELCOM, so an interesting feature for future research is to explore whether the implementation of the BSAP is driving new collaborations rather than new collaborations driving the development and implementation of policies.

Uncoordinated behavior such as it is found within the HELCOM is said to hamper policy change. Looking into the case of the launch of the BSAP in the Baltic Sea region it is somewhat surprising that the BSAP was launched and signed despite this. The empirical results show that few actors share reservations with other actors and when they do share the same reservations no clear pattern of similar beliefs i.e. content of reservations and statements could be identified. This lack of behavioral coordination is however in many ways distinctive for policy making within the EU (see e.g. Mörth 2008), which makes the HELCOM actor behavior less surprising when looked upon in this context.

Somewhat surprising is that the empirical analysis at the same time suggests that the different actors' beliefs within the HELCOM are very similar. So, either all actors are included in one grand coalition, or no coalitions exist within the HELCOM. Both the quantitative and qualitative text analysis of statements suggests a broadened scope of HELCOM. The results show that HELCOM have gone from being issue specific to include everything from hazardous substances, to biodiversity, conservation, maritime issues, pollution, and eutrophication. Aggregated beliefs of all actors show that the number of concerns that HELCOM is dealing with have increased. This increased number of concerns and joint "belief movement" implies what in the ACF literature is termed 'policy-oriented learning', which results from new experiences and/or new information within the organization. The launch of the BSAP could therefore potentially be explained by such a policy-oriented learning process in the entire region. With this in mind, it is important to discuss this potential policy-oriented learning in the light of historical changes in the Baltic Sea region. Even though external perturbations as such is outside the scope of this study, since no external material was included in this study external perturbations on or internal perturbations in HELCOM cannot be excluded as a major driving force for learning and thus a possible explanation for the launch of the BSAP. For example, the noted belief change among all the actors seems to occur already in the early 1990s, probably as a consequence of the initiation of the Joint Comprehensive Programme signed at the Ministerial Meeting in 1990 and the revision of Helsinki Convention in 1992. The Joint Comprehensive Programme aimed at reducing emissions of harmful substances and nutrients by 50 % which promoted the precautionary

principle, the polluter pays principle, best environmental practice and the usage of best available technology. These were major changes in policy and also later introduced in the 1992 Convention[7]. The new convention also introduces the concept "ecosystem" where the earlier 1974 Convention used "marine life"[8]. These new concepts opened up for a wider discussion about how, why and for whom the Baltic Sea should be governed. The changes made in the early 1990s could potentially also be coupled to the global ecosystem based management trend that was initiated at the 1992 UN Conference on Environment and Development held in Rio de Janeiro. The Agenda 21 process as an external perturbation or so called policy diffusion is yet another interesting explanation for the launch of the BSAP.

The collective beliefs and belief change which were presented in the empirical analysis of how actors worked together to create the new policy not only resembles 'policy-oriented learning' but also a so called 'negotiated agreement' described in the ACF literature as:

> "In situations in which *all major coalitions view a continuation of the current situation as unacceptable*, they may be willing to enter negotiations in the hope of finding a compromise that is viewed by everyone as superior to the status quo."
> (Sabatier 1998 p. 119; emphasis in original)

The quotes from the interviews analyzed also state that there was a consensus among all actors about "doing something" and that the current situation was unacceptable. However, the number of interviews is too few to without any doubt state that a negotiated agreement has occurred. The quantitative text analysis confirms a belief change but do not explain the causes of them. Belief changes caused by negotiations can therefore not be confirmed neither completely be ruled out.

As it seems, historical events and "belief structures" constructed when the HELCOM was initiated still play an important role for how actors behave and what they believe. HELCOM was initiated in a time when any agreement between the Eastern and Western bloc– regardless of size and importance – was considered a success. The backbone of HELCOM therefore is a general joint concern for the environmental state of the Baltic Sea. This joint concern becomes clear in the interviews. The empirical analysis show that many actors within HELCOM begun to realize that the current management system was not capable of dealing with the deteriorating ecosystem of the Baltic Sea, and a joint wish to establish a new management system arose in the region. A joint wish for a better Baltic Sea thus have its roots long before the launch of the BSAP why in this light the joint wish and the joint changing belief system leading to the launch of the BSAP comes as no surprise.

## Conclusion

Actors' influence on policy has in this study been examined inspired by the advocacy coalition framework (ACF) through actors' beliefs and their behavior. Beliefs and behavior are used to study the reasons behind the launch of the Baltic Sea Action Plan (BSAP) in the Baltic Sea region. According to the ACF policy changes, such as the BSAP, are caused by policy-oriented learning, external or internal perturbations, or as a result of a negotiated agreement.

This study have analyzed the internal causes behind the launch of the BSAP. This study concludes that no voting tactics among the actors involved in the HELCOM where proved, nor could several competing belief clusters within the HELCOM be identified. Actors within HELCOM seem to share beliefs at one level but at the same time when acting out their behavior no shared beliefs are expressed. Belief changes at the joint group level have been identified why policy-oriented learning, as well as a negotiated agreement, could explain the launch of the BSAP but these two processes normally don't occur together. Therefore, the causal links and the interrelationship between policy-oriented learning, external and internal perturbations and policy stalemates within the HELCOM remains unexplored.

## Endnotes

[1]The 30 actors divided by function are: Nation states: Denmark, Estonia, Finland, Federal Republic of Germany (FRG), German Democratic Republic (GDR), Germany, Latvia, Lithuania, Poland, Russia, Soviet Union (USSR), and Sweden; NGOs: Baltic 21, Baltic Farmers Forum on Environment (BFFE), Coalition Clean Baltic (CCB), Greenpeace, and World Wide Fund for Nature (WWF); IGOs: Baltic Sea Parliamentary Conference (BSPC), Economic Commission for Europe (ECE), European Community (EC), International Baltic Sea Fishery Commission (IBSFC), International Council for the Exploration of the Sea (ICES), International Maritime Organization (IMO), Intergovernmental Oceanographic Commission (IOC), Nordic Council, Oslo and Paris Commission (OSPARCOM), United Nations Environment Programme (UNEP), Vision and Strategies around the Baltic Sea (VASAB), and World Meteorological Organization (WMO); and other: Nordic Investment Bank (NIB).

[2]Statement by the Finnish Minister of Environment at the 5th meeting of the Helsinki Commission, 1984.

[3]Statement by the Head of the Soviet Delegation at the 5th meeting of the Helsinki Commission, 1984.

[4]Statement by the Swedish Minister of Agriculture and Environment at the 5th meeting of the Helsinki Commission, 1984.

[5]Statement by the WWF at the 12th meeting of the Helsinki Commission, 1991.

[6]Fishing, when it is not concerning protection of specific species or marine reserves, is under the jurisdiction of the EU, why the European Community in the HELCOM many times makes reservations as soon as decisions made in the HELCOM could potentially influence EU fisheries.

[7]Article 3 in the 1992 Helsinki Convention. The principles are also elaborated in Annex II.

[8]Compare Article 2, point 1 in 1974 and 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area.

**Competing interestes**
The author declare that she has no competing interestes.

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