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March 2012

Evaluation of the European Union's policies and legislation related to Baltic Sea eutrophication[1]

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[1] The PROBALT project upon which this report is based was funded by the Federal Ministry of Education and Research (BMBF) under the project number: 03F0498A. The responsibility for the content of this publication lies with the author.

Content

1. The EU as the most suitable level to combat Baltic Sea eutrophication

Like many other environmental challenges, marine protection requires cross-border policy solutions. Similar to the trans-boundary nature of air pollution, sea currents are likely to transport pollutants across far distances, with the effect that damages may emerge far away from the original pollution sources. It is difficult to exactly ascribe responsibility for these environmental damages. Consequently, establishing appropriate counter measures is a long-lasting process.[2]

In the case of marine protection the scale and character of environmental damages differ considerably depending on the specific nature of the concerned ecosystems. Characteristics like the degree of salinity, the water depth or the speed and direction of sea currents also have an impact on the environmental sensitivity of a particular sea. Moreover, there are huge differences in terms of the susceptibility to damages depending on whether a marine region is part of an enclosed sea or an ocean. However, what most marine environmental challenges have in common is the fact, that they only can be addressed successfully if they are approached within a broader international framework.

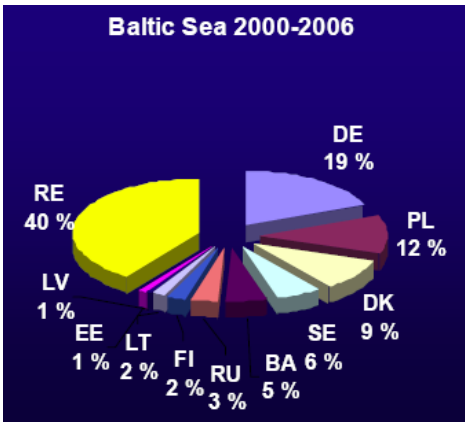
This also applies in the case of Baltic Sea eutrophication. Here, the transnational character of the problem is due to the fact, that nutrients are transported by the dominating sea currents from the Western and Southern parts of the Baltic Sea towards its Northern parts. Thus, pollutants stemming from German and Polish sources do not cause so much damage in the regions of their origin but accumulate along the Swedish and Finnish coasts and contribute here to the most severe algal blooms of the Baltic Sea.

To a considerable degree the nutrient loads of the Baltic Sea even originate from sources that are located beyond its coastal states. While not being a littoral state and thus not suffering at all from Baltic Sea eutrophication Belarus contributes significantly to pollution loads through discharges to the Daugava and Nemunas rivers. Similarly, countries like Great Britain, the Netherlands and Belgium contribute to nutrient loads in the Baltic Sea through NOx emissions which reach the marine environment via atmospheric deposition. Those latter examples suggest that even an institutional framework, which would comprise all Baltic Sea coastal states, obviously would not be sufficient to effectively address the problem of eutrophication. As the following figure demonstrates around 40 % of the nitrogen, which

[2] A classical example is the acidification of Scandinavian lakes. It took decades to identify sulfur and nitrogen emissions from British combustion plants as the major sources for the pollution of the far distant Northern Scandinavian lakes and many more years for the British government to acknowledge the problem and to launch the initiation of counter measures (Ramus 1991).

reaches the Baltic Sea via atmospheric deposition, stems from emission sources outside the Baltic Sea Region.

Figure 1 Contribution from different countries and sources to the atmospheric deposition of total nitrogen to the Baltic Sea. “RE” comprises countries (e.g. Great Britain, the Netherlands, Belgium) and shipping (e.g. on the North Sea) outside the Baltic Sea Region



Source: Bartnicki and Valiyaveetil 2008

Geographic extension should however not be taken as the only criteria when identifying the most appropriate institutional setting for tackling the problem. Aspects like the scope of competences as well as the capability to facilitate and implement decisions have to be taken into consideration as well. For at least three decades the most important international institution related to Baltic Sea marine protection policies had been HELCOM. The organisation was established in 1972 as the first in a series of regional sea conventions worldwide, following a request by the United Nations Conference on the Human Environment in Stockholm, which was held in the same year. The role and results which HELCOM achieved already during the Cold War is quite impressive. However, the problem of eutrophication only emerged on HELCOM’s agenda during the 1980s. In 1988 a declaration was issued according to which each member state should halve its nutrient discharges to the Baltic Sea until 1995. When considering the difficult conditions for any kind of international cooperation in times when the Iron Courtain was sharply dividing the Baltic Sea, this had been a quite ambitious goal. Hence, after the collapse of the Soviet Union and the end of the Cold War it turned out that those figures that had been used by the Eastern European coastal states to assess their respective contributions of nutrients to the Baltic Sea were drastically down-played, hiding the true harmful impacts of the pollution stemming from these countries. In fact, the goal of halving nutrient discharges was in 1995 neither achieved by the Eastern or Western, nor by the Northern coastal states (Wolff 1996). However, its formulation

had not been completely useless either. The HELCOM declaration undoubtedly contributed to achieve a trend reversal as far as nutrient discharges are concerned. Still, the results were far from sufficient to mitigate Baltic Sea eutrophication substantially.

The 2007 adopted Baltic Sea Action Plan (BSAP) constitutes a more recent attempt to make use of the institutional setting provided by HELCOM. The plan prescribes concrete nutrient reduction objectives for each of the Baltic Sea coastal states and recommends policy measures, which member states shall apply to various sectors, e.g. agriculture, waste water treatment, detergents and shipping, in order to achieve the overall target of reaching Good Environmental Status for the Baltic Sea by 2021. As a member of HELCOM even the European Union committed itself to support the BSAP goals. However, the provisions are not legally binding, but rather formulated as “recommendations”. Implementation thus depends on the continuous self-commitment of HELCOM member states, whereas at the international level only soft enforcement strategies can be applied e.g. procedural reporting obligations or political pressure through the “naming and shaming” approach (Stöfen 2009: 37).

In general, it is questionable whether HELCOM still today is the most appropriate international arena to address Baltic Sea eutrophication. The most striking difference compared to the first three decades of its existence is related to the fact that since 2004 the European Union has become by far the most important institutional framework for addressing any kind of cross-border policy issues within the Baltic Sea region (Kern and Löffelsend 2008: 117). This is due to three developments.

First, with the enlargements of 1995 (Sweden and Finland) and 2004 (Poland, Lithuania, Latvia and Estonia), the Baltic Sea has become almost entirely an internal sea of the EU, with Russia remaining the only non-member state among its coastal states. This is a major difference to the situation in the 1970s and 1980s when the European Economic Community geographically only was of marginal importance for the Baltic Sea with Denmark and West-Germany as the only members among the coastal states. On the other hand, the today’s advantage resulting from the fact that most Baltic Sea states belong to the EU might be thwarted by the increased geographical extension of the Community as a whole, which could lead to a situation in which European sub-regions become marginalized within the EU’s overall cooperation framework. Environmental challenges that only concern a particular region may have difficulties to receive much attention within the central institutions. Moreover, it is questionable whether non-affected EU member states will be ready to make any costly concessions if these are necessary to mitigate environmental damages that do not directly affect their own countries.

Second, the European Union has since the 1970s experienced a steady strengthening of its institutions. Today there is no other international institution is available which has similar

capabilities for the development of binding decisions and for enforcing the implementation of regulations within its member states. This institutional capacity is a consequence of major reform steps which have characterized the process of European integration during the last decades. Milestones had been the introduction (Single European Act, 1986) and successive extensions (Treaties of Maastricht, Amsterdam, Nice and Lisbon) of majority voting in the Council of Ministers as well as the decisive influence of supranational institutions, most of all the European Commission, the European Parliament and the European Court of Justice on the initiation and implementation of European policies.

Moreover, even at the intergovernmental level European integration has gained additional strength and attractiveness. This is repeatedly demonstrated by the weight and high expectations that are associated with European Council meetings as a core arena of European politics. The overriding importance of the EU for the Baltic Sea region was not least also demonstrated by the fact that EU accession had been on top of the foreign policy agenda in most of the Central and Eastern European countries until the enlargement was completed in 2004.

This institutional strength of the EU is however not only of great importance within internal European affairs. It also comes into play in cases of interaction with third states or with the global level. In using her frameworks of cooperation with Russia and Belarus the EU has the chance to include environmental concerns in the development of bilateral relations. At the global level the EU participates in the elaboration of various environmental conventions under the UN, including those relevant for Baltic Sea eutrophication.[3]

Third, the EU has not only strengthened its institutional effectiveness but also extended its sphere of influence to a steadily increasing number of policy fields. As far as Baltic Sea eutrophication is concerned, this is one of the main prerequisites that must be taken into consideration when developing strategies to address the problem effectively. Combating eutrophication may even more than other environmental damages constitute a good example for the fact that environmental protection is not just another policy field but most of all a cross-sectional task, which only can be tackled successfully if the resulting requirements lead to amendments related to all the various relevant policy areas. This is very clearly illustrated by the fact that the Common Agricultural Policy (CAP) on the one hand today is responsible for the majority of nutrient inputs to the Baltic Sea and on the other hand represents a policy field, where regulation competences are more consequently transferred to the community level than it is the case in any other policy sector (Feindt 2008: 191).

[3] For example the 1979 adopted Convention on Long-Range Transboundary Air Pollution or the MARPOL convention from 1973, which regulates ship emissions.

Apart from the CAP also various other policy fields of the EU have a direct impact on the quality of the Baltic Sea's marine environment and in particular on the eutrophication issue. This concerns those policies that directly address water quality e.g. when regulating the treatment of urban and industrial waste waters, prescribing minimum quality standards for marine and coastal waters and ecosystems or maximum concentration limits for certain pollutants. Moreover, the EU has been quite ambitious to introduce a comprehensive air pollution control policy, thus addressing a variety of harmful air pollutants which mainly stem from industrial sources and traffic. Finally, the EU has in 2007 introduced an integrated maritime policy which in itself also includes an environmental dimension. Thus, the EU holds competences within each of the policy fields which are relevant for Baltic Sea eutrophication. However, the extent to which regulation competencies are transferred from the national to the European level varies depending on the particular issue. The span reaches from almost exclusive EU competencies in policy areas like the CAP to a rather limited scope of action at the European level for instance in terms of introducing environmental taxes.

As has been shown, the European level deals at one and the same time with a broad variety of policies. Together with its institutional capacity to facilitate decision-making-processes and to enforce implementation of regulations it seems that the EU offers a perfect framework to manage such a complex challenge like Baltic Sea eutrophication. This is particularly true when considering the fact that the EU comprises all Baltic Sea states with Russia as the only exception and in addition even states that are not part of the region but likewise contribute to nutrient loads to the Baltic Sea like Great Britain, the Netherlands or Belgium.

The large scope of EU politics even allows the application of promising negotiation strategies, e.g. the agreement on cross-sectoral package deals. Member states that otherwise would be reluctant to approve a particular regulation, for instance because they are not affected by Baltic Sea pollution themselves, might be easier convinced to agree on such a regulation if they are compensated by concessions in a completely different policy field. To conclude, the EU seems to provide the appropriate framework to address the problem of Baltic Sea eutrophication. The following chapters will demonstrate to which extent the EU in fact has taken positive steps in this direction.

2. Abatement measures taken by the EU

This chapter will analyze those European policies, which have considerable effects on nutrient loads to the Baltic Sea. Measures that have emerged in the context of basically every relevant policy sector will be scrutinized regardless whether or not they originally had

been designed to address the problem of Baltic Sea eutrophication. This is because it seems to be a quite difficult undertaking to reconstruct the extent to which this particular problem has by itself triggered decision making processes in the field of European environmental policy.

What is more, it would mean to leave out major arenas of European politics, if such an analysis would exclusively focus on policies that are explicitly targeted to reduce nutrient loads to the Baltic Sea. If the analytical task is to find out more about the EU's actual capacity, that could be utilized to push for environmental improvements for the Baltic Sea's marine environment, it would be a loss of opportunities to neglect those spheres of action that have positive side effects such as promoting this goal even in cases where this had not been the original intention for the development of a certain policy. On the contrary it should be of considerable interest to find out as much as possible about motives, patterns of political action and typical interest constellations, which drive the EU to take measures that are beneficial for the Baltic Sea or those that constitute obstacles for further improvements, respectively.

It should also be of interest to find out to which extent different environmental objectives are likely to mutually enhance each other, for instance whether policies addressing climate change tend to spill-over to become beneficial also for the goal of marine protection or whether there rather is a competition for attention and resources between different needs for action, leading to a situation where progress in one field is only possible at the expense of stagnation or even deterioration in other fields.

The following sections will discuss those particular European policies that have an impact on the eutrophication of the Baltic Sea. After starting with the CAP, which constitutes the most important single source for marine pollution, the subsequent chapters will address the EU's water, marine and air pollution control policies. It is obvious that in political practice these topics are not as much separated from one another as it might be convenient for analytical reasons. For instance, measures that are intended to improve the environmental impacts of agriculture are in most cases also components of water and/or air pollution control policies. However, what is interesting in the context of this study is to gain insights into the initial intentions of these policies and to assess the forces that impact the related decision-making-processes. The latter may vary, depending on whether they are conducted as part of the CAP, the EU's integrated maritime policy or environmental policy in general. Thus, there seem to be good reasons to adhere to a sectional approach when analyzing the Community policies related to Baltic Sea eutrophication.

2.1. Environmental reforms of the Common Agricultural Policy

Since the 1970s a gradual process of including environmental concerns into the CAP can be observed. (Feindt 2007: 384-392) proposes to discern between three phases which are characterized by basically different approaches. The first phase reaches until the beginning of the 1990s and is characterized by the predominance of a conflict model in environmental policy. This means that regulation took place mainly in the form of bans and quality standards aiming to prescribe more environmental friendly farming procedures. Legislation took place through the adoption of directives of which the Groundwater Directive (80/68/EEC), the Sewage Sludge Directive (86/278/EEC), regulating the use of sewage sludge as a fertilizer in agriculture and the Nitrates Directive (91/676/EEC) were the most relevant legislative acts as far as mitigation of water pollution is concerned. Considering the fact, that until the adoption of the Single European Act (SEA) in 1987 environmental protection had not been an independent target of the Community, these are respectable achievements. However, the major disadvantage of regulation on the basis of the conflict model has been that farmer organizations and agricultural politicians were not included in the decision making processes but instead were forced to comply with the regulations imposed on them by environmental policy makers. The consequence has been a considerable reluctance in implementing the new rules.

The second phase comprises mainly the 1990s. The new underlying idea was to provide farmers with incentives for more environmental friendly production methods. Among the main instruments that were introduced during this period were extensification- and set-aside programs, which started in 1989. They obliged farmers to take a certain percentage of farmland out of production. The loss of income should then be compensated by direct payments. However, as one of the main motives for developing this instrument had been the increasing problem of agricultural overproduction rather than environmental concerns, these programs were not designed in a way that necessarily would lead to more environmental friendly farming procedures. First, the regulation did not prevent farmers from compensating production losses through an even more intensive production on the remaining farmland. Second, it did not oblige the farmer to set aside those parts of his land where extensification would create most benefits for the environment (Feindt 2007: 388). In the interest of surface and marine water protection this would be the case if primarily waterside areas would be taken out of production.

The MacSharry reforms of 1992 constitute another step during this second phase of including environmental concerns into the CAP. Here, once again one major intention had been to address overproduction. Thus, the core move was to shift financial support to

farmers from subsidizing production to providing area related direct payments. This measure was accompanied by the introduction of the so-called agri-environment programs. They allow member states to give farmers financial support for environmental friendly production, but also for the development of alternative income sources like agro-tourism. The programs are financed in equal parts by the member states and the EU.

Whereas the described measures of the second phase obviously do for the first time try to integrate some environmental aspects into the philosophy of the CAP, they still remain quite cautious. Any real progress depends on the extent to which member states and farms ultimately would implement the suggested measures and accept them as tools for switching to more environmentally friendly production methods.

In contrast, the third phase within the process of including environmental concerns into the CAP is characterized by a much more consequent endeavor to decouple payments from merely rewarding agricultural production to directing farms towards the fulfillment of a variety of other, including environmental objectives. The first major step of this phase constituted the Agenda 2000's provision to introduce cross-compliance and modulation as new policy tools. While initially on a voluntary basis both subsequently became obligatory components of the CAP through the Luxembourg Declarations of 2003. Cross-compliance implies that direct financial support is only paid to the farmer if he or she adheres to regulations concerning environmental protection, food safety and animal welfare. Modulation involves the transfer of a certain percentage of direct payments to be used for measures which promote rural development.

Already with the Agenda 2000 rural development policy was formerly introduced as the second pillar of the CAP in addition to the traditional market organization policy, which has remained as the first pillar. In 2005 the financial basis for both pillars was reorganized and made clearer through the establishment of two separate funds (2005/1290/EC). Whereas market support and direct payments to farmers are since then provided through the European Agricultural Guarantee Fund (EAGF), rural development programs are financed through the European Agricultural Fund for Rural Development (EAFRD).

The EAFRD is currently in the phase of implementation, which started in 2007 and will proceed until 2013. It obviously provides good starting points to develop agriculture policy in a direction, which is more environmentally sensitive and in particular serves the needs of more effective water pollution control policies. It could for instance be used to support the implementation of the Water Framework Directive and the Nitrates Directive. The Strategic Guidelines for Rural Development, which basically are to set the course for action under the EAFRD point to the problem of water pollution from agriculture and explicitly mention that "problems of ammonia emissions, eutrophication, soil degradation (…) persist in many areas"

(2006/144/EC: 4). Furthermore, they even call for taking into account the EU's other environmental priorities, among others "soil protection, protection and conservation of the marine environment" (2006/144/EC: 9). This passage is quite remarkable because it is the first time ever that the need of marine protection is mentioned in the context of the EU's agricultural policy (Guttenstein 2007: 13).

On the other hand, there are also some constraints that may prevent the EAFRD from becoming an effective instrument for water protection policies. First, there is a discriminative hierarchy between measures conducted under the first and the second pillar of the CAP. Whereas the former are completely financed by the EU the latter depend on the willingness and the ability of the member states to provide funding for co-financing the measures. The old member states have to allocate 50%, the new member states 25% of the total costs from the national budgets. This leads to the situation, that actually not all financial resources which the EU has allocated for rural development are in fact used, because member states are reluctant to pay their part. What is more, the second order position which rural development and environmental programs occupy within the CAP contributes to the notion of a policy which is less important and less reliable. Governments can easily establish and remove these measures again just depending on their actual budget developments. A consequence may be, that even farmers, who basically are open towards environmental protection lose the faith that politics would provide a stable and long term oriented framework in which it makes sense to changeover and invest into environmental sound farming (Schulz 2010: 2).

Second, a potential weakness is related to the fact that member states have quite much freedom of action in defining which kind of measures they actually want to pursue under the EAFRD framework. As rural development actions also comprise support to socio-economic projects, national governments might choose to support objectives within this context and only allocate the legally required minimum support to environmental measures. Even the money which goes to environmental projects has not necessarily to be directed to water protection measures. There is no legal obligation for that at all (EEA 2006: 37). Thus if member states prioritize to pursue other environmental goals like for instance the mitigation of hazardous effects from the use of pesticides this could ultimately lead to a situation where no measures at all are being established under the EAFRD that could contribute to combat the eutrophication of marine waters (Guttenstein 2007: 13).[4]

[4] This discrepancy of targets within the process of implementation becomes obvious already in the respective National rural development Strategy Plans (NrdSP) of the various Baltic Sea coastal states. Whereas for instance the Latvian and Estonian NrdSPs provide for most of the agri-environmental measures to address water pollution control, the Finnish and Polish NrdSPs do not at all mention particular measures for water protection. In contrast the Polish NrdSP highlights the overall importance of addressing socio-economic challenges under the EAFRD framework (Guttenstein 2007: 28).

In sum, it can be concluded that if compared to the situation before the process of environmental CAP reforms started in the 1970s, considerable progress has been made. The most important step has obviously been the adoption of the Luxembourg Conclusions in 2003. They managed to establish a paradigm shift by moving away from the principle of primarily subsidizing agricultural production, towards connecting financial support to the promotion of a variety of other objectives for rural development among others environmental protection (Feindt 2007: 402). As a result, member states have acquired a much greater flexibility to prioritize those aims that are of particular value within their respective national and regional contexts. Regarding the problem of Baltic Sea eutrophication it thus may become easier to establish agricultural policies and practices which are suitable to address this highly complex challenge (EEA 2006: 37). However, apart from the cross compliance provisions there is still not much regulation at the European level that actually obliges politicians and farmers to reorient practices in a more environmentally friendly way let alone to take water and marine protection policies into account. Moreover, there is a risk that by giving much scope for action to the national level when implementing the new policies, the EU looses the possibility to engage in a comprehensive approach for marine protection at a regional seas level, which otherwise could have been a highly promising strategy to combat Baltic Sea eutrophication.

2.2. Relevant sectors of the EU's environmental policy

2.2.1. The EU's water protection policy

Water protection along with control of chemicals and waste management had been the first individual sectors that were addressed within the newly emerging European environmental policy in the 1970s (Knill and Liefferink 2007: 52). One of the first and already far reaching directives with effects on water quality was the 1976 adopted Bathing Water Directive. It prescribes rules and parameters for the monitoring and definition of bathing water quality including coastal waters. Among several other parameters also nitrates and phosphates are listed in the annex with the provision that these nutrients "must be checked by the competent authorities when there is a tendency towards the eutrophication of the water" (76/160/EEC: 9). However, in contrast to other pollutants no explicit limit values are defined for both nutrients within the directive. The current Bathing Water Directive will be repealed in 2015, when a revised version (2006/7/EC) will come into force. The new one does not longer mention the risk of eutrophication or the need to check nitrates and phosphates. This challenge is since 2000 addressed under the Water Framework Directive. However, indirectly also the new version of the Bathing Water Directive refers to eutrophication through

the newly inserted Article 8, which exclusively deals with “cyanobacterial risks” and calls for “appropriate monitoring” and “management measures” to prevent human health in cases of cyanobacterial proliferation.[5] Another important directive which can be related to the pollution of waters with nutrients is the Drinking Water Directive, decided in 1980 and revised in 1998 (98/83/EC). It currently prescribes a limit value for nitrates of 50 mg/l for water which is intended for human consumption.

What is common in this early phase of legislation on water quality is the intention to regulate water quality from the perspective of the end-user (e.g. bathing water for the swimmers and drinking water for the consumers). The instruments to attain the set goals are measures aiming at monitoring water quality and managing possible risks for human health. In contrast, the underlying idea was not so much a general concern for the environment.

During the following decade a fundamental change in the philosophy of environmental policy took place. With the Single European Act of 1987 a new title for the environment was introduced into the treaty providing the newly emerging environmental policy with an independent legal basis including the principle of preventing pollution at source. The idea of sustainable development became the guiding principle in the EU’s environmental policy since the early 1990s. These developments also facilitated the adoption of a new approach in water protection policy. The directives on the treatment of urban waste water (91/271/EEC) and on nitrates from agricultural sources (91/676/EEC) are both aiming at reducing discharges of nutrients into surface and ground waters. One motive was to enable member states to fulfill their obligations from the earlier directives related to water quality and human health. But what was new was the fact that also the protection of the environment as an end in itself was intended to be achieved through those new directives.

2.2.1.1. The Urban Waste Water Directive

The Urban Waste Water Directive can be judged as one of the most important legislation activities of the EU in combating eutrophication. By addressing not only municipal waste water but also certain branches of the food and feed industries it comprises most of the major point sources for nutrient discharges. The directive carefully discerns between “sensitive and less sensitive areas” defining the former as among others “coastal waters which are found to be eutrophic or which in the near future may become eutrophic if protective action is not taken” (91/271/EEC: 15). Whether in that case both phosphorus and nitrogen or only one of those nutrients should be removed by further treatment should then depend on the actual hydrological and ecological situation of the respective water bodies e.g.

[5] Cyanobacterial blooms frequently occur in the Baltic Sea as a consequence of eutrophic conditions.

whether they are closed bays, open bays, estuaries or other coastal waters.[6] In contrast "less sensitive areas" are defined as marine waters, which because of their natural conditions are "unlikely to become eutrophic or to develop oxygen depletion due to the discharge of urban waste water". With respect to transboundary pollution which often occurs in marine waters it is important to note that art. 9 of the directive urges member states, if necessary with the help of the Commission, to coordinate their actions in cases where waters are affected that reach beyond the area of jurisdiction of one member state.

Apart from the above mentioned general motives for stricter regulation within European environmental protection the development of the Urban Waste Water Directive can in particular be traced back to the serious situation of the North Sea's marine environment during the 1980ies. The text of the directive itself emphasizes this driving force already in its first introductory sentence. Here a direct reference is given to the "Council Resolution of 28 June 1988 on the protection of the North Sea". This resolution had been motivated by serious algal blooms, which occurred in the spring of that year and had required the Commission to present proposals for new measures for sewage treatment at community level to address the problem (Prat 1990: 103).

2.2.1.2. The Nitrates Directive

Not only the Urban Waste Water Directive but also the Nitrates Directive, which was decided in December of the same year can be at least to a large extent be traced back to the acute environmental problems of the North Sea. In emphasizing the excessive quantities of fertilizer pollution of its marine environment the above mentioned Council Resolution on the protection of the North Sea from 1988 also required the Commission to present proposals for the reduction of nutrient discharges from agriculture. A reference to the resolution is made in the introductory text of this directive as well. But in contrast to the Urban Waste Water Directive even other reasons are mentioned for the new legislation, in particular the need to comply with the provisions of the Drinking Water Directive (80/778/EEC).

Similar to the Urban Waste Water Directive, the Nitrates Directive discerns between areas of two different categories depending on their environmental sensitivity. Member states have to designate areas as Nitrates Vulnerable Zones (NVZs) if discharges either affect surface waters, used for the abstraction of drinking water or "natural freshwater lakes, other freshwater bodies, estuaries, coastal waters and marine waters" that "are found to be

[6] The directive requires a minimum percentage of reduction by 80% for phosphorus and 70-80% for nitrogen.

eutrophic or in the near future may become eutrophic if action pursuant to Article 5 is not taken" (91/676/EEC, Annex 1).

The wording of this provision, including a strong reference to the risk of marine eutrophication is nearly the same as in the Urban Waste Water Directive and it is obvious that both directives have emerged from a clear perception of one and the same environmental threat that the EU's waters in particular in the North Sea faced in the early 1990ies.

However, when considering the details of the provisions of the Nitrates Directive and even more its implementation results in detail it turns out that it has by far not the same potential to mitigate marine pollution as it is the case with the Urban Waste Water Directive. Instead of drastically reducing the use of fertilizers in agriculture it mainly emphasizes changes in manure handling and land management and elaborating rules on Good Agricultural Practice. Although it includes the objective that the content of nitrates in groundwater and surface water must not exceed 50 mg/l, the date to which this has to be achieved is not fixed in the directive. There is a provision that manure, which is applied within NVZs must not contain more than 170 kg/ha nitrates per year. But there are several exemptions to that provision taking into account for instance the potential of the crops to take up the nutrients from the soil.

The main weakness of the Nitrates Directive is however related to the limited possibilities to ensure a proper implementation. Member states had been very reluctant to meet the obligation to designate NVZs. Even countries like Sweden and Poland, which are among the largest contributors to nutrient pollution of the Baltic Sea only designated relatively small parts of their territory (IEEP 2007: 14). A reason for the lacking willingness of the member states to comply with the directive, if compared with the Urban Waste Water Directive, might be the fact that full compliance with the Nitrates Directive could have a negative impact on the competitiveness of the concerned farmers. If for instance Southern European member states, because they do not suffer as much from eutrophication as the Northern parts of the EU, continuously allow higher rates of manure application, productivity and incomes from the farming sector here would remain stable, whereas they would decrease in Northern European countries. Southern European farmers may even get the chance to increase sales at the expense of their Northern European colleges. The Directive thus potentially "opens for competition based on environmental dumping" (Bonde 1994: 498). In a resolution on the implementation of the Nitrates Directive the European Parliament also pointed to the inherent unfairness of the regulation emphasizing the competitive disadvantages for farmers who comply with the regulation (EP 2000: 3). In the same resolution the Parliament accuses the Commission of being not strict enough in enforcing implementation of the directive.

However, even if all Baltic Sea states would have implemented the Nitrates Directive completely, the problem would still remain that its provisions simply are not sufficient for effectively addressing the serious environmental situation of the Baltic Sea. A HELCOM study revealed that a consequent improvement of manure handling in accordance with the Nitrates Directive throughout the Baltic Sea catchment area within all EU and HELCOM Contracting States would reduce nitrogen run-off to the sea only to the marginal extent of something between 1% to the Gulf of Finland to maximum 6% to the Baltic Proper (HELCOM 2006: 21). The study also emphasizes another weakness of the directive. In focusing mainly on the prevention of water based nitrogen depositions it overlooks the risk of atmospheric deposition. But there is a risk that this even may increase as a result of changes in manure handling. For instance in striving to reduce the content of nitrates farmers are expected to store manure for a certain time before applying it on the soil. But in doing so about 25% of the nitrogen evaporates as ammonia to the atmosphere and thus potentially contributes to increased airborne depositions of nutrients to surface and marine waters.

Those weaknesses had been recognized already shortly after the adoption of the Nitrates Directive in the early 1990ies. As a solution it was suggested to address the legal shortcomings by the adoption of additional directives on Ammonia and also on Phosphorus, which is another source of nutrient loads that had not been regulated to that date (Bonde 1994: 497). Still in its resolution on the Nitrates Directive in 2000 the European Parliament called on the Commission to develop special measures to address phosphates from agriculture (European Parliament 2000a: 4).

However, the basic approach to address water pollution changed since the end of the 1990s. It moved away from the idea of tackling certain pollutants individually, towards the development of broader goal-oriented strategies that should integrate various environmental objectives in one comprehensive act of legislation. One step in that direction was made by the 1996 adopted Integrated Pollution Prevention and Control (IPPC) Directive, which regulates the granting of permissions for various kinds of industries. It addresses a broad range of potential sources of pollution. With regard to nutrient discharges to waters the IPPC Directive requires that “substances which contribute to eutrophication (in particular nitrates and phosphates)” have to be taken into account when issuing an operating licence for a certain business (96/61/EC).

2.2.1.3. The Water Framework Directive

In 2000 the EU’s water policy got a new legal basis with the adoption of the Water Framework Directive. Its overall objective is to achieve good status for surface waters and

groundwater at latest in 2015. Surface waters are defined as inland, transitional and coastal waters, whereby the latter only comprise marine water up to a distance of one nautical mile[7] from the coast. As far as the risk of eutrophication is concerned “good status” for coastal waters is defined by the absence of “accelerated growth of algae”, a situation, where “oxygenation conditions and transparency do not reach levels outside the ranges established so as to ensure the functioning of the ecosystem” and “nutrient concentrations do not exceed the levels established so as to ensure the functioning of the ecosystem” (2000/60/EC: 57). Annex VIII of the Directive contains a list of the main pollutants, among others “substances which contribute to eutrophication (in particular, nitrates and phosphates)”, which stem from point and diffuse sources “from urban, industrial, agricultural and other installations and activities” and whose impact on the environment should be continuously observed by the member states (2000/60/EC: 35). In general, the Water Framework Directive acknowledges the fact that water protection is not an objective that can be achieved independently from other developments on the European level. Thus it calls for a “further integration” of water protection “into other Community policy areas such as energy, transport, agriculture, fisheries, regional policy and tourism” (2000/60/EC: 4).

As mentioned above, the Water Framework Directive directly addresses marine eutrophication, albeit only as far as it occurs within the rather narrowly defined coastal waters. But it is obvious that measures aiming at the protection of any surface waters and groundwater would indirectly also be beneficial for marine waters. Consequently, the intention to “contribute to the protection of territorial and marine waters” is also expressed explicitly in Article 1 of the directive. However, there is no quality goal e.g. for the Baltic Sea, which could directly be derived from the legislative text. Instead an explicit reference to the goals of regional seas conventions is made, stating that “this Directive is to make a contribution towards enabling the Community and Member States to meet those obligations” that arise from the conventions on the protection of the Mediterranean Sea, the North-East Atlantic (including the North Sea) and the Baltic Sea (2000/60/EC: 5).

The Water Framework Directive introduces a new approach to water protection policies insofar as it establishes the idea of tackling the problem comprehensively instead of merely addressing specific pollutants separately from each other. It is an advantage that it clearly emphasizes the overall target of achieving “good status” for surface waters. The coherence of measures in the process of implementation is intended to be ensured by requiring member states to develop overall management action plans for whole river basins. Thus, measures taken should be tailored to the regional specific situations. Furthermore, the practicability

[7] One nautical mile corresponds to 1,852 kilometres.

should be enhanced through a high degree of public information and consultation and in particular through the “active involvement of all interested parties” in the elaboration of river basin management plans.

Two major weaknesses are nevertheless inherent in the Directive. They concern the possible exemptions from the goal of achieving good environmental status until 2015 and in general the potential of the directive to ensure a proper implementation in the member states. The latter is due to the fact that there is a lack of concretely prescribed measures in the directive itself leaving much scope of action and responsibility for effective legislation to the member states. This is like two sides of the same coin. On the one hand it is an advantage because it is ensured that states or even regions have the chance to freely develop those measures that are most suitable for the sustainable management of the individual river basins. On the other hand it involves the risk that member states, in the absence of pressure to implement concretely prescribed measures, slow down the process of developing and implementing protective practices. This tendency could be further increased through the quite extensive provisions for exemptions which are laid down in the Directive. Member states may extend the deadline for reaching good environmental status from 2015 up to the year 2027 “for reasons of technical feasibility”, if measures otherwise would be “disproportionately expensive” or in cases of difficult “natural conditions”. In certain cases, for instance if water bodies are extraordinarily affected by human activity, member states are even allowed to establish “less stringent environmental objectives” for an unlimited period of time (2000/60/EC: 14).

Taken those weaknesses into account it is not a big surprise that the implementation of the Water Framework Directive so far has not been satisfactory in all respects. Whereas all member states have in accordance with the timetable presented RBMPs latest in 2009, the process of consultation with the public has been delayed. Moreover, the quality of the RBMPs often is not in line with the requirements of the Directive. Rather than taking water protection as a priority they are often dominated by socio-economic interests for instance when they stipulate a reduction of space for rivers to serve the needs of agriculture and housing (Scheuer and Rouillard 2009: 13). Thus, currently it is expected that 50% of the RBMPs will not lead to the achievement of “good status” by 2015.[8] Member states will

[8] In 2010, less than 10% of German surface waters were in good environmental status (UBA 2010: 61). The German government already announced that by 2015 this number will only slightly increase to 14%. In 2005 the European Court of Justice condemned Germany because not all federal states had transferred the Water Framework Directive into national law by that year. However, this process was completed in 2007 (Deutscher Bundestag 2007). In December 2009 the Federal Government expected Germany to reach the goals of the directive latest in 2027, if the various possibilities for exemptions are taken into consideration (Deutscher Bundestag 2009).

instead have to apply for an extension of the deadlines in relation to the WFD-objectives. Another 5% of the RBMPs even aim for the allowance of less stringent objectives (Dworak et al. 2010).

Concerning the requirement to integrate water protection into other Community policies this has not yet been realized to a considerable extent. To the contrary, in some areas rather new clashes with other European policy goals have emerged. This is for instance the case when the EU supports a new intensification of agriculture by promoting energy crops as a consequence of the call for strategies to increase the share of renewable energy in Europe (Scheuer and Rouillard 2009: 38).

The lack of concretely prescribed measures under the Water Framework Directive has to a certain extent been compensated through the development of daughter directives. As far as regulation of groundwater quality is concerned Art. 17 of the WFD requires the European Parliament and the Council to take action in this area within two years after the WFD's entry into force. The introduction of this passage was a consequence of the fact that the member states were not able to commonly agree on groundwater quality standards to that date and they did not want to delay the adoption of the WFD any longer because of this remaining question. Therefore the Commission suggested to address the issue within an extra legislative procedure at a later point in time (Rechenberg 2007: 1).

Although the negotiations leading to the Groundwater Directive had been quite difficult including conflictual discussions between the Commission, the member states and the European Parliament, finally all parties successfully agreed on quite progressive formulations. In fact, there is a chance that the directive can make a contribution to approach the "good status" goal under the WFD until 2015. The Groundwater Directive not only supplements the WFD by specifying the maximum allowable content of nitrates in groundwater by a threshold value of 50 mg/l. It even compensates for some of the above mentioned weaknesses of the Nitrates Directive from 1991. Whereas the latter did not mention a deadline to which the quality goals should be reached this is now provided through the WFD and confirmed through the Groundwater Directive. What is more, the Groundwater Directive even opens up the possibility to introduce stricter quality standards than the 50 mg/l limit. These should be adopted if there otherwise would be a risk of failure to achieve the "good status" goal for associated bodies of surface water (e.g. rivers, lakes and coastal waters). Furthermore, in cases when trends towards a worsening of environmental conditions can be observed member states are required to introduce counter measures already at an early stage. Efforts to achieve a trend reversal should then already start at a point when the concentration of a pollutant (e.g. of nitrates) reaches 75% of the limit value. This would mean that counter measures have to be established as soon as nitrate concentrations in

groundwater reach a level of 37,5 mg/l, if there is evidence that this is part of an ongoing process of deterioration (Rechenberg 2007: 3).

Also another obvious shortcoming of the Nitrates Directive is addressed in the Groundwater Directive. As pointed out earlier, one of the obstacles for a consequent implementation of the Nitrates Directive are concerns, according to which compliance with the regulation could have negative impacts on the farmers competitiveness, because decreased rates of manure application as required within Nitrates Vulnerable Zones could lead to decreased production and thus lead to reduced incomes compared with farmers in countries or regions that suffer less from eutrophication and thus do not have to reduce fertilizer application. This possible reason for reluctance in implementing protective farming practices is acknowledged in the introductory part of the Groundwater Directive. It is stated there that "the protection of groundwater may in some areas require a change in farming or forestry practices, which could entail a loss of income (2006/118/EC: 19)." To address that problem the possibility is suggested that financial compensation could be provided through funding mechanisms under the 2005 established European Agricultural Fund for Rural Development (EAFRD).

Despite the described weaknesses of the WFD, e.g. shortcomings concerning its legal provisions and the obvious difficulties for a proper implementation, the directive still can be assessed as a progressive step within the EU's efforts to improve water protection. This is especially the case if the ambitious objectives of the groundwater daughter directive are included in the evaluation. The most important advantages concern the sharpening of water quality standards in the latter directive against the earlier more moderate provisions in European law, the introduction of the 2015 or latest 2027 deadline for the realization of good status for groundwater and surface water and the principal idea to switch over to an integrative strategy, e.g. from addressing pollutants separately towards formulating overall quality goals for European ground and surface waters.

In the long run the WFD may even impact the further development of the Common Agricultural Policy (CAP). As part of the 2009 decided WFD's Common Implementation Strategy for the period 2010-2012, the establishment of an Expert Group was announced, with the task to discuss issues and solutions concerning interrelations between the CAP and the WFD. Among others this Expert Group has got the task to assess the cost-effectiveness of buffer strips along water courses, to make proposals how to ensure that Rural Development programmes (like for instance support for bio-energy cropping) not entail negative effects on the environment and to give inputs to the discussion about the long-term development of the CAP beyond 2013.

2.2.2. The EU's marine protection policy

Marine protection has only recently become a specific policy area within the EU. However, as has been shown in the previous chapter, the marine environment has in fact already been a matter of concern since the 1970s. But until the turn of the millennium it was only addressed as a side effect of European legislation, which primarily was related to other objectives, e.g. the quality of drinking and bathing waters and later the protection of (first of all) inland surface waters and groundwater.

There are several reasons for this rather late emergence of concerns for the seas on the European political agenda. In the earlier phases of European integration environmental legislation had mostly been triggered by the need to harmonize product standards and thus to remove remaining barriers for the realization of the Common Market. The result was a concentration on issues such as legislation concerning noise and air pollution standards or the use of chemicals (Knill and Liefferink 2007: 52). In contrast, marine protection was not perceived as an issue of relevance for the functioning of the Common Market. Moreover, public awareness for marine pollution and for the value of healthy marine ecosystems had only been limited. It only played a role in special situations, for instance in cases of bathing water pollution in tourist regions.

The first case in which public concern about the poor ecological situation of a European sea directly resulted in legislative countermeasures at the EU-level had been the occurrence of massive algae blooms in the North Sea during the 1980s. The consequence was the adoption of the directives on Urban Waste Water and on Nitrates in 1991.[9] However, the North Sea had in that period been a special case insofar as it was the only European sea that almost completely (with the exception of Norway) was surrounded by EU member states. Thus, it was somehow natural that the EU would take regulative action to prevent a further ecological deterioration of this sea.

In all other cases it was much more evident to make use of the regulative capacities of either the regional seas conventions that had been established in Europe during the 1970s and which had the advantage of comprising all coastal states of the respective seas, e.g. the Helsinki Commission (1972) for the Baltic Sea, the OSPAR Commission (1972) for the North-East Atlantic including the North Sea and the Barcelona Convention (1976) for the Mediterranean Sea. Beyond that and especially as far as pollution from ships is concerned the most relevant institution has since 1973 been the global MARPOL convention, which is embedded in the institutional framework of the International Maritime Organization (IMO). Taking into account the transcontinental character of the shipping industry it obviously makes

[9] See chapter 2.2.1.

sense to shift responsibility for regulation as far as possible over to the global level. This is another reason for the fact that a comprehensive marine protection policy appeared rather lately on the EU's political agenda.

2.2.2.1. The Green Paper on a Future Maritime Policy

But the overall framework conditions changed with the beginning of the new millennium. The EU then started to acknowledge the oceans and seas as a new sphere of action that should be addressed through the development of a particular policy. This emerging new orientation was triggered mainly by two developments. The first one can be attributed to the Lisbon Strategy, which was adopted in 2000 intended to make the EU "the most dynamic and competitive knowledge-based economy in the world" by 2010 (European Parliament 2000b). As one sphere of activities to reach this overall objective the potential of Europe's maritime industries was moving into the center of attention. The "Green Paper on a Future Maritime Policy", published by the European Commission in 2006, describes this new maritime dimension as a hitherto underestimated opportunity for the promotion of economic growth.[10] In addition to a better coordination and strategic planning of the traditional maritime branches such as shipping and shipbuilding, fisheries and tourism the Green Paper outlines the possibilities for establishing new business activities related to the seas in various sectors, e.g. energy (offshore renewables, pipelines, sequestration and storage of carbon), raw material extraction or the development of marine biotechnology.

At the same time the paper acknowledges the fact that in the long run the economic potential of the seas only can be exploited to the full extent if a healthy state of the marine environment is achieved and preserved. Thus it calls for the adoption of a thematic strategy for the marine environment, which should serve as the "environmental pillar" of the future maritime policy. The Green Paper suggests a rather broad approach to address the environmental challenges of the European seas. It emphasizes the importance of a healthy nature as a prerequisite for economic activities like tourism and fisheries but also for the realization of "non-market values" e.g. services that do not contribute to GDP generation but still have significant impacts on human well-being. As examples it mentions "recreational activities such as spending time at the beach and the value of the coast's scenic benefits" (European Commission2006a: 24).

[10] The European Commission quite emotionally calls for a "new awareness among Europeans of the greatness of their maritime heritage, the importance of the oceans in their lives and their continued potential to provide us with increased wellbeing and economic opportunity" (European Commission2006a: 5).

The Green Paper repeatedly points to the fact that the natural conditions of the various European seas are different and therefore need to be addressed in accordance with their individual needs. Consequently it calls for regional administrative approaches for the various marine ecosystems. The particular marine geology of the Baltic Sea and its special ecologic sensitivity, which can lead to “widespread algae blooms”, is stressed several times within the paper.

As to the causes for the deterioration of the marine environments the Green Paper is very eager not to blame one side more than others when determining the main polluters. Generally the idea is rather to include environmental considerations from the outset into future maritime economic activities that are intended to start as part of the EU’s new maritime policy. Although the fisheries sector is mentioned as an actor which has a major impact on the development of a successful marine protection policy, the paper also points to the fact that the sector itself suffers from pollution that stems from other sources. Interestingly, there is even the intention to protect the fishery sector against being blamed too much alone for damages of the marine environment. It is argued that this otherwise easily could happen just because this sector is “easier to identify and to regulate than many other contributors to environmental damage” (European Commission 2006: 23). On the contrary, the idea is that the fishery sector should benefit from the integration of the other hitherto isolated policy areas into the overall objectives of the maritime policy. The paper leaves no doubt that land-based sources of marine pollution have to be addressed if healthy marine environments shall be achieved. In particular it calls for measures that address “nutrients from farming, urban and industrial effluents, pesticides, hydrocarbons and chemicals” to be included into the development of a thematic strategy for the marine environment.

2.2.2.2. The Sixth Community Environment Action Programme

Besides the EU’s maritime policy, which emerged in the context of the Lisbon Strategy, the second driving force that triggered the development of a particular European marine protection policy can be attributed to a shift in the general basis for the EU’s environmental policy at the turn of the millennium. Whereas already the Single European Act of 1987 had introduced the protection of the environment as a general task for the EU, this objective was further enhanced through the Maastricht Treaty which introduced the principle of sustainable development. The Amsterdam Treaty of 1997 once more strengthened environmental policy goals by emphasizing the need to integrate them into all other policy areas. To underline the idea that environmental protection should have the same weight as other policy goals it was

taken up as one of the general tasks for the Community in Art.3 in the beginning of the treaty (Knill and Liefferink 2007, p22).

The new weight, which the EU's environmental policy acquired at the beginning of the century and its new principal goals are reflected within the Sixth Community Environment Action Programme, decided by the Council and the European Parliament in July 2002 (1600/2002/EC). Suggesting a time frame of one decade it requires the EU to take action within the following key priority areas:

Sixth Community Environment Action Programme (2002-2012)
Priority Areas:

1. Tackling climate change
2. Action on nature and biodiversity
3. Action on environment and health and quality of life
4. Action on the sustainable use and management of natural resources and wastes

The second Priority Area concerning "Action on nature and biodiversity" is reflecting the new perception of nature protection as a value in itself, which has become a policy objective independent to the question whether it appears within the context of economic activities of the Community or not. Also marine protection falls within this priority area. With the aim of "promoting sustainable use of the seas and conservation of marine ecosystems" the Action Programme calls for the development of "a thematic strategy for the protection and conservation of the marine environment" latest by 2005. This strategy should also take into account "the terms and implementation obligations of marine conventions and the need to reduce emissions and impacts of sea transport and other sea and land-based activities" (1600/2002/EC: 9).

2.2.2.3. The Marine Strategy Framework Directive

As has been shown, at the beginning of the millennium two major new developments in European politics, the EU's emerging maritime policy and the 6th Community Environment Action Program, pushed for an enhanced consideration of marine environmental concerns on the European political agenda. Both of them explicitly require the adoption of a marine

strategy that should serve as a framework and starting point to address present and possible future threats to the marine environments of Europe.

The European Parliament and the Council adopted the Marine Strategy Framework Directive in June 2008 (2008/56/EC). Similar to the Water Framework Directive from 2000, which primarily addresses inland waters, the strategy aims to tackle the pollution of marine waters by providing a cross-sectoral framework intended to cover all the main pollution sources and by setting a time limit, in this case the year 2020, by which good environmental status shall be achieved for Europe's marine environments. The responsibility for developing and implementing measures to achieve that goal is to a large extent handed over to the member states. They are required to develop national marine strategies according to the environmental situation of the respective seas to which they are bordering. The definition of good environmental status is to be elaborated individually with regard to the various European marine regions (e.g. the Baltic Sea) or sub-regions (e.g. the Adriatic Sea). Although the directive provides a list of 11 qualitative descriptors which are to be taken into consideration for this purpose, it depends on the environmental conditions of the individual marine ecosystems, which of them are applied in the actual cases.[11] The decentralized approach of the marine strategy is reflected also in those of its provisions which encourage member states to engage in regional cooperation. Thus art. 6 of the strategy calls for the inclusion of programs and activities developed in the framework of the regional seas conventions and even urges member states to extent regional cooperation to comprise also land-locked countries which likewise are part of the catchment area of a marine region.

It is obvious that member states have to be included as broad as possible if marine protection measures are to be conducted successfully. However, in some aspects the degree to which the marine strategy hands over responsibility to the national level appears to be rather counterproductive. For a successful realization of the marine strategy's objectives a stronger commitment of the European level and a more binding inclusion of the regional level would have constituted a major advantage. The latter aspect follows directly from the transboundary nature of marine pollution. It does not appear plausible why a variety of national approaches should be applied to tackle the problems of one and the same marine region as it is required by the strategy's call for the development and implementation of individual national marine strategies. It would have been more natural if the directive would have urged the member states to develop joint marine strategies with regard to each of

[11] Of particular relevance for the Baltic Sea is the fifth qualitative descriptor which specifies that a marine ecosystem has a good environmental status if "human eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters" (2008/56/EC: 34).

Europe's marine regions and sub-regions. Instead, in adopting national strategies, there is an inherent risk of differently ambitious targets and uncoordinated measures within one and the same marine region (Salomon 2009: 363; Menn 2009: 95).

The rather weak inclusion of the regional level is even more astonishing when considering the fact that well established institutions already exist with regard to the various European regional seas. Since the 1970s they have gained profound experiences in both the observation of the respective marine environments and the development of protective measures. The Marine Strategy Directive indeed refers to these institutions but not in a binding way (IEEP 2007: 39). There is no obligation for the member states to build upon existing regional programs and activities they only shall do that "as far as possible". Furthermore, member states are not required to take over but shall only "take into account" the environmental targets laid down in international conventions. In particular with regard to the Baltic Sea there would have been the chance to go further and enhance regional efforts under the HELCOM convention by including the Baltic Sea Action Plan from 2007 into the strategy. This had also been proposed by the European Parliament under the decision process. However, the Parliament was not able to push through that demand (SRU 2008: 509). Instead, a more general provision was added to the Marine Strategy Directive. Accordingly, in case of a need for urgent action following from a particular critical status of a specific European sea the Commission has the possibility "to improve the marine environment by making the region in question a pilot project."

This rather limited inclusion of the regional seas' level accounts for only one of the two structural weaknesses of the Marine Strategy Directive. The other one is related to the EU-level and refers to its reluctance to set ambitious targets for the integration of sectoral Community policies into the overall objective of achieving good environmental status for the European marine regions. Whereas the strategy generally states that the new framework for marine protection policies should "foster the integration of environmental concerns into other policies, such as the Common Fisheries Policy, the Common Agricultural Policy and other relevant Community policies" it subsequently does not determine a possible proceeding, which could lead to the otherwise demanded integration of sector policies. This goes especially for the CAP, which is not particularly addressed throughout the rest of the directive, although it is the main reason for the serious state of the Baltic Sea and many other marine regions in Europe. This is all the more astonishing because on the other hand "agriculture" is in Annex III, Table 2 of the directive mentioned as a reason for "Nutrient and organic matter enrichment" which in turn is listed as one of the possible pressures on the marine environment. But whereas with regard to the Common Fisheries Policy the Marine Strategy Directive requires to "take into account the environmental impacts of fishing and the

objectives of this Directive, (…) including in the future reform", no corresponding request is made with regard to the CAP.

The strategy only indirectly suggests a proceeding which in its final consequence may pave the way for the integration of marine environmental concerns into other Community policies including the CAP. Accordingly, art. 15 requires the member states to inform the Commission if they identify an issue, which affects their marine environment but "cannot be tackled by measures adopted at national level or which is linked to another Community policy." In such a case the member states should recommend appropriate measures to tackle the issue at the EU-level. The Commission should then respond within six months and develop related proposals to the European Parliament and to the Council.

Emissions from shipping account for another major pressure on Europe's marine environments. However, this issue is not at all addressed within the Marine Strategy Directive. Instead, tackling air pollution from ships is included as one of the tasks listed in the Commission's 2007 adopted Action Plan, which accompanies the Blue Book on the EU's Integrated Maritime Policy (European Commission 2007a: 16). Here, the Commission commits itself to follow the IMO discussions on stricter global regulations regarding sulphur, NO_x and greenhouse gases with the aim to "consider alternative proposals for action" in case of insufficient results at the international level. In addition, the Action Plan also requires the Commission to promote the use of shore-side electricity by ships and thus to improve the air quality in and around ports.

As has been shown, there are some major shortcomings related to the Marine Strategy Directive. They concern first of all the non-appropriate distribution of responsibility between the national, regional and EU-level, which neither corresponds optimally to the transboundary character of marine pollution nor to the distribution of competences within the involved policy sectors of the EU. Whereas the objective to achieve good environmental status for Europe's oceans and seas by 2020 seems to be a quite ambitious target, this impression gets weaker in view of the fact that the strategy provides generous provisions for exceptions to this goal. Art. 14 thus opens the possibility that member states may not achieve good environmental status in case of "natural conditions which do not allow timely improvement" of the concerned marine waters or if environmental damages result from "actions taken for reasons of overriding public interest which outweigh the negative impact on the environment." Furthermore, member states may abstain from fully implementing the directive if "the costs would be disproportionate taking account of the risks to the marine environment". Although the directive requires that these exceptions should not permanently preclude the achievement of good environmental status in the concerned marine waters, it does not provide a clear time limit by which the exception should end at the latest. In this respect the

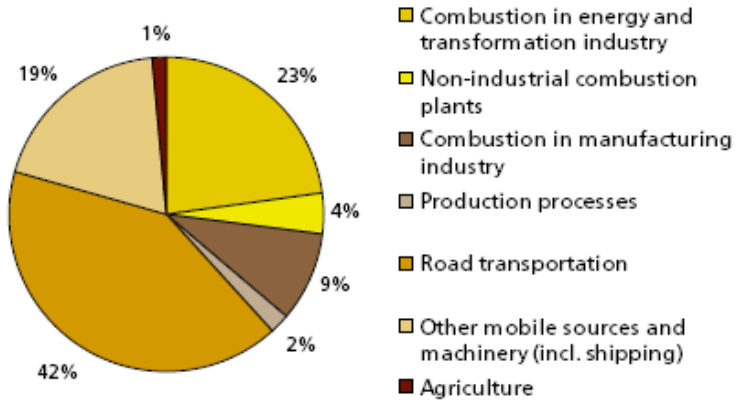
provision is even weaker than the corresponding one within the Water Framework Directive, which prescribes that exceptions to reach the goal of GES by 2015 may not be extended more than two times a period of six years thus setting the year 2027 as the ultimate deadline. Still, the Marine Strategy Directive surely constitutes a big step in the right direction, especially when considering the fact that before 2008 no legislation at all existed at the EU level that was exclusively designed to promote the protection of the marine environment (Salomon 2009: 363). There are however several shortcomings regarding most of all the appropriate inclusion of all relevant sectoral policies and the involvement of the regional and European level into the elaboration of marine protection strategies. Thus it remains to be seen whether the directive will be able to make a strong contribution to the protection of the European seas.

2.2.3. The EU's air pollution control policy

The link from air pollution to damages of the marine environment may at first glance be less obvious than the effects that had been described in the previous chapters, e.g. waterborne discharges stemming from agriculture and inland surface waters. However, to a large extent the deterioration of the world's oceans and seas is a consequence of pollutants reaching the marine waters through atmospheric deposition. This goes in particular for the problems of acidification and eutrophication. Whereas the former is mainly triggered by high concentrations of carbon dioxide, sulfur and nitrogen oxides in the air, the latter is at least to a large degree a consequence of air pollution, caused by emissions of nitrogen oxides and ammonia.

Up to 35% of the anthropogenic loads of nitrogen that cause the eutrophication of the Baltic Sea reach the water through atmospheric deposition (HELCOM 2009: 75). This higher number results, if also those parts of atmospheric nitrogen are included into the calculation, which originally are deposited on the soil and vegetation throughout the drainage area of the Baltic Sea and thus finally reach the marine waters as riverine inputs. In order to tackle their original source, it is necessary that abatement measures focus on the various causes of air pollution. The following graph accounts for the degree to which different sources of atmospheric nitrogen are responsible for the nutrient loads of the Baltic Sea.

Figure 2 Contribution of nitrogen oxides by source to the atmospheric deposition of nitrogen entering the Baltic Sea in 2005



Source: Helcom, 2009, Baltic Sea Environment Proceedings No. 115B

The figure shows that traffic is by far the most important contributor to emissions of nitrogen oxides, followed by energy production and shipping. The manufacturing industry and smaller combustion plants account for smaller contributions. The very low figure of only 1 % for agriculture is slightly misleading. It has to be seen against the background that agriculture mainly contributes to atmospheric deposition of nitrogen through emissions of reduced nitrogen (ammonia) and only very little through oxidized nitrogen. If both oxidized and reduced nitrogen would be counted together, the result would be just the opposite, exposing agriculture as the biggest single source of the total atmospheric nitrogen depositions to the Baltic Sea.

As was the case with water protection, a comprehensive air pollution control policy only emerged rather lately at the EU-level. Once again the reason is that in the beginning environmental protection only was part of European legislation to the extent to which this constituted a prerequisite for the realization of the Common Market. Hence, the first European legislative measures related to air quality were part of the EU's aspirations to harmonize product standards and thus to remove non-tariff barriers for trade within the Community. Consequently, the EU started its air protection policy in the 1970s with the harmonization of standards for automobile emissions.

In the 1980s the general concern about the deterioration of the environment became another strong driving force, which pushed for protective actions to address air quality at the European level. Acidification and the formation of ground-level ozone were now increasingly perceived as urgent pressures with harmful consequences for nature, in particular forest dieback, but also as hazards that could damage human health and buildings, in particular historic monuments, which suffered from the corrosion of building materials caused by acid

rain. Both the transboundary character of air pollution and the interest not to create unequal conditions of competition for national industries were the main reasons for the call for protective action at Community level since the beginning of the 1980s. Especially Germany, where public concern about forest dieback was particularly strong, urged the European Commission to become active (Ramus 1991: 15).

It was obvious that the main sources for pollutants that caused the problem of acid rain were oil- and coal-fired large combustion plants. Thus the newly introduced legislative measures directly addressed those major sources. The first achievement in this respect was the 1988 adopted Large Combustion Plant (LCP) Directive, which regulates the control and limitation of SOx and NOx emissions from power stations, petroleum refineries, steelworks and other industrial processes. The directive was revised in 2001 as a consequence of advances in combustion and abatement technologies. In contrast to the original directive from 1988 the introductory text of the new version now even refers to the problem of eutrophication (2001/80/EC: 1).

In 1996 the legislative activities that aim to address emissions at source were extended through the Integrated Pollution Prevention and Control (IPPC) Directive, which once again was revised in 2008, when several amendments were comprised in a new version (2008/1/EC). The IPPC Directive is regulating permissions for various kinds of industries (e.g. energy industry, production and processing of metals, mineral industry, chemical industry, waste management, livestock farming), which have a high pollution potential. Thus, it supplements the LCP Directive, which exclusively is related to combustion processes. What is more, in order to allow for an integrative assessment of all the possible harmful effects of industrial installations the IPPC Directive is not addressing air emissions in an isolated way, but also includes pollution effects on water and soil as well as waste handling.

Currently both the LCP and the IPPC Directives undergo a revision process. Together with a few other directives which regulate specific industrial emissions they shall be integrated into a new single act of legislation under the new name Industrial Emissions (IE) Directive. The idea is to hereby improve some hitherto unclear provisions, which in the previous regulations existed with regard to the application of the Best Available Techniques (BAT) principle. Furthermore it is intended to ensure a more consistent interpretation of the various legal definitions by the member states (SEPA 2010).

Whereas the so far described measures since the 1980s have aimed to regulate air pollution by controlling emissions at specific sources e.g. combustion plants, steelworks or intensive agricultural installations, another parallel approach in developing protective policies has been to define general air quality standards and emission ceilings for certain pollutants in Europe, independently from their distinct sources of origin. This process started with the adoption of a

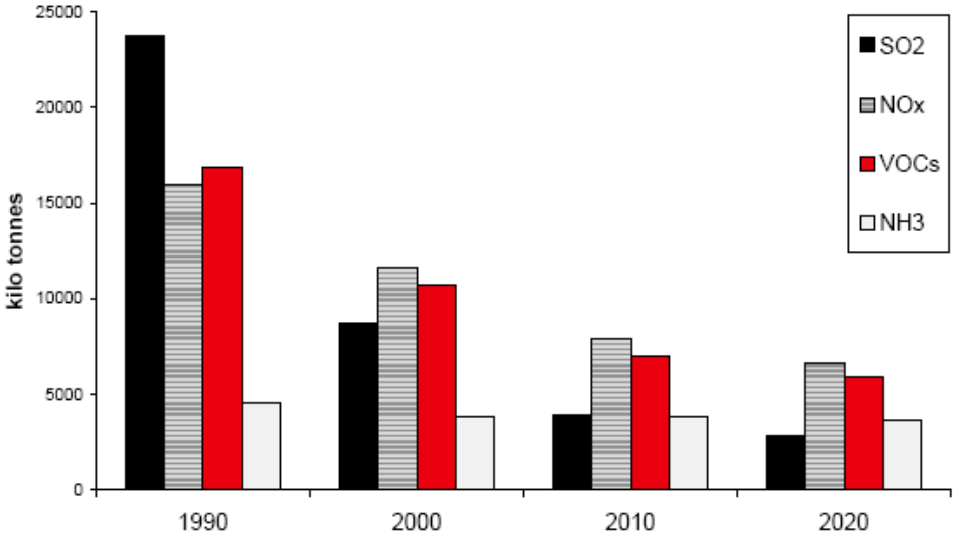
directive in 1980, which provides limit values and guide values for sulfur dioxide and suspended particulates (80/779/EEC). It was followed by regulations for various other pollutants, among others a directive on air quality standards for nitrogen dioxide in 1985 (85/203/EEC), until finally all these single pieces of legislation were merged to one comprehensive legal act, the Directive on Ambient Air Quality Assessment and Management from 1996. Moreover, one of the most important directives regarding the mitigation of airborne eutrophying pollutants became the 2001 adopted National Emission Ceilings (NEC) Directive (HELCOM 2007: 18). For each member state it prescribes a set of national ceilings for emissions of sulfur dioxide, nitrogen oxides, volatile organic compounds and ammonia. These standards have to be met at the latest by the year 2020. Interim targets are provided to be met already by 2010. The NEC Directive can be traced back to WHO recommendations to tackle certain air pollutants which can have adverse effects on human health. They led to the adoption of the Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, which in 1999 was signed by 31 states and by the EU.[12]

A progress evaluation, analyzing the implementation success of the NEC Directive, revealed that the interim targets have not been met by all EU member states by 2010 (EEA 2011). Among the four ceilings the most difficult one to reach seems to be the emission limit for NOx, which in fact 10 of the 27 EU member states have failed to meet. These include Belgium, Germany and the Netherlands, i.e. states whose emissions significantly contribute to the eutrophication of the Baltic Sea through atmospheric nitrogen depositions. The situation is much better regarding ammonia, here only Germany and the Netherlands have failed to reach the emission ceilings for 2010. Interestingly, measures to achieve reductions of sulfur emissions have apparently brought about better results than those targeting the other pollutants. All EU member states have complied with the limit values that were set for sulfur for 2010.

The unequal reduction trends that can be observed with regard to the four NECD pollutants since 1990 are also reflected by the following comparison:

[12] The Gothenburg Protocol is one of eight additional protocols to the United Nations Economic Commission for Europe's (UNECE) Convention on Long-Range Transboundary Air Pollution, which in 1979 was signed in Geneva. Since then 46 European and Central Asian states, the EU, Canada and the US have joined the convention.

Figure 3 EU-25 land-based emissions of NECD pollutants



Source: European Commission 2005

The table illustrates a sharp decrease of sulfur emissions that mostly took place in the two decades between 1990 and 2010. The trend is expected to continue slightly until 2020. Decreases of volatile organic compounds and, albeit a little less, of nitrogen emissions are significant as well, however they are much less pronounced than the reduction trend for sulfur emissions. In contrast, nearly no reductions in ammonia emissions could be achieved during the last decades and no significant reductions are either expected to take place with regard to this pollutant until 2020.

The observed trends reflect the different priorities that at different times have been given to the abatement of distinct environmental threats. One of the first and most serious concerns, which since the 1970s had been present in debates on transboundary air pollution in Europe, is acidification. Its harmful consequences became apparent in many countries and in various ways, e.g. forest dieback, damages to buildings or environmental deterioration of lakes. What is more, sulfur and nitrogen oxides, the pollutants that mainly cause acidification, even have harmful effects on human health. Consequently, the first legislative activities by which the EU in the 1980s started to address air pollution primarily aimed at reducing the emissions of sulfur and nitrogen oxides in Europe. The emphasis that the EU put on this particular threat is furthermore underlined by the fact that the European Commission even developed a comprehensive “Community strategy to combat acidification” in 1997 (European Commission 1997).

In contrast the EU has until today never devoted the same particular attention to the problem of eutrophication. A reason might be that unlike acidification a much broader variety of

causes would have to be taken into account, also because of the fact that only approximately one third of the eutrophying pollutants can be addressed through air protection measures. Still there could be good reasons to include more consciously the intention of combating eutrophication into the EU's air pollution control policy. As a positive side effect of measures that otherwise are developed to tackle acidification or ground-level ozone this could at least serve as an additional argument and thus help to move forward decision making and implementation processes at the European and national levels.

Such a more comprehensive approach in fact started to reshape European air pollution control measures since the end of the 1990s. Interestingly it is the already mentioned "Community strategy to combat acidification" from 1997, which for the first time strongly emphasized the need to address eutrophication as an integrative part of the EU's air protection policy. The strategy devotes one of all together six chapters to "Positive Side-Effects/Double Benefits" of anti-acidification measures. They are expected to be realized with regard to eutrophication, ground-level ozone, human health and the preservation of buildings and historical monuments. Taken together the financial benefits that could be achieved in these various areas by implementing the strategy are estimated to account for nearly 20 billion ECUs. With regard to the mitigation of eutrophication considerable progress is envisaged to result in a major reduction of European ecosystems where critical loads of eutrophication are exceeded from over 34% in 1990 down to 19% by 2010. The development of an anti-acidification strategy that in fact aims at realizing multiple targets in connection with air pollution was at least partly triggered by the parallel ongoing negotiations within the UN ECE framework, which in 1999 led to the adoption of the already mentioned Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (European Commission 1997: 6).

Since the turn of the millennium the fight against eutrophication has acquired an almost equal weight if compared to other targets e.g. addressing acidification and ground-level ozone within European air pollution control policy. This became obvious in the 2001 adopted NEC Directive and is in particular the case in the formulation of the 2005 published Thematic Strategy on air pollution.[13] Whereas in relation to human health this strategy points to ground-level ozone and particulate matter as the two pollutants which cause the most serious damages, in relation to effects on the ecosystem it emphasizes that "excess nutrient nitrogen in the form of ammonia and nitrogen oxides can disrupt plant communities, leach into freshwaters, leading in each case to a loss of biodiversity (called "eutrophication")."

[13] The Thematic Strategy on air pollution is one of seven thematic strategies, which the European Commission was required to develop by the 6th Community Environment Action Programme of 2002.

Furthermore, it is estimated that about 55% of all EU ecosystems suffer from eutrophication and that the strategy may lead to environmental improvements for at least half of the affected areas (European Commission 2005: 5).

To reach these objectives the strategy proposes a broad horizontal approach across all relevant policy sectors. On the one hand it calls for the strengthening of existing legislation on air quality e.g. a revision of the NEC Directive and other legal acts on air quality. On the other hand the strategy requires the integration of air pollution concerns into other Community policies e.g. energy, transport, shipping and structural policies. Special emphasis is given to agriculture, as "cattle farming, the pig and poultry sectors and the use of mineral fertilizers account for the vast majority of ammonia emissions" (European Commission 2005: 10). Although the strategy acknowledges the potential benefits that could be expected to emerge from the CAP reform of 2003 as well as from an effective implementation of the Nitrates, the IPPC and the Water Framework Directive, it raises concern that even these improvements may not be sufficient. Consequently, it calls for the development of further measures and policies to reduce the excessive use of nitrogen in agriculture.

The overall trend to address air pollution in a more comprehensive way must also be assessed in the context of policies to address climate change. Initially there had been cases, in which the objective to mitigate global warming led to the development of measures and policies that were likely to give rise to emissions which contribute to eutrophication. This applies especially to emissions from shipping and road traffic. Following from a one-sided orientation towards limiting emissions of greenhouse gases, the EU introduced in 2001 a policy, which promotes the transfer of traffic from land to sea, suggesting the development of the "motorways of the sea" by 2010. The underlying idea is to make use of the fact that transports by short-sea shipping produce about 2.5 times less CO2 than by road (European Commission 2001: 42). Shipping is obviously a quite attractive mode of transport, if seen from the aspect of mitigating climate change. On the other hand, too less attention had for a long time been paid to SO2 and NOx emissions from ships. The harmful consequences for the environment arise from the fact that ships release about twice as much NOx per ton-kilometer than modern truck models (EEB 2004). Consequently the situation today is that international shipping in many European countries account for the largest single source of acidifying and eutrophying fallout (Seas at Risk 2008). In parts of the Baltic Sea and at certain times of the year, shipping is responsible for up to 50 percent of the atmospheric nitrogen depositions to the marine environment (Hassellöv 2009: 20). With a share of 16 %, shipping is also the largest single contributor to atmospheric NO_x depositions to the Baltic Sea (HELCOM 2008). In its Thematic Strategy on air pollution from 2005 the EU expresses concern about the increasing problem of ship emissions, stating that they in terms of both

sulfur and nitrogen emissions by 2020 would exceed all land based sources of air pollution taken together.

One of the reasons for the reluctance in imposing stricter environmental standards for shipping is the global character of this sector. It would be difficult for the EU to proceed with protective measures without synchronizing them in an international context. European trade with third countries largely depends on goods being transported at sea and on the openness of the sea routes for all trading nations. At the same time it is important to have fair conditions of competition for all parties involved. Thus, the EU has put much emphasis to reach stricter environmental standards for shipping at the global level through negotiations within the IMO framework.

In 2008 these efforts resulted in an agreement regarding a revision of Annex VI of the IMO's MARPOL Convention. The new provisions include stricter limit values for both SO2 and NOx emissions. As far as nitrogen oxides are concerned emission standards for new ship engines shall be strengthened in two steps. From 2011 on they must be cut by 16-22% and from 2016 by a further cut by 80%. However, the letter provision shall only apply in specially designated Nitrogen Emission Control Areas (NECA). As far as existing ships are concerned no far reaching provisions were agreed. There is only an obligation for some larger ship engines to be retrofitted and thus to realize a reduction of NOx emissions by 10-20%.

In the interest of reducing atmospheric loads of nitrogen to the Baltic Sea two consequences for political action arise from the 2008 IMO agreement. First, there is an urgent need to designate the Baltic Sea as a NECA and thus to ensure that from 2016 newly built ships that enter the sea emit 80% less NOx than today. Currently the coastal states of the Baltic Sea are preparing such a proposal to the IMO under the direction of HELCOM. However, taking into account the polluting effects of air emissions across far distances it would obviously be a more effective strategy to establish an all European NECA and thus to follow the more ambitious example of North America. Here, already in March 2009 the United States and Canada proposed most areas of their coastal waters to become a NECA. The proposal was approved by the IMO in 2010 and in 2012 it will enter into force. The marine waters of North America will by then constitute the world's first NOx-ECA (EPA 2010). A Europe-wide NECA instead of only regional ones (e.g. for the Baltic and the North Seas) could also help to prevent the environmental problematic situation in which goods transports would be shifted from sea to land routes in order to prevent the use of ships that have to comply with the strict emission standards which are required within the NECAs. Second, it has to be taken into consideration that it will take much time until a possible Baltic Sea NECA can be expected to bring about substantial reductions of atmospheric pollution. Ships usually become 25-35 years old before they are scrapped. One could even expect that after 2016 ship owners

would predominantly send their fleet's older vessels to the Baltic Sea and thus circumvent the need to comply with the stricter emission limit values which only apply to new ships in a NECA (Kågeson 2009: 9). It is therefore necessary to impose reduction measures also on ships that are built before 2016. Otherwise, if no additional measures are taken, there is a danger that even in the case of the installation of a Europe wide NECA ship emissions will continue to increase in the coming decades, especially if the expected trend of increasing ship traffic is taken into account. The European Commission has therefore investigated several options which could lead to NOx emission reductions also at the existing ship fleet. They include both technical adjustments for engines and financial incentives for ship owners (Seas at Risk, 2008: 5). However, no concrete steps towards new legislation in this direction have been taken so far.

Apart from shipping also measures to control emissions from road transport constitute an example for the priority which for many years had been given to the reduction of greenhouse gases rather than imposing abatement measures to tackle other air pollutants. The introduction of the Euro II (1997) and Euro III (2001) norms for heavy duty engines led to excessive increases of NOx emissions (Hausberger and Rexeis 2004). Another reason for the rise of NOx emissions at the turn of the century is the shift to diesel which is a consequence of the European Automobile Manufacturers Association's commitment on the reduction of CO_2 emissions from passenger cars. It resulted in an increase of diesel consumption by 90% between 1990 and 2005, while petrol consumption decreased by 20% during the same period. If climate change was seen as the main threat to the environment one could have welcomed these trends as they indicate a significant reduction of greenhouse gases. In contrast, if the harmful effects of NOx emissions (e.g. eutrophication, acidification, health damages) are seen as the major concern these developments are far from promising, when considering the fact that diesel passenger cars emit three times more NOx emissions than gasoline cars (Vestreng et al. 2009: 1515). The imbalance which arises from reducing various harmful air pollutants differently is expected to disappear when the next generations of emission standards enter into force. The Euro 5 (2009-2012) and especially the Euro 6 (from 2014) standards include limit values for NOx which will lead to decreasing emissions from both petrol and diesel vehicles. However, it will take a couple of years before the old vehicles are replaced and thus substantial air quality improvements will only occur with considerable delay.[14]

[14] It is interesting to note that as in the case of ship emission standards also with regard to road transport emissions the United States have gained the lead over Europe by having introduced the stricter standards already in 2010 (EEB 2008a).

As has been shown, within the EU's air pollution control policy actions against eutrophication have only played a minor role. In most cases those abatement measures that address nitrogen emissions have in fact been triggered by other major driving forces, e.g. concerns about acidification and ground-level ozone. Combating eutrophication was at best welcomed as a positive side effect.

A particular sensitive aspect is related to the fact that measures that originally are intended to address climate change may have negative reciprocal effects in the context of eutrophication. This has to be taken into consideration when regulating emissions from combustion processes and has generally to be included in debates on the question whether certain political concepts for the traffic and energy sectors meet the criteria of sustainability. The need to balance a variety of different environmental objectives is also of great importance in agricultural policy. The production of energy crops and the operation of biogas plants need to be evaluated with respect to their potential effects on emissions of every kind of air pollutants. An integrated approach as provided through the NEC Directive seems to be a good way to tackle air pollution, since it helps to avoid a situation in which one harmful pollutant is merely substituted by another.

3. Explaining the weaknesses of the EU's protection policies

Whereas the intention of the previous chapter was to account for the various policies that play a role when assessing the EU's capacity to address eutrophication, the next step is now to ask for the reasons why certain protective measures are taken, while others and further going steps obviously are blocked. There might be constraints that directly can be related to the particular policy sector's (e.g. agriculture, air pollution control) connection to the eutrophication issue but it is also likely that structural patterns of the EU's political system in a more general sense influence the chances for the emergence of effective marine protection policies. Thus, aspects like the role of individual institutions (e.g. the Commission, the European Parliament) and the way and the extent to which regional specific problems in general can be articulated within the European polity will have to be considered. Furthermore, it is necessary to ask whether the complex nature of Baltic Sea eutrophication itself poses additional constraints on a successful development of appropriate abatement policies. Considering the fact that decision making processes in the EU are rather characterized by a strong fragmentation of policy sectors it could be assumed that it is difficult in such a system to achieve the cross sectoral integrative approach which otherwise would constitute a highly effective prerequisite to address eutrophication. Since agriculture

accounts for the most important single cause of Baltic Sea eutrophication, this chapter will start with an attempt to identify the basic preconditions for reforming the CAP.

3.1. Prerequisites for reforming the Common Agricultural Policy

Given the particular importance of agriculture as the main source of anthropogenic nutrient discharges to the Baltic Sea it should be worth to elaborate the main driving forces which have triggered the CAP reforms of the last decades. This might be useful in order to better understand the circumstances under which reforms are likely to emerge in general in the agricultural sector and to assess how likely it may be that they develop in a direction, which could help to improve the environmental situation of the Baltic Sea.

Agriculture has a quite exceptional position within EU politics. Decision making and policy developments have to be assessed in the light of the particular circumstances that characterize the history, interest constellations and institutional settings of this sector.

When reviewing the history of the CAP, the years 1989/1992 can be judged as a turning point. Whereas in the decades before a strong inertia prevailed and almost no changes took place regarding the basic principles of the EU's agricultural policy, since then, repeated reform steps and ongoing discussions about the CAP's appropriate instruments and objectives have characterized debates within the sector (Garzon 2006: 21). However, despite a principal opening towards reform proposals, until today many factors prevail, that can be made responsible for a considerable reluctance of the European agricultural sector towards a major reorganization. Some of the obstacles that today prevent the CAP from adapting to the environmental needs of the Baltic Sea can be traced back to the first years of European Integration. In the following the factors of inertia will be elaborated before turning to an analysis of those driving forces that have proved to be able to push for substantial CAP reforms during the last decades.

3.1.1. Reasons for inertia

The distinct position of agriculture within European politics can to a large extent be explained by the specific historical conditions under which the Common Agricultural Policy had been established. By including it in the 1957 adopted Treaties of Rome this policy had from the very beginning of European integration acquired a strong legal and symbolic position. One reason for this special importance of agriculture is the experience of Europewide severe food shortages in the years during and after the Second World War. Agricultural productivity in the 1950s was still low and the EU's founding states were dependent on food imports. Thus, it

was a consequent move to give high priority to the development of a strong European agricultural sector and by all means to avoid future incidents of food supply shortages. These interests are also reflected in the objectives for the CAP laid down in Article 33 of the EC Treaty and which after having been taken over in the Lisbon Treaty (Article 39) are valid until today. Accordingly, the CAP's tasks are

- to increase agricultural productivity by promoting technical progress and ensuring the optimum use of the factors of production, in particular labour
- to ensure a fair standard of living for farmers
- to stabilise markets
- to assure the availability of supplies
- to ensure reasonable prices for consumers

Whereas wartime experiences of food shortages are obviously the main reason for the particular character of agricultural policy, e.g. its strong focus on stimulating production increases, the pursuit of this goal would not necessarily require the creation of a Common Market for agricultural products and an almost complete transfer of policy competences to the community level. Thus, another aspect has to be taken into consideration for fully explaining the special position that agriculture had acquired during the initial phase of European integration.

This aspect is related to a basic reconciliation of interests between France and Germany, which paved the way for the formulation of the Treaties of Rome. In the years after the end of the war, Germany and France had different priorities when determining the path of recovery for their national economies. France emphasized the modernization and competitiveness of its agriculture sector, while protecting its industries. In contrast, Germany gave priority to the reconstruction of industrial capacities over the development of the farming sector. Consequently, both countries had contrasting views on the question, which of both branches should be exposed to free competition on the envisaged Common Market and which of them should remain under national protection. The solution to this contradiction of interests was an agreement, which can be described as one of the first important package deals in the history of European Integration. In exchange for gaining access to European markets for German industrial goods Bonn finally agreed on the inclusion of agricultural products into the Common Market (Garzon 2006: 23).

The CAP thus became a core policy sector right from the beginning of European Integration. Being the most fully common policy in the EU it also serves as a symbol for the potential benefits that can arise from unity among the member states and for the regulative capacities of the European institutions (Skogstad 1998: 470). Moreover, the basic agreement between

France and Germany on the inclusion of agriculture into the Common Market became a path-breaking experience with a lasting impact on the EU's political system. It marked the birth of the Franco-German alliance's powerful role in European politics and its special functions as a motor of European integration and a facilitator of compromises between member states. Thus, the CAP is very much connoted to some essential positive experiences with regard to institutions and patterns of cooperation, which have proved to stabilize the EU as a whole.[15] Since most political actors in the EU do not want to jeopardize these structural achievements they are basically reluctant to agree on fundamental changes of the CAP.

Another approach that must be taken into consideration, when explaining the exceptional position that agriculture has acquired if compared to other Community policies, is related to the distinct institutional setting in which the CAP is embedded. Institutional inertia in general is a notion that is often used to explain stability in politics. It is even seen as an obstacle that makes fundamental policy changes almost impossible, apart from some rare situations in which the whole political system faces an existential crisis. Several aspects would support the assumption that the CAP constitutes a particular serious case as far as institutional inertia is concerned. This goes especially for the decades until the beginning of the 1990s.

Policy making in the EU is in general characterized by a strong fragmentation of decision making channels along the individual policy sectors. The reason becomes obvious when policy making at the European and at the national level is compared. In the latter case all sectoral issues are usually discussed and decided within the cabinet of ministers, thus giving every minister a chance to impact the final decision. Whereas ministries often tend to act as representatives of sectoral interests rather than to promote common goods, cabinet meetings provide a chance to reconcile the contrasting interests of various ministries and even to mitigate the influence, which lobby organizations otherwise exert on individual ministries. At the European level this integrating effect that arises from cross sectoral policy making processes is institutionally not as much supported as at the national level. One reason is that in most cases decision making processes within the EU are split up according to the various configurations in which the Council of Ministers meets (e.g. the Environmental Council, the Agriculture and Fisheries Council, the Economic and Financial Affairs Council etc.). These single sector Council meetings lack the balancing effect of common cross disciplinary meetings, which otherwise could ensure that for instance the Ministers for Agriculture would directly have to defend their positions against objections from the Environment Ministers.

The fragmentation of policies in the Council is partly modified through the participation of other institutions in European decision making processes, in particular the European

[15] Interview with the German MEP Ulrike Rodust, S&D group, Brussels, 15.09.2010

Commission, the European Council and the European Parliament. However, the degree to which this inter-institutional collaboration in fact contributes to an integration of otherwise fragmented policies differs depending on which policy sector actually is concerned. With regard to the CAP it has proved to be extremely difficult to realize any further going steps to integrate its objectives with those of other policy sectors. This is due to the exceptional position, which the CAP has acquired within the EU's broader institutional structure.

As already mentioned, the CAP is the most fully common policy in the EU. Interestingly, this fact has not resulted in a consequent supranationalization of the sector. Decision making takes place mostly at the intergovernmental level and despite majority voting is applied formally, unanimity has remained a principal option as a consequence of the Luxembourg Compromise (Daugbjerg 1999: 421). The European Parliament has until recently only acquired marginal competences in decisions on agricultural policy, because for many decades they had in most cases been taken on the basis of the consultation procedure. A fundamental change has been achieved only in the Lisbon Treaty, which introduced the codecision procedure for the CAP.

Thus, the Agriculture Council is on the one hand the most important institution for the formulation of agricultural policies in the EU and on the other hand it had until 2009 been in the rather comfortable position of not having to share many of its competences with the European Parliament. This extraordinary position of the Agriculture Council is also reflected in the high frequency of its meetings. The European Ministers of Agriculture meet once a month, which is quite often if compared to for instance the Ministers for the Environment, who only meet about five times per year.

Another institutional characteristic contributes to the notion of agricultural exceptionalism. It is related to the preparatory stage of CAP decision making. Whereas with regard to most of the policy sectors Council meetings are prepared within the Committee of Permanent Representatives (COREPER), preparations for the Agriculture Council are taking place within its own exclusive Special Committee on Agriculture (SCA). Thus, even in the preparatory stage the CAP decision making process is institutionally decoupled from the broader structures of European policy making and thus not likely to be confronted with conflicting objectives from other policy areas.

Agricultural exceptionalism is also both reflected and self-reinforced by a particular strong position of the farmer's interest organizations within European politics. Both in the member states and in the EU's decision-making bodies the agricultural sector has since the 1950s managed to establish "inside lobbies", meaning that ministries, parliamentary and other official committees are not only the target of lobbying efforts, but they themselves, rather

than promoting common goods as would be expected from state institutions, tend to act as lobby organizations on behalf of the agricultural sector (Feindt 2007: 382).

The European Commission had originally supported the development of strong agricultural interest associations. The intention had been an interest to stabilize the administration of the CAP, which in its initial phase was lacking a strong, historical grown institutional background at the European level (Daugbjerg 1999: 413). However, the strong position of agricultural networks in European politics has obviously contributed to the sector's successful resistance to fundamental reforms and has continued to do so even after the farmers' electoral strength had declined in later decades following the establishment of the CAP (Daugbjerg 1999: 410; Roederer-Rynning 2003: 6).

Another argument, which likewise focuses on the role of lobby organizations, explains the CAP's institutional inertia by pointing to the strong cohesion of the European farmers' interest groups. During the first decades of European Integration the European association of national farmers' unions (COPA) had a monopoly-like position in representing the farmers' interests. A similar degree of cohesion existed also at the national level, giving for instance the French and German farmers' organizations the possibility to use their respective national ministries and the SCA as exclusive channels to the European decision making arenas. The decisive impact of united interest organizations can be illustrated by a comparison with the situation in the United States, were farmer organizations traditionally are split up in commodity-specific lobby groups and thus are not able to acquire a similar exceptional position for agriculture within the American economy and society as it had been the case in Europe (Skogstad 1998: 480). The monopoly like position of the COPA was not only enhanced by the fact that it represents both the various groups of crop producers (e.g. grain growers, fruit and vegetable producers) and livestock farmers (e.g. cattle, pig and poultry farming). It was additionally underlined by the fact that for several decades no other farmers' interest organizations emerged that would have been able to act as representations for sectoral interests that for instance would arise from size related special interests of small farms etc. Even representatives of other interests that only partly are related to the agricultural sector (e.g. consumer organizations), had as a consequence of the COPA's monopoly-like structures successfully been kept away from the core of the policy network, which has emerged around the CAP (Daugbjerg 1999: 417).

Finally, also the ideational level has to be taken into account when evaluating the forces of inertia that influence CAP decisions. The above described historical and institutional circumstances made it possible for agriculture to achieve a special position within European politics and to protect the sector from being affected by the same ideas and values, which guide developments in other areas of the economy. Exceptionalism has to a certain extent

shifted its position from merely being a consequence of a certain historical constellation to becoming a guiding idea by its own. It helps to prevent the emergence of a critical debate that would question the basic principles of the CAP. Many actors just accept agricultural exceptionalism as a given fact without asking whether it is really justified by good arguments. Instead it is self-reinforced by putting originally second order motives to the centre of argumentation. This is for instance the case, when other functions than just food-production are attributed to the CAP. Thus, it is argued that agriculture is the key sector of the rural economies and therefore has the task to generally stabilize the socioeconomic situation in rural areas. Keeping the country side populated is either taken as a value in itself or even linked to an assumed interest of the society in the conservation of the landscape in its traditional shape. It is then suggested that people and tourists would appreciate the country side more if it is characterized by agricultural activity than if it just would consist of forests and wilderness (Skogstad 1998: 488).

3.1.2. Reasons for change

After having elaborated the main obstacles for changes in the CAP, the second step is now to ask for the reasons behind those reforms, which nonetheless have been taken starting with the MacSharry reforms of 1992. In this context already the observation is striking that the reforms of 1989/1992 can be seen as a turning point. They put an end to three decades of almost complete inertia and gave the starting signal to a lasting process of reforms that is not likely to end within the near future. This paragraph will try to explain why this basic reorientation was at all possible to emerge in the years around 1990. It will then discuss, whether the same driving forces also were responsible for the next major reform steps of the years 2000/2003. Finally, it will be assessed to which extent environmental concerns have played a role in the CAP reforms. Thus, it should become clearer how likely it is, that marine protection requirements significantly impact the formulation of agricultural policies in Europe.
The reforms of 1989/1992 marked the beginning of a basic reorientation of the CAP, even though these measures did not fundamentally change all of its principals. The main innovations were the introduction of extensification and set-aside programs, the shift of financial support for farmers from merely subsidizing production to including area related direct payments and the establishment of agri-environment programs. These reforms were only partly triggered by challenges that directly are related to the agricultural sector. Environmental concerns only played a marginal role. The most important reason instead resulted from global trade considerations. Here, the basic conditions changed, since in 1986 agricultural products were included in the trade negotiations of the GATT. Consequently, it

was not longer possible for the EU to adhere to a liberal trade policy for industrial products while at the same time calling for protectionism in the agricultural sector. In order not to lose access to world markets, the decisive pressure in this situation came from the German industry. Its representatives urged the Federal Government to push for CAP reforms, which in turn should pave the way for the achievement of a liberal global trade regime under the Uruguay Round of the GATT (Feindt 2008: 203; Garzon 2006: 68).

Apart from this main pressure, which was caused by global trade considerations, increasing concerns also emerged from negative internal effects of the CAP, in particular regarding the budget and the problem of overproduction. The financial aspects had become more urgent during the 1980s as a consequence of the Mediterranean enlargements. They sharpened the contrast between net payers and net consumers within the EU due to the economic reliance on agriculture in the new southern member states (Roederer-Rynning 2003: 10). Moreover, the completion of the Single Market, envisaged for 1992, was intended to be accompanied by the introduction of a European cohesion policy, which put further pressure on the EU's budget.

However, the finally agreed reforms did not bring about any financial savings. They only resulted in a reorganization of agricultural expenditure through the introduction of some liberal elements to the CAP, thus making it more compatible with the GATT requirements. This fact underlines the impression that global trade had been the main trigger for the reforms (Garzon 2006: 73). Nevertheless, the budget problems should not be underestimated as they served as an additional driving force that contributed to increase the readiness of European actors to at all start the process of rethinking agriculture. A principal understanding that something has to be done was prevailing not only among politicians but also in the wider public, were agricultural overproduction was increasingly scandalized and regarded as a symptom of basic failures of the CAP (Feindt 2007: 397).

The second and, as far as the integration of environmental objectives into the CAP are concerned, hitherto most far reaching reform step, known as the Luxembourg Declarations, was taken in 2000/2003. The important innovation was the introduction of cross-compliance and modulation as tools that obligatory connect a certain degree of direct payments to the fulfillment of other tasks than agricultural production, among others environmental protection. In contrast to the MacSharry reforms of 1992 there was not one main trigger (i.e. global trade considerations) but instead a broad variety of driving forces that urgently required the development of a new basis for Europe's agricultural sector. Budgetary pressures now played a more decisive role, given the expenses that were expected to arise from the upcoming EU's Eastern enlargement and in particular from the extension of the CAP to the new member states.

At the same time, the overall political constellation differed a lot from the traditional patterns that so far had contributed to secure core farming lobby groups a strong impact on decision making processes. Quite extraordinary was the situation in Germany, where since 1998 a red-green government was in power. For the first time the Green Party took over the Ministry for Agriculture, thus challenging the traditional alliance between the German Farmers' Association (DBV) and the government. The position of the Minister for Agriculture vis-à-vis the farmers' interest groups was strengthened through the critical public debate, which emerged as a consequence of the drastic experiences of the BSE crisis. Together with an already existing basic mistrust about the farming sector's readiness to serve environmental needs it moved the public debate towards an attitude that was in favor of introducing more binding environmental protective and quality assurance instruments into the CAP. This attitude was also shared by the new member states Austria, Sweden and Finland, which acceded the EU in 1995 and now for the first time had the opportunity to exert influence on the future development of the CAP.

On the ideational level the 2000/2003 reforms can additionally be explained by the then overall presence of liberalism and market orientation as guiding principles in political and economic discourses. There was a strong readiness to reorganize every functional sector of the society in a way that is subordinated to the rules of market economy. Thus, for many actors it seemed only logical to reconsider even agriculture from that perspective (Feindt 2007: 400). To a certain extent, this attitude was also supported by the farmers. The recently introduced decoupling of public payments from subsidizing production to providing direct payments had led to an identity crisis for many farmers. They thereby became aware, that they partly just are recipients of income transfers from the rest of the society without in return giving back anything to the public. This was regarded as a situation that was conflicting with the actual self perception of many farmers of being self employed entrepreneurs. It is therefore that the idea of linking financial support to the fulfillment of tasks like environmental and nature protection or to the enhancement of food quality met the farmers' interest in reinforcing their image of being paid for the production of goods and services that are valued by the society (Garzon 2006: 153).

To conclude, deliberations on agricultural policy in the EU have since the late 1990s got a much more pluralistic character if compared to previous decades. Increasingly more and different actors and interests have gained access to the decision making process. Both at the European and at the national level the monopoly-like position of the farmers' interest organizations was challenged through the rise of other lobby organizations, for instance those that exclusively represent small farmers' interests. Moreover, commodity specific interests increasingly searched to establish direct contacts to national and European

administrations. In Germany the DBV's unity was additionally challenged as a consequence of unification, which reinforced the discrepancy between competitive large scale farming in Northern Germany and small family farms prevailing in the southern parts of the country.

The tendency of moving away from the traditional corporatist structure of decision making towards a more pluralistic pattern of interest representation is not limited to the various agricultural actors in the narrower sense. Instead, even interests stemming from other policy areas have gained an influential position in debates on agriculture. Here, an important step was taken, when for the first time during the 1990s an alliance was formed that comprises consumer associations, environmental activists and development organizations. The latter's motive for participating was to point to the negative effects of the CAP (i.e. import duties and export subsidies) on the agricultural sector in the developing countries. Through a unified approach this alliance acquired a powerful position in the policy debate and thus contributed to the CAP reforms of 2000/2003 (Garzon 2006: 113).

The broader scale of issues and actors that increasingly are included in debates on the EU's agricultural policy is both reflected and self-reinforced through a gradual decline of the Agricultural Council's privileged position in CAP developments. The Heads of Government have been successful in using the European Council to subordinate agricultural interests to other urgent issues (Feindt 2008: 203; Daugbjerg and Swinbank 2007: 5). Moreover, also the European Parliament has managed to extent its scope of action in CAP decision making even in a situation when still formerly only the consultation procedure was applied. This has been achieved in two ways. On the one hand parliamentary committees have organized hearings on topics related to the CAP reform that helped to improve the integration of non-agricultural interests into the debate. On the other hand the European Parliament has used its regulatory power (i.e. codecision procedure), which it has in other sectors (e.g. food safety and environmental protection) to indirectly strengthen its legislative role also in agricultural policy making (Garzon 2006: 92). In setting up a Committee of Inquiry, whose task it was to investigate the European Commission's role in handling the BSE crisis, the Parliament even managed to force the Commission to make some institutional adjustments (Roederer-Rynning 2003: 21). These measures contributed to an opening of the former "closed circle", in which CAP decision making so far had taken place. Advisory committees to the Commission now are no longer exclusively composed of representatives from the farmers' interest groups but also include experts for environmental protection. Furthermore, the role of the DG Health and Consumer Protection in the preparatory phase of CAP decisions was strengthened (Feindt 2008: 201).

3.1.3. Including marine protection concerns into the Common Agricultural Policy

Despite the described motives and conditions that to a certain extent have facilitated a successful integration of environmental objectives into the CAP there is still much reason to question the EU's actual potential to reorganize the agricultural sector in a way that would ease the pressure on the Baltic Sea's marine environment. Most striking in this respect is the fact, that environmental and in particular marine protection concerns so far have never been a major driving force for any of the described CAP reforms. Instead, other considerations like international trade, budgetary pressures and the farmers' income development have been decisive.

However, some positive trends can be observed as well. Environmental concerns have at least acquired a second order position in influencing CAP developments. From time to time, constellations do occur, which provide opportunities for the inclusion of environmental considerations. Important in this respect is the fact that the frequency with which those constellations emerge has increased as a consequence of the broader and more pluralistic basis on which CAP decisions are made since the late 1990s.

It also seems to be a promising development that the dominance of the Franco-German alliance on CAP decision-making has decreased, while, especially after the 1995 Northern enlargement, new member state alliances have emerged, which challenge the traditional position of agriculture within the EU. The European Council has at the expense of the Agricultural Council acquired a greater role in balancing those conflicting approaches, thus giving non-agricultural interests a chance to intervene on an equal footing and including the consideration of regional specific environmental challenges within the wider European framework.

Related to these developments is another observation. It emphasizes the effects of policy feedback on the way the CAP has evolved since the MacSharry reforms of 1992. The notion of policy feedback modifies the theorem of path dependency in pointing to the unintended consequences that initial minor moves may have on subsequent developments within the same policy field. In the actual case the introduction of agri-environment schemes and set-aside programs might have triggered that kind of self-reinforcing push factors (Garzon 2006: 149). The former obviously made a contribution to at all bring agriculture into the focus of environmental debates and thus to raise expectations regarding the further development of measures that in a more fundamental way would address the CAP's harmful effects on the environment. On the other hand, the set-aside programs played a role in drawing the farmers' attention to the question, which kind of service they actually deliver in return of the money that they get from the society. These two unintended consequences of the 1989/1992

reforms can at least to a certain extent be made responsible for the fact that changing the CAP has become a process with open end rather than a short and already completed episode. This process may even lead to new opportunities for a more consequent integration of marine protection interests into the CAP.

3.2. Structural weaknesses of the EU's environmental policy for the Baltic Sea

3.2.1. The lack of awareness at the European level

The EU's reluctance to develop efficient protection measures for the Baltic Sea can partly be explained by a lack of awareness at the European level and by its failure to acknowledge the sea's specific susceptibility to environmental damages. A variety of factors contribute to this notion.

Basically, there had been a delay in putting the marine environment on the EU's agenda if compared to the consideration of other environmental challenges as for instance air pollution. Only after the year 2000 a European integrated maritime policy was developed and subsequently became a policy field by its own. A stronger awareness of the marine environment as an issue that needs to be addressed at the European level was at that time triggered by serious oil-tanker catastrophes which had harmful consequences along the European and especially the French coastline at the Atlantic. At the same time the Prime Minister of Portugal, Manuel Barroso, who in 2004 became President of the European Commission, was personally strongly convinced of the maritime dimension's importance and in particular its inherent potential in terms of economic growth which in his view only could adequately be exploited by developing a specific maritime policy at the community level.[16]

Thus, since the beginning, the EU's maritime policy was geographically biased as it was developed from a southwest European, i.e. Atlantic and Mediterranean perspective. This situation has been reinforced by the fact that the majority of staff positions related to marine protection within the European Commission has been occupied by officials of southern European origin. For instance none of the current officials within the DG Environment's Marine Unit, which normally would be expected to be the most central actor in putting Baltic Sea protection on the European agenda, has a personal background in any of the Baltic Sea states.

[16] Interviews with officials from the European Commission, 15.09.2010 and the Hanse-Office (representation of the Federal States of Hamburg and Schleswig-Holstein to the European Union), 01.12.2009

Even beyond the situation in the DG Environment there is a widespread lack of adequate knowledge about the Baltic Sea throughout the European Commission's various Directorates-General. This has lead to a distorted perception about the real state of the Baltic Sea's environment. Paradoxically, the Baltic Sea Region seems to suffer from the positive image, which Northern Europe generally has acquired within the area of environmental protection. This positive reputation has facilitated the emergence of a false impression among European policy makers, who tend to believe that the Baltic Sea is one of the cleanest marine waters in Europe instead of acknowledging, that just the contrary is correct. But even in those cases, where policy makers know about the real environmental situation of the Baltic Sea, they do not naturally draw the conclusion that much priority should be given to action at the European level. This has again to do with the positive reputation of Northern European governance structures and here in particular of the Helsinki Commission, which is very often pointed out as a role model for cooperation in marine protection at a regional seas level. Consequently, there is a widespread impression that the Baltic Sea states must be very well prepared to deal with any regional specific environmental problems on their own instead of needing the European Union to push forward protective actions for the Baltic Sea.

In contrast to the positive image of governance structures in Northern Europe there is a rather negative perception of the regional cooperation capacities in the Mediterranean and Black Sea regions. Indeed, those latter areas suffer from a much greater heterogeneity of participating states with more non-EU-member countries involved and more potentially conflictual dividing-lines if compared with the situation in the Baltic Sea region. Together with the fact that officials who deal with maritime issues within the European Commission often have a personal background in Southern Europe this leads to the consequence that the development of marine protection policies at the European level often takes place against the background of those apparently more challenging situations in the marine regions of Southern and Western Europe. In contrast, the Baltic Sea is not perceived as an ecosystem that needs much particular attention.[17]

The lack of awareness for the Baltic Sea's serious environmental situation is further reinforced by the conditions for political deliberations that characterize the work of the European Commission. If seen from a Brussels perspective, the Baltic Sea region often is perceived as being located within a rather remote corner of Europe.[18] This does not only result in a reduced awareness for the region but also has consequences in very practical

[17] Interviews with officials from the European Commission, 07.09.2010, 15.09.2010 and 20.09.2010

[18] An official working at the Brussels based West Finland European Office complained to the author that still in 2005 the DG Transport and Energy was using maps that were cut just north of Helsinki, Interview 02.12.2009.

terms. The remoteness is limiting the opportunities of environmental activists from the Baltic Sea region to make their voices heard in European politics. If for instance workshops are arranged in Brussels with the intention to influence decision making processes in European maritime policies, it is easier for NGO representatives from Belgium and the surrounding countries (e.g. from Paris, Amsterdam or London) to participate than it is for those who are residing in the Baltic Sea region, who would have to spend much more time and money for a trip to Brussels.[19] Thus it is more likely that environmental concerns which are represented by the major European NGOs with headquarters in and around Brussels and which are of relevance within a pan-European perspective are being considered within European policy making than those that are mainly relevant for a particular sub-region.

In general, representing the specific environmental interests of the Baltic Sea in Brussels at NGO-level does not seem to work in a perfect way. At the governmental and level the environmental NGO-sector is well developed in most of the Baltic Sea states and enjoys high reputation. However, the functional link to the European level is not strong enough. Activities are very much targeted towards national or macro-regional (HELCOM) actors, rather than seeking channels to influence core European actors, e.g. the European Commission. There is an albeit invisible division line between NGO activities that take place at a pan-European level, directed to the central actors in Brussels and intended to address environmental problems that are relevant within an all European context and those who more or less exclusively focus on the situation of the Baltic Sea.

Among those all-European environmental organizations with offices in Brussels there are those who are very prominent in the public, e.g. Greenpeace, WWF or Friends of the Earth. They frequently manage to get access to the media and thus have an important role in shaping awareness for urgent challenges as for instance climate change, accidental pollution (e.g. oil spills from tankers or oil-platforms) or threats related to Genetic Modified Food.[20]

[19] Interview with an official from the European Commission, 07.09.2010

[20] Among the press releases published by Greenpeace ca. 95% of those related to agriculture are contributing to the debate on GMOs. Moreover, 80% of the organization's press releases, which are related to maritime policies, are dealing with fishery issues. In contrast, marine eutrophication is almost a non-issue in the publications by Greenpeace. One exemption is the report "The Baltic Sea: A Roadmap to Recovery" published in 2006 to influence the debate on the emerging EU's Marine Strategy Directive. Here, eutrophication is mentioned as one of the major threats to the Baltic Sea's marine environment. However, at no point throughout the 28 pages of the brochure the EU's Common Agricultural Policy is mentioned as the main cause of the problem. Instead, topics like fishing, shipping, oil and gas extraction or the establishment of marine reserves are discussed extensively. Greenpeace thus failed to point out one of the major weaknesses of the emerging Marine Strategy Directive namely the absence of an explicit requirement to include marine protection concerns into future CAP reforms. See http://www.greenpeace.org/international/Global/international/planet-2/report/2006/8/baltic-sea-report.pdf

Thus it is relatively easy to place those kinds of concerns high on the EU's political agenda. In contrast the eutrophication of marine waters is not a topic, which is pushed forward by those prominent NGOs. In not doing so they are just reflecting predominant views in most of the member states, where eutrophication is neither perceived as a relevant issue nor something which is likely to make the headlines.

The "Flash Eurobarometer on water" (European Commission 2009b) analyzed the attitudes towards water quality issues by people in all EU-member countries in a comparative perspective. The survey revealed some interesting insights regarding awareness and knowledge about the problem of marine eutrophication. First of all there are contrasting views in Europe regarding the question, which kind of water-related problems generally are considered the most serious ones. Whereas the public opinion in southern Member States strongly focuses on the problem of water shortage, this is nearly not an issue at all in the northern Member States. In contrast, if citizens were asked whether they perceive algae growth as a main threat to the water environment in their respective countries it turned out that there is a clear dividing line between the European north and south. According to the survey, people in Finland and Sweden are most concerned about algae growth, with 78% resp. 65% answering that they see this as the most urgent environmental threat related to water. In contrast, people who live around the Mediterranean and Black Sea are much less worried about that issue. The Member States whose populations are least concerned are Spain (9%), Bulgaria (8%) and at the end Cyprus with only 7% of its people pointing to algae growth as the main threat to their countries' water environment.

The survey revealed also another aspect that is important when estimating the question whether there is a chance to activate European public pressure with the aim of introducing effective anti-eutrophication policies. People in Europe where asked about which causes they would consider to be the most relevant for water pollution. With the exception of Ireland, Denmark, Luxembourg, France and Slovenia, in all other EU-Member States including the remaining Baltic Sea states people where of the opinion that industry would be the largest single factor that impact water quality, thus relegating agriculture to the second place. Considering the fact that actually agriculture is by far the most important single reason for water pollution and that this goes in particular for the Baltic Sea this is a rather difficult starting point when mobilizing public support for the development of well-targeted abatement measures.

The notion of a non appropriate representation of marine eutrophication by environmental NGOs shall be further illustrated by some concrete examples. At the European level *Seas at Risk* has specialized on lobbying for marine protection. Through its office in Brussels it has a realistic chance to impact decision making processes within the EU. However, one of the

organization's policy officers openly admitted in an e-mail, that "eutrophication issues, to be honest, are not part of Seas at Risk's expertise."[21] Instead, she referred to the expertise and activities of the Coalition Clean Baltic, which as an umbrella organization of the various environmental organizations within the Baltic Sea region has specialized on the sea's particular challenges and especially on the fight against Baltic Sea eutrophication. Located in Uppsala, the Coalition Clean Baltic indeed plays a significant role in deliberations on marine protection policies around the Baltic Sea and within the HELCOM framework. However, the organization is naturally not sufficiently involved in policy making processes at EU-level, as this would require a stronger presence in Brussels.

The unbalanced consideration of the Baltic Sea environment in Brussels at NGO-level can be exemplified by the way in which position papers are presented. Various environmental NGOs have contributed with position papers to the consultation process on the 2013 reform of the CAP. However, none of them has referred to the harmful consequences that agriculture has on the particular sensitive marine environment of the Baltic Sea. No contribution has been delivered to the consultation by Seas at Risk.[22]

As a consequence of the fact that agriculture obviously is not perceived as one major reason for marine pollution from the major European NGOs' point of view[23], neither Seas at Risk nor the Coalition Clean Baltic had been included in the preparation of a common NGO "Proposal for a new EU Common Agricultural Policy", which in 2009 was presented by five major European environmental NGOs (European Environmental Bureau 2009).[24] Consequently, there is no particular reference in the paper to the harmful effects of the CAP on marine waters in its current state, although this could have added additional weight to the postulated reform needs. Instead, the paper only takes up water quality concerns to the extent to which they geographically also are covered in the Water Framework Directive. Thus, it calls for including the objective "to contribute to achieving 'good status' in European freshwater systems and adjacent coastal waters" when suggesting the new CAP principles. It does not,

[21] E-Mail to the author on 19.11.2009

[22] The positon papers are made available for the public by the European Commission on: http://ec.europa.eu/agriculture/cap-post-2013/debate/contributions/index_en.htm#contributor2

[23] In a press release commenting on the European Council's decision in 2010 to halt biodiversity loss by 2020, Seas at Risks expressed its concern that the target only could be reached if the biodiversity protection requirement would be integrated into the EU's sectoral policies. With regard to marine ecosystems fisheries, transport and spatial planning were mentioned explicitly. In contrast, the negative impact of the Common Agricultural Policy was not mentioned at all in the NGO's publication. See http://www.seas-at-risk.org/news_n2.php?page=299

[24] The five organizations are Bird Life International, European Environmental Bureau, European Forum on Nature Conservation and Pastoralism, International Federation of Organic Agriculture Movements and WWF (World Wide Fund for Nature).

however, go beyond the rather narrow concept of "coastal waters"[25] as it would have been the case if a contribution from the CAP to achieve 'good status' for *marine waters in the open sea* would have been required as well. The same concept of narrowing down marine waters to only comprising coastal waters is once again applied in the position paper, when it calls for the extension of cross-compliance rules to additional legal acts. Here, the paper indeed mentions among others the Water Framework Directive, but no reference at all is made to the Marine Strategy Directive.[26]

Apparently, the perception of those NGOs is limited to coastal waters, at least as far as marine waters in the context of agriculture are concerned. From a pan-European perspective this is quite understandable, since marine eutrophication in the case of the Mediterranean Sea, the Black Sea, the Atlantic and the North Sea in fact mainly threatens the coastal parts of those seas. The Baltic Sea is the only case in Europe, in which also the open sea massively suffers from eutrophication.

3.2.2. The unbalanced discourse on eutrophication

Apart from the difficulties to raise awareness for the regional specific environmental problems of the Baltic Sea, the rather complicated ecologic nature of the eutrophication issue causes additional complications at the discursive level. Those discursive complications obviously affect the possibilities to combat eutrophication mainly in two ways. First, it is the complexity of factors that are responsible for marine eutrophication, which constraints the opportunity to address the main sources of pollution in a targeted manner and to develop stringent abatement strategies. One negative consequence could be that actors, in the absence of clarity about the main causes for eutrophication, try to manipulate public debates and easily succeed in diverting suspicion that they might belong to the main polluters from themselves to other actors in public opinion. Second, in competing for public attention, marine eutrophication has particular difficulties to attain an appropriate position in political deliberations. Other actual environmental threats e.g. climate change or oil spills from tank ships or drilling platforms are more likely to become "popular" issues in public debates. This may not only lead to an insufficient engagement for the development of anti-eutrophication measures but there even may be incidents in which strategies to combat those more

[25] Coastal waters, in the Water Framework Directive's definition, only comprise marine water up to a distance of one nautical mile, i.e. 1,852 kilometer, from the coast.

[26] The EEB's position of not considering the inclusion of the Water Framework Directive into the cross-compliance requirements was confirmed in an interview with the EEB's policy officer for agriculture and bioenergy in Brussels on 16.09.2010.

"popular" environmental threats even result in adverse effects with regard to marine eutrophication.

As far as the first obstacle i.e. the complexity of causes for eutrophication is concerned one basic problem here is related to the fact that scientists are divided into two camps on the issue whether excessive loads of both nitrates and phosphates equally are responsible for Baltic Sea eutrophication or if mainly or even solely phosphate discharges should be addressed when developing abatement measures. The discussion has most of all affected debates and policy choices in Sweden and even determines the Swedish role and thus bargaining processes in international arenas e.g. HELCOM and the EU. At the forefronts of the underlying academic dispute have since years been researchers from the Universities of Gothenburg and Stockholm respectively. Whereas the former almost exclusively have stressed the need to reduce phosphate discharges and some of them even claimed that any technical upgrades of waste water treatment plants aiming to achieve higher nitrogen removals constitute nothing more than an enormous waste of tax payer's money, the latter have argued for the need to impose reduction measures that address both nitrate and phosphate discharges equally (Fall 2006: 38).[27] Obviously this split in the Swedish academic debate has made it difficult for politicians to develop a target oriented approach in anti-eutrophication policies. Although the Swedish government has not exclusively adopted the view of those researchers who argue for a concentration on phosphate reduction measures, the overall Swedish approach to the problem is still biased towards a stronger consideration of phosphates while rather neglecting the impact of nitrates.

The Swedish way of prioritizing the fight against phosphate discharges can not only be explained by the presence of some researchers in the country who are convinced that this approach is more firmly supported by results of scientific research. There are other, rather societal factors that support this direction. As it seems to be the case in all European countries, also for Sweden it is more difficult to address non-point (i.e. mainly agrarian) pollution sources than point sources (e.g. urban waste water or industry). However, the

[27] The arguments of the "Gothenburg fraction" have additionally been enforced by research results according to which in the central parts of the Baltic Sea the amount of nitrogen loads stemming from nitrogen-fixing cyanobacteria is nearly as high as anthropogenic loads, thus making the reduction of the latter rather meaningless. What is more, the Uppsala based researchers Håkonsson and Bryhn (2008) claim that phosphate loads that are held responsible for the cyanobacteria blooms during summer times are not a consequence of phosphate releases from the sediments, triggered by oxygen depletion in bottom waters, which has been the hitherto accepted scientific doctrine. Instead they argue that the high phosphate concentrations in the Baltic Sea's marine waters are to a large extent caused by the natural phenomenon of land uplift and that they consequently are not anthropogenic. If that would be the case, apart from some efforts to reduce phosphate discharges there would not be much reasons left that could legitimize stricter measures aiming at the reduction of nitrogen discharges to the Baltic Sea.

natural conditions for the Nordic country are even more complicated. The condition of the Swedish soil does not allow the substitution of mineral fertilizers based on nitrates by other substances, because there is already a high concentration of cadmium in the soil by nature. Replacing nitrate based fertilizers by cadmium therefore does not constitute a possible alternative for farmers, in case that Sweden would introduce stricter legislation on nitrates.[28] It thus may be more convenient for national politicians to adopt the "Gothenburg researchers" point of view according to which it anyway would not make much sense to address nitrates discharges in the fight against Baltic Sea eutrophication.

The Swedish bias towards phosphate reduction measures is additionally supported by the fact that – seen superficially – cyanobacterial blooms are indeed supported by a particular condition of marine waters, in which high concentrations of phosphates and at the same time low concentrations of nitrates prevail (Nausch et.al. 2009: 46). This fact may give rise to a particular popular perception according to which addressing phosphate discharges, while at the same time rather neglecting the impact of nitrates, would be an easy and quick way to tackle the most irritating and directly felt consequences of Baltic Sea eutrophication, namely beaches and bathing waters polluted by algae blooms in summer time.[29] In contrast, the way in which nitrate loads contribute to Baltic Sea eutrophication including their responsibility for the surplus of phosphates during summer is much more complex and not easy to understand. It might therefore be much easier for politicians to explain to the public the need to introduce phosphate reduction measures than to call for actions aiming at addressing nitrate discharges.[30]

The situation in Denmark and Germany is just the contrary. Baltic Sea eutrophication here is not so much perceived as a problem of cyanobacterial blooms that threaten beaches and bathing water quality. Instead, if at all noticed, eutrophication appears mainly as a problem of oxygen depletion in deep water layers. It is then generally explained by the excess supply of nutrients in the Baltic Sea's marine waters without emphasizing phosphates in particular. In fact, some actors in Germany right now even argue for a stronger focus on nitrate reduction

[28] Interview with a staff member of the Swedish Society for Nature Conservation, Stockholm, 17.06.2010

[29] This one-dimensional approach in combating eutrophication in the sense of exclusively addressing phosphates is reflected in an article series of a leading Swedish online newspaper (SvD) during summer 2010. The articles repeatedly stress the need to reduce phosphate loads in marine waters without even mentioning nitrates. To reach immediate results rather unconventional methods are suggested e.g. the idea to introduce chemicals into bottom waters that could dissolve the phosphates out of the water and bind them on the sea bed. See Selin (2010) and Baltscheffsky (2010).

[30] Interview with a staff member of the Swedish Society for Nature Conservation, Stockholm, 17.06.2010

measures when considering coming priorities in the fight against Baltic Sea eutrophication.[31] The underlying idea is that great success has already been achieved with regard to the reduction of phosphate discharges during the last decades, mainly due to improved waste water treatment capabilities at point sources. In contrast, less progress has been made as far as the reduction of nitrates is concerned. Thus, as long as one perceives it as important to address both nutrients in a somehow balanced way, at the moment it would make sense to put a stronger emphasis on nitrate reduction measures.

These particular natural and societal factors that determine the perception of Baltic Sea eutrophication differently in individual countries apparently impact the elaboration of protection policies. For instance, when implementing the Nitrate Directive, Sweden has been quite reluctant to designate nitrate vulnerable zones (NVZ). In contrast to Denmark, Germany, Finland and Lithuania,[32] who all have chosen to designate their whole territory as an NVZ, Sweden initially only designated 9% and increased this share until 2007 to 15% of its territory only due to pressure by the European Commission (IEEP 2007: 14). A principal reluctance to acknowledge the harmful impact of nitrates discharges can also be constituted with regard to the implementation of the Urban Waste Water Directive. Here, Sweden and Finland have several times been criticized by the EU for not fulfilling its requirements adequately. In 2006 both countries were even taken to the European Court of Justice because of their failure to systematically remove nitrogen when treating the waste water of inland cities. Environment Commissioner Stavros Dimas commented on this by saying "Finland and Sweden are rightly concerned about the state of the Baltic Sea, but they can help to make it healthier by improving their own waste water treatment. Indeed, European law requires this" (European Commission 2006b). Once again in 2010 a first warning letter was sent to Sweden and Finland by the European Commission accusing the two Nordic member states for not fully complying with the Urban Waste Water Directive (European Commission 2010a).

Sweden may have some plausible arguments for its reluctance to consequently remove nitrogen in waste water treatment plants. It argues that such removal is not necessary in inland areas far away from the coast, because of the retention capabilities of the rivers, which largely prevent those nitrates from reaching the Baltic Sea. However, as the above mentioned statement by the Environment Commissioner indicates, Sweden risks to get a credibility problem at the European level as long as it does not fully comply with every single

[31] Interview with a staff member of the German Advisory Council on the Environment (SRU), Berlin, 24.11.2010

[32] Lithuania has in fact only designated 91% of its territory, but the national Action Program is targeting the whole country.

regulation, which has been developed with the intention to combat marine eutrophication. Considering the fact, that Sweden otherwise is the member state which is most actively pushing the European Union to acknowledge the problem of Baltic Sea eutrophication, such a weakening of the Swedish position could be seen as particular detrimental to this overall political struggle.[33] Moreover, the discrepancies related to the perception of the problem and to the assessment of the various possible counter strategies that prevail among those EU-member states, who otherwise suffer jointly from marine eutrophication, are likely to negatively affect their potential to set up an influential pressure group with the aim of lobbying for stricter protection standards for the Baltic Sea in Brussels.[34] Such a negative effect played for instance a role during Council deliberations on the European Commission's draft proposal for the Marine Strategy Directive. Among the delegations from the EU's Baltic Sea member states, only the one from German strongly emphasized in a written statement, which was distributed prior to the negotiations in the Council, the need to address the Common Agricultural Policy within the new directive. If realized, such a passage could have become an important tool in addressing the most important source of nitrogen discharges to the Baltic Sea. However, the idea was not backed by corresponding formulations in the otherwise very ambitious statement by the Swedish delegation, let alone by those from the other Baltic Sea states (Council of the European Union 2006a).

Coming back to the potential consequences that may arise from the complexity of causes leading to marine eutrophication, another notion has to be taken into consideration. Since it is very difficult to exactly explain the causes and to localize the responsibility for the problem of excess nutrient supply, actors may easily manipulate public deliberations on it. Thus, in order to avoid the implementation of costly abatement measures those polluters that contribute most to nutrient discharges to the Baltic Sea could be tempted to try to manipulate political deliberations in a way that would shift the burden to other polluters even if those contribute to a much lesser extent to nutrient discharges.

Such a strategy may even get support by politicians. Having primarily in mind the coming elections, policy making may be guided most of all by the short-term interest of gaining support from the voters. Thus, in order to demonstrate their determination to tackle eutrophication, politicians may be tempted to first of all address those pollution sources

[33] The risk that Sweden could lose credibility as a determined actor against eutrophication is implicitly expressed also in a reaction of the German WWF representative Jochen Lamp on the abolition of the Swedish national tax on nitrogen fertilizers in 2010: "It is irresponsible if those Baltic Sea states, who on the one hand have decided ambitious goals to stop nutrient discharges, on the other hand fuel overfertilization." Quotation from http://www.proplanta.de/Agrar-Nachrichten/Umwelt/Riesige-Blaualgenschicht-raubt-der-Ostsee-Sauerstoff_article1279805421.html

[34] Interview with a staff member of the Coalition Clean Baltic, Stockholm, 17.06.2010

which either have the reputation of being responsible for the problem or which are relatively easy to tackle or which do not have the means to reject inadequate accusations. If such kind of rather symbolic measures is sufficient to satisfy the voters' demand for action, then only limited incentives remain to address the more serious pollution sources that are really responsible for the problem.

A good illustration of this observation is provided by the debate on whether a ban on phosphates in detergents could be an effective instrument to combat Baltic Sea eutrophication. As already mentioned, the "Flash Eurobarometer on water" (European Commission 2009b) revealed that with the exception of Denmark a majority of respondents in all other EU member states around the Baltic Sea wrongly is of the opinion that industry would be the largest single source for marine pollution. Against this background politicians have strong incentives to address industrial pollution sources as they can expect these measures to be the most popular ones. The question, whether they also are the most effective ones is then only of secondary importance.

Calling for a ban on phosphates in detergents constitutes a quite comfortable move that helps politicians to achieve a pro-active, rather than defensive image in the context of combating Baltic Sea eutrophication.[35] At the same time for farmers' interest groups it could serve as a strategy aiming to shift away responsibility from the agricultural sector in public perception. The notion that the idea of putting a ban on phosphates in detergents is to a large extent motivated by the interest to single out one "popular" pollution source is underlined by the fact that only household laundry detergents used in private households are intended to be addressed by such regulations, whereas neither professional detergents nor those used in automatic dishwashers are covered.[36] Thus, it seems to be an ideal opportunity to show action in an area which directly interferes with the consumer's reality of daily life. From the consumers' perspective the problem seems to be solved with the ban on household laundry detergents. He usually will not be aware of the fact that detergents used for automatic dishwashers let alone those used for professional purposes, i.e. industrial laundries, are not covered by the legislation. Thus, a popular perception might be that regulating phosphates in household laundry detergents constitutes huge progress for environmental protection (Köhler 2006: 25) and that consequently politicians must be praised for doing a great job.

[35] Interviews with an official from the European Commission, 16.09.2010 and a representative from the CEEP (Centre Européen d'Etudes sur les Polyphosphates), 10.09.2010

[36] See for instance the European Commission's recent proposal for an amendment to the regulation on detergents regarding the use of phosphates in household detergents (European Commission 2010b).

However, the actual contribution, which the introduction of phosphate free household laundry detergents can make to the fight against marine eutrophication is rather disproportionate to the importance of the issue in political deliberations. There are among others also historic reasons for that. In the 1980s, when the eutrophication of both inland and marine waters started to become a serious concern throughout Europe the call for a ban on phosphates in detergents in fact constituted a reasonable short-term strategy. As a result, several European countries e.g. Italy, Germany, Belgium and the Netherlands subsequently adopted legislation to reduce or ban phosphates in detergents. However, it has to be taken into consideration that pollution of waste water in those years constituted a much greater threat to the environment than today. This is due to the fact that waste water treatment plants in Europe up to the 1990s were far less effective than today. Thus, rather than the stricter legislation on detergents, the technical upgrading of WWTPs which followed the 1991 adopted Urban Waste Water Directive has during the decades that followed been decisive for the major quality improvement of many surface waters throughout Europe.

However, due to the biased public perception and to the impact of sector specific interests on political debates, this improvement, at least as far as tackling eutrophication is concerned, is often associated mostly with the positive consequences of the detergent legislation. On the other hand, the awareness for the impact of improved waste water treatment is rather underemphasized. This is in sharp contrast to the actual relation between causes and effects. In fact, research has proved that rather the contrary is right. For instance a report by the European Commission concerning the use of phosphates in detergents clearly explains that waste water treatment in line with European law is a more promising way to address phosphate discharges then introducing a ban on phosphates in detergents (European Commission 2007b: 10). This argument is indeed plausible when considering the fact that detergent phosphates only to a minor degree contribute to the total phosphate inputs to sewage waters, whereas the majority stems from human excrements and food wastes (CEEP 2007). Thus, in the interest of combating eutrophication it is absolutely necessary to include phosphate removal in waste water treatment anyway, regardless whether any specific legislation on laundry detergents is in place or not.

Notwithstanding, there is still some reason to consider detergent legislation a possible tool in the context of water protection policies. It could offer an opportunity to address phosphate pollution which is not (yet) covered by measures under the Urban Waste Water Directive e.g. sewage from small settlements or to serve as an immediate solution during the transition period in the EU's new member states until the implementation of the directive will be completed there. However, it should be carefully considered that replacing phosphates in detergents by alternative substances may imply other risks for water quality and human

health (European Commission 2007b: 8). From a general environmental perspective the optimal solution would therefore be to concentrate restrictions on phosphates in detergents to those countries and regions in Europe that are particularly sensitive to eutrophication.[37] However, from an economic point of view such a solution could create new problems as this could lead to a distortion of the Single Market approach. This is also the reason why the detergents industry's main interest organization A.S.I.E. is supporting an EU-wide phasing-out of phosphates in household laundry detergents (A.I.S.E. 2008).

The most striking observation with regard to the whole debate about phosphates in detergents is the fact that this issue constitutes almost the only case within deliberations on European anti-eutrophication policies, in which a profound discussion is going on at all. In contrast, those sectors, which bear the main responsibility for eutrophication are – if at all – only marginally included in the debate. This goes for the energy and traffic sectors including shipping, but in particular for agriculture. Despite the fact that environmental organizations repeatedly have pointed to the latter sector's pollution effects, e.g. in the context of the forthcoming CAP reform, such kind of accusations usually only come from one direction and do not lead to a proper debate including an exchange of arguments. The farmers' interest organizations – at least at the European level – have so far successfully avoided to be drawn into public deliberations on their sector's responsibility for marine eutrophication. The fact, that none of their publications, e.g. position papers, deal with this issue indicates that they do not even consider to admit, that agriculture plays a role at all within the context of marine eutrophication.

This is in sharp contrast to the lively debate which is going on regarding the impact of phosphates from detergents on water pollution. Here all stakeholders are involved including politicians, scientists, environmental organizations and first and foremost the detergents industry itself. Numerous publications including position papers, scientific studies and regular newsletters[38] extensively deal with the problem of eutrophication. Not surprisingly, those of them written by industrial representatives largely reflect a defensive attitude. While downplaying the contribution of phosphates from detergents to eutrophication they instead emphasize the role of other factors. These could be natural and ecosystemic aspects, e.g. "changes in river morphology", "climate" or "fish populations" (CEEP 2007a) or sources other than detergents that lead to an excess supply of nutrients such as agriculture or insufficient waste water treatment. In illustrating the relatively small impact from detergents on

[37] This would for instance constitute a highly effective strategy to reduce phosphorus pollution within the Danube River Basin, see Shepherd (2009).

[38] See for instance the CEEP's SCOPE NEWSLETTER on http://www.ceep-phosphates.org/Files/Newsletter/Scope%20Newsletter%2076.pdf

eutrophication the SCOPE Newsletter, published by an organization, which represents the European phosphates industry, states that

"…whereas phosphorus removal in sewage works or significant reductions in non-point phosphorus loadings (agriculture) would result in reductions in chlorophyll concentrations perceptible by the public as water quality improvements, the P load reduction resulting from a detergent ban would not result in a perceptible change in the eutrophication-related water quality (CEEP 2007b: 5)"

Various articles in the SCOPE Newsletter thoroughly discuss measures that could be suitable to mitigate nutrient discharges. With regard to improvements in waste water treatment the European Commission's role in putting legal pressure on member states in order to ensure compliance with European law – especially regarding the implementation of the Directives on Nitrates and Urban Waste Water and the Water Framework Directive – is emphasized repeatedly (CEEP 2003: 2, CEEP 2007c: 3, CEEP 2010: 2). Likewise the strict interpretation of environmental law in the interest of water protection by the European Court of Justice is highlighted (CEEP 2005: 3). With regard to the agricultural sector, other articles analyze the potential benefits of establishing buffer strips on fields along water courses in order to prevent nutrient runoffs (CEEP 2007b: 7). It is interesting to note, that representatives of the detergent industry through some of these publications even try to change the suspected bad image of phosphates. For instance, the introduction to the CEEP's brochure "Phospates: a good environmental solution for detergents" CEEP (2007a) argues that

"Phosphates are irreplaceable for human health and all living organisms, essential in bones, teeth, genes, proteins, biological cycling of energy, photosynthesis … The phosphate used in detergents (STPP) is safe, indeed it is authorized for, and widely used in, human food preparations."

Moreover, the recycalbility[39] of phosphates used in detergents is stressed:

"Phosphates can be recovered from sewage and recycled, either back into industrial products (full scale installations are already doing this several countries in Europe, in Canada, in Japan), or into food production (around half of the phosphates in sewage in Europe are currently recycled through agriculture). They are thus the only recyclable detergent ingredient."

[39] The idea of recycling phosphates is however not only motivated by environmental considerations. It may increasingly become also an important measure to cope with the problem of dwindling phosphate resources (European Commission 2009c).

In contrast to those "good" characteristics of phosphates another article in the SCOPE Newsletter aims at bringing the negative environmental aspects of nitrates into focus. The underlying intention is obviously once again to shift away the responsibility for water pollution from the detergent industry to the agricultural sector:

"Natural biological nitrogen fixing and denitrification mechanisms are approximately balanced, but man has massively altered this situation with the development of mineral nitrogen fertilizer synthesis, in particular with a tenfold increase since the 1960's. Mineral fertilizer synthesis now fixes around 90 million tons of N per year, compared to biological nitrogen fixation estimated at 240 million tones N worldwide. There are few other elements for which human impact has been so dramatic (CEEP 2002: 13)"

To conclude, what is most striking when following this debate is the very fact that such a profound elaboration and exchange of arguments is going on at all. Nothing similar can be observed in any other sectors e.g. agriculture, energy, traffic or shipping, despite of the fact that they bear much more responsibility for the eutrophication of marine waters, in particular those of the Baltic Sea. Thus the debate on phosphates in detergents appears at least partly to fulfill an alibi function.[40] Actors representing other pollution sources may use it to divert public attention from their own responsibility. Moreover, calling for a ban on phosphates in detergents constitutes a rather cheap and easy move for politicians. On the one hand they hereby can show the public their determination to address the problem, and on the other hand in doing so they do not have to fear much resistance from any particular powerful societal or industrial actors.

Another aspect, that has to be taken into account when assessing the extent to which unbalanced processes of public deliberation constrain political opportunities to combat eutrophication, is related to the weak position which this problem attains in political debates if compared to other urgent environmental issues. This weak position is a consequence of the largely non-alarming and non-visible manner in which eutrophication in most cases is experienced. Obviously, it is much easier for accidental ecological catastrophes like oil spills from tank ships or drilling platforms to make headlines than to scandalize oxygen depletion in deep water layers. The latter remains a rather abstract notion, which is difficult to illustrate for the media. It is not easy to explain and responsibility can hardly be assigned directly. Thus societal actors like environmental organizations and the media, who otherwise would be supposed to take over the role of advocates for marine protection, are rather reluctant to take care of the subject as they cannot expect to gain much from it in terms of public recognition, new members, additional readers, donations, etc.

[40] Interview with an official from the European Commission, 16.09.2010

It is therefore important to include interrelations with other environmental discourses when evaluating the chances of marine eutrophication to acquire the necessary degree of public attention, which then could serve as an additional trigger for political action. When considering the different pollution sources leading to eutrophication, it is particularly striking, that those pollution sources which exclusively contribute to nutrient loads of the Baltic Sea through atmospheric depositions e.g. traffic and energy have received the least attention in political deliberations on eutrophication. European political discourses on air pollution are almost totally dominated by issues like acidification, ground-level ozone and human health. Thus, most of all only these latter concerns are included in the formulation of publications and position papers from environmental NGOs.[41] Only in a few cases the debate on air pollution here contains some references on how certain measures could have an impact regarding eutrophication. This seems to be all the more likely if Swedish experts are involved. For instance in a position paper on the benefits of reducing emissions from power stations, which was published jointly by the European Environmental Bureau and The Swedish NGO Secretariat on Acid Rain in 2008, the advantages of the required stricter legislation on air pollution control are thoroughly measured not only in terms of avoided premature deaths, lost working days and hospital admissions. In the concluding paragraph some other positive side effects are mentioned as well:

"Reductions in emissions of SO_2 and NO_x would in addition bring a series of other benefits which are less easily quantified in monetary terms, including less damage to ecosystems and biodiversity through acidification, eutrophication and ozone, and reduced rates of corrosion and weathering of buildings, materials and cultural monuments (EEB 2008b: 9)."

Also in debates, which the European Parliament holds on air pollution, eutrophication is only mentioned in very rare cases. For instance, during its discussion in 2006 on the European Commission's newly developed Thematic Strategy on Air Pollution, the contribution made by the Swedish MEP Jonas Sjöstedt constitutes the only case, in which the policy's positive effect regarding eutrophication plays a role, albeit a very small one:

"Air pollution causes major public health problems within the European Union. The Commission's own calculations show that, getting on for 370 000 premature deaths per year are caused by emissions into the air. Particulate emissions are the most important cause of these premature deaths, to which should be added all the health problems that affect people with asthma or allergies of one kind or another, children being an especially vulnerable

[41] See for instance Acid News No. 2, June 2010 or the joint press release by eight environmental and human health organizations "EU Parliament must resist pressure to weaken Industrial Emissions Directive", Brussels, 26.04.2010, available on http://www.eeb.org/index.cfm/news-events/news/eu-parliament-must-resist-pressure-to-weaken-industrial-emissions-directive/

group. Air pollution also creates major environmental problems in the form of eutrophication, acidification and ground level-ozone. There are clear reasons in terms of health and the environment for placing a strict limit on these emissions (European Parliament 2006a)."

It can be concluded, that eutrophication has been a largely underestimated issue in European discourses on air pollution control. It is therefore far from being a driving force by its own that could lead to calls for stricter environmental regulations. Whereas it remains unrealistic to expect eutrophication to acquire a position from which independent calls for regulations on air emissions could be derived, at least the role of an additional driving force could be further developed. This would not only add more weight to existing claims for NO_x reductions resulting from other concerns. It could also underline the comparative importance of anti-eutrophication measures relative to other discourses, in which eutrophication otherwise has a rather disadvantaged position. This is most of all the case with regard to climate change. It has acquired such a strong position in political deliberations that other "minor" environmental problems are either ignored or even negatively affected as solutions for the former are being developed at the expense of the latter. One example for this is the repeated postponement of the revision of the National Emission Ceilings Directive, which is the key instrument for regulating atmospheric nitrogen depositions to the Baltic Sea. In fact, the European Commission should have made a revision proposal already in the context of the 2005 adopted Thematic Strategy on Air Pollution. However, since then it has been repeatedly postponed. In 2010 Environment Commissioner Janez Potocnik suggested a possible further delay until 2013.[42] The failure to strengthen the National Emission Ceilings Directive has been explained by the need to offer compensation to some EU member states in exchange for their acceptance of the EU's climate and energy package in 2007.[43]

Agriculture is another sector, in which concerns about climate change could lead to measures that are unfavorable from the perspective of combating eutrophication. Stakeholders as for instance the fertilizer industry use the predominance of the climate change discourse to legitimize their call for increasing bio-energy production through the use of mineral fertilizers.[44] The argument is also used to reject claims to increase the share of organic farming within the agricultural sector. According to a publication by the German fertilizer industry, in that case areas under cultivation would have to be extended massively. As a consequence, forests and wetlands would have to be converted to arable land and thus

[42] http://www.airclim.org/policy/sub6_7.php

[43] Interview with two officials at the Swedish Ministry of the Environment, Stockholm, 16.06.2010 and Ågren (2008: 2)

[44] See for instance the article on „bioenergy production" on the European Fertilizer Manufacturers Association's website, http://www.efma.org/subcontent.asp?id=4&sid=16&ssid=3

lose their function as storages for carbon dioxide.[45] Not surprisingly, these arguments are developed one sided and intended to refer to the overall concerns about climate change. In contrast, any considerations about the negative impact of an increased use of fertilizers on water quality are consciously kept out of the debate.

Even the EU has conducted a policy, which emphasizes the role of bio-energy in combating climate change while not adequately considering its potential negative effects regarding eutrophication. The Union's 2009 adopted directive (2009/28/EC) on the promotion of the use of energy from renewable sources thoroughly outlines the benefits of developing the bio-energy sector throughout Europe, both from an economic and an ecologic point of view. There are also reservations included in the directive according to which biofuel production should be sustainable. But eutrophication is mentioned nowhere as a possible threat. Only at one point reference is made to water protection. Accordingly, paragraph 74 requires that the production of raw material for biofuels and bioliquids should "comply with Community environmental requirements for agriculture, including those concerning the protection of groundwater and surface water quality." However, eutrophication is not taken up as one of the sustainability criteria listed up in Art. 7 of the directive, which is all the more astonishing, as this list is quite extensive, containing requirements as for instance the preservation of primary forests, grasslands, wetlands or the protection of endangered ecosystems and species. It seems to be highly inappropriate that a legislative act with such important implications for the future development of the European agricultural sector does not explicitly refer to the need to take into account eutrophication problems in particular affected areas as for instance the Baltic Sea.[46] This shortcoming can only be explained by the dominance of the climate change discourse, which additionally is enhanced through those contributions to the debate, which stem from agro-industrial lobby groups.

[45] This argument has been developed in the annual report 2009/2010 of the German Industrieverband Agrar e.V., http://www.iva.de/publikationen/iva-jahresbericht-20092010

[46] Apart from the intensive use of mineral fertilizers, which can be expected to become a consequence of further developing the bio-energy sector, another negative impact on water quality could result from the use of residues for biofuel production, which is explicitly encouraged in paragraph 89 of the directive. Crop residues such as stalks, stubble and leaves if used for biofuel production instead of remaining on the soil after harvest would then not longer be able to fulfill their function to prevent excessive nutrient loads in water runoff (Blanco-Canqui et al.: 2009). However, the same paragraph 89 also includes at least one positive aspect of bioenergy which could entail mitigation effects regarding eutrophication. The directive suggests making biofuels from algae. Harvesting algae in large quantities from marine waters could in fact be a strategy to address both climate change and eutrophication at the same time and thus to create a true win-win situation in environmental protection.

3.2.3. The regulation gap at the macro-regional level

Obviously, the coastal states of the Baltic Sea first and foremost are responsible for protecting the common sea against pollution. In contrast, it may be less easy to engage non-bordering states in protection measures, as they would not directly reap the benefits from a cleaner Baltic Sea. However, also they contribute to the problem as upstream polluters (e.g. Belarus) or through emissions to the atmosphere (e.g. Great Britain). Even more difficult to imagine is, how more remote states (e.g. Spain, Italy, Romania) with neither positive nor negative links to the Baltic Sea should be motivated to engage themselves in a comprehensive strategy to save the sea's marine environment.

Involving the EU in Baltic Sea protection thus automatically implies the challenge to cope with a certain tension. On the one hand there is no way to address Baltic Sea eutrophication without giving the EU a decisive role to play. This is because competences within the relevant policy areas are largely located at the community level and only the EU's institutions have the capacity to facilitate effective policy making processes across the various involved sectors and to enforce the implementation of and compliance with the decided regulations. On the other hand, it has to be taken into consideration that only a minority of the member states has a direct and profound interest in cleaning up the Baltic Sea. Moreover, even those actors and states, who as bordering states in principal might be interested in the seas environmental situation could, as a consequence of other overriding priorities in EU politics, be reluctant to fully exploit the opportunities for Baltic Sea protection measures available at the European level.

One strategy to overcome the described tension would be to strive for general solutions from which not only the Baltic Sea region but also other countries and regions throughout the EU would benefit. This has in fact so far been the dominant approach in the development of European water and marine protection policies. It is therefore, that for instance both the Urban Waste Water Directive and the Nitrates Directive imply a considerable degree of flexibility. With the intention to address the rather different environmental needs throughout Europe, they require stricter standards for waste water treatment and fertilizer application respectively, depending on whether the affected regions are suffering from eutrophication or not. Also the Common Agricultural Policy, in particular through its second pillar, provides opportunities, which open for a flexible adoption of measures at member state level according to their specific environmental requirements.

This middle way of harmonizing environmental legislation throughout Europe, while maintaining a certain amount of flexibility, has in so far been a successful approach, as it has contributed to improve water environments in several member states and marine areas.

However, it has turned out that the inherent degree of flexibility is not sufficient to solve the problem of Baltic Sea eutrophication. Both the above mentioned directives would not entail considerable improvements for this sea, even if all Baltic Sea states would implement them in the strictest possible way, e.g. include an 80% removal of phosphates in waste water treatment and declare the whole Baltic Sea catchment area a Nitrates Vulnerable Zone. Furthermore, the Common Agricultural Policy in its current state by far does not include those kinds of flexible mechanisms that would be necessary to prevent further increases of nutrient discharges, which otherwise have to be expected from an extension of the current CAP regulations to Poland, Lithuania, Latvia and Estonia.

The hitherto applied option to overcome this regulation gap has been to develop common rules for Baltic Sea protection, which apply independently from the EU and only within the context of the Helsinki Commission. Here, one early important step had been the 1988 declaration requiring each bordering state to halve its nutrient discharges to the Baltic Sea by 1995. The most outstanding achievement is the 2007 adopted HELCOM Baltic Sea Action Plan (BSAP). It requires every participating state to reduce a specific amount of nutrient discharges. The reduction requirements are individually prescribed per state for nitrates and phosphates respectively. Moreover, the BSAP addresses specific pollution sources in requiring legal standards which go beyond the corresponding European regulations. Thus, for instance waste water treatment should include a 90% removal of phosphates instead of 80%, which European law requires for medium and bigger settlements. Also different to EU-legislation, waste water treatment is even required for small settlements. Furthermore, the BSAP supplements the Nitrates Directive in requiring a maximum level not only for nitrogen but also for phosphorus contents of manure, when applied to agricultural land. The latter should not exceed the amount of 25kg per ha.

The BSAP even takes into consideration the fact, that some actions, which are important in the context of Baltic Sea protection, can only be realized at the European or even the global level. Thus it urges the contracting states, as far as they also are member states of the EU, “to make a joint submission stressing the need to integrate better the specific environmental concerns of the Baltic Sea” in the context of reforming the EU’s Common Agricultural Policy and to stress “the need to adopt additional and targeted agricultural measures in particular to reduce eutrophication of the Baltic Sea.” Furthermore, the BSAP requires the contracting states to promote the revision of the EU’s National Emission Ceilings (NEC) Directive with the aim to take into consideration its consequences for marine eutrophication and in particular to include emissions from ships.

The problem however with all these promising provisions laid down in the HELCOM BSAP is related to the fact that they are not binding for the contracting states. The country-wise

reduction requirements for phosphorus and nitrogen are indicated as “provisional”, that means they are to be revised periodically and may be modified if new scientific findings emerge. Moreover, the BSAP requirements related to standards for waste water treatment and to the prevention of pollution from agriculture merely have the character of “recommendations”. Implementation and enforcement relies on the participating states’ continuous self-commitment and cannot be guaranteed by any supranational body.

It is also by far not self-evident, that the agreement to make joint submissions aiming at the adaption of the EU’s Common Agricultural Policy and of the NEC Directive to the environmental needs of the Baltic Sea will really exert substantial influence on European policy making. In fact as far as agriculture is concerned a quite short and not very ambitious submission was sent from HELCOM to Brussels in April 2008.[47] It rather generally stresses the need to integrate the specific environmental concerns of the Baltic Sea into the Common Agricultural Policy and “to adopt additional and targeted agricultural measures, in particular to reduce eutrophication of the Baltic Sea.” The submission must be classified as a failure since the governments involved (i.e. all Baltic Sea states except Russia) did not succeed to reach consensus on a more stringent and detailed request to the EU.[48] In contrast, the submission concerning the revision of the NEC Directive has been developed more carefully. It was sent to the European Commission in January 2010.[49] While also generally calling for taking into account the specific marine environment of the Baltic Sea when revising the emission targets, it even includes the concrete requirement that the new NEC Directive also should cover emissions from shipping.

In contrast to the above mentioned overall tendency towards harmonizing environmental policies throughout Europe, even the EU has acknowledged that particular marine regions may need specific policy approaches and that the responsibility for developing them cannot merely shifted over to independent regional conventions. Thus, the whole process of establishing a European strategy for marine environmental protection has been accompanied by a debate whether and to which extent the macro-regional level should be directly incorporated in the development of EU regulations. The issue has unveiled conflicting positions between the European Commission, the European Parliament and different groups of member states, whose arguments in turn have influenced the position of the Council.

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[47] See http://meeting.helcom.fi/c/document_library/get_file?p_l_id=18967&folderId=103473&name=DLFE-33548.pdf

[48] A HELCOM official made this assessment in an e-mail to the author.

[49] See http://meeting.helcom.fi/c/document_library/get_file?p_l_id=18983&folderId=863107&name=DLFE- 40622.pdf

Already in her initial communication “Towards a strategy to protect and conserve the marine environment” (European Commission 2002), the Commission had emphasized the potential opportunities for macro-regional approaches in the context of marine protection. Among others the communication contains the objective “to eliminate human induced eutrophication problems by 2010” and calls for the development of “regional specific action and timeframes” and for the collaboration with regional marine conventions. As a legal basis for “groups of Member States” to act “in concert” the Communication refers to the Treaty Revision in Nice, which explicitly had opened for the possibility that groups of member states agree on common measures, which then only would apply to that group. However, the Commission within the same communication also expressed concern, that such an approach must not impose constraints on the functioning of the internal market.

The idea to consider macro-regional approaches when developing European marine protection policies has been taken up with great enthusiasm by the European Parliament. In its report on the Commission’s proposal for a Marine Strategy Directive the Parliament made several amendments with the intention to add a distinct macro-regional dimension to this new policy (European Parliament 2006b). One suggestion in that direction is the idea to designate specific marine regions as pilot areas. Accordingly, member states, who share a common marine region, should have the possibility to agree on greater efforts to move ahead within their group, if compared to the general European time schedule. Such a pilot area should then officially be acknowledged by the European Commission. The underlying idea is that those further going efforts of member states within a pilot area should be supported by the EU among others through the provision of additional financial support (European Parliament 2006c).

The idea of creating pilot areas was even further substantiated through an additional suggestion of the European Parliament, according to which the Baltic Sea region should explicitly be mentioned in the Marine Strategy Directive as a possible first pilot area. The BSAP should then serve as a tool for achieving the objectives of a pilot program. This suggestion constitutes an interesting move as its realization would definitely have left behind the hitherto applied principal of striving for general solutions in the development of new EU legislation. Instead, the Baltic Sea would have explicitly been singled out as an area which needs to be treated differently to other parts of Europe.

Another suggestion, which clearly underlines the European Parliament’s ambition to promote the Marine Strategy’s macro-regional dimension, concerns the institutional level that should be responsible for the strategy’s implementation. Whereas the initial proposal of the Commission requires member states to independently from one another develop national marine strategies for their European marine waters, the Parliament suggests that “Member

States sharing a Marine Region shall ensure that a single, joint Marine Strategy is produced per region or sub-region". Implementation and Monitoring of these macro-regional strategies should then be assisted by management units that likewise should be installed commonly for the respective marine regions.

The European Parliament's idea to add a strong macro-regional dimension to the EU's Marine Strategy Directive was subsequently weakened through objections from the Council and the European Commission. During the Council deliberations in 2006 the delegations of the member states expressed rather different attitudes towards the idea of developing joint marine strategies at the macro-regional level instead of applying national approaches. A clear discrepancy between Northern and Southern European countries could be observed. On the one hand, delegations from the Baltic Sea states, in particular those from Latvia, Sweden, Lithuania and Estonia very clearly advocated macro-regional approaches i.e. they required the development of joint marine strategies and the establishment of legally binding links to the targets set by regional sea conventions. The Latvian government explained this attitude as follows:

"Latvia is still very skeptical about all proposals for actions at national level, at least from the position of the Baltic Sea ecoregion, since at least three decades of experience clearly shows that efficient evaluation of the state of the art and constructive planning of further action can be achieved only at ecoregional or subregional level (Council of the European Union 2006b: 9)."

On the other hand, member states from the Mediterranean Sea were far more skeptical towards such an approach. For instance France, while not completely rejecting the idea, suggested a rather weak formulation, when calling for an "overall framework common to all regions" only "if practicable and advisable". And even then, still, "each Member State would set up specific programmes and strategies" individually (Council of the European Union 2006b: 5). France as well as Cyprus justified this reluctance in pointing to the fact that the Mediterranean region, in contrast to other European marine regions, is bordered more by third countries than by member states. Given this broader variety within the Mediterranean region, it would be rather difficult to establish a strong and efficient regional convention to take over central tasks in implementing the EU's Marine Strategy Directive.

However, France did not completely reject the idea of giving regional conventions a binding role within the new directive. Referring to positive examples, e.g. cases, in which the European Court of Justice had decided on the basis of the Barcelona and UNCLOS conventions, the French government suggested to select carefully and determine explicitly, which of the various marine conventions in fact would be appropriate to be used to fulfill the requirements of the Marine Strategy Directive. The strongest reservations against directly

linking marine conventions to the EU's legal framework were expressed by Germany. The arguments brought forward by the German delegation stressed the difficulty to find a clear and legally correct definition for the relationship between both institutional levels. Moreover, the German government expressed concerns that any kind of macro-regional differentiation within the EU could result in distorted conditions of competition and thus undermine the single market principle (Council of the European Union 2006a: 9).

In the end, it turned out that the strong emphasis on promoting macro-regional approaches within the context of the Marine Strategy Directive mainly got support from the Nordic and Baltic states, whereas the rest of the EU member states either held an indifferent position or directly rejected the suggestion. In a concluding statement the Council justified its definitive refusal to require the development of joint single marine strategies per region with the argument, that this would dilute the legal responsibility for compliance at member state level. The Council made clear, that generally only the national state can bear the ultimate responsibility for meeting obligations under Community law (Council of the European Union 2007). Moreover, the Council also rejected the idea of giving existing marine conventions a binding legal role and to explicitly mention the Baltic Sea region as a possible pilot area within the Marine Strategy Directive. Instead, only a weak, non-binding formulation was taken up, according to which member states "as far as possible" shall consider the programs developed by Regional Sea Conventions. Also the general idea of establishing pilot regions was not dropped completely, albeit the formulation about supportive actions, which the eligible regions could expect from the Commission, was made rather vague and thus is not likely to become a basis for concrete measures.[50]

The debate about whether and to which extent a macro-regional regulation level should be introduced into the Marine Strategy Directive reveals, that more ambitious EU protection policies for the Baltic Sea do not only fail due to a lack of political will to improve environmental conditions. They are also impeded by differences, which member states and Community actors have with regard to institutional preferences and general targets concerning the process of European integration. For instance, when developing environmental legislation, concerns about regional specific requirements have to be kept in

[50] The idea of designating the Baltic Sea area as a pilot area under the Marine Strategy Framework Directive has since the adoption of the Directive in 2008 mainly been promoted by Sweden. Lacking support from most other member states and in particular from Germany, which on the contrary repeated its concerns that pilot projects might create legal uncertainties, Sweden seems to have given up the idea in 2010 (Council of the European 2009; Interviews with officials at the Swedish Ministry of the Environment, Stockholm, 16.06.2010 and from the European Commission, 20.09.2010). The decision might have been all the more easier for the Swedish government, since the EU's Baltic Sea Strategy in the meantime has evolved as a promising alternative approach to strengthen the Community's commitment to the Baltic Sea environment.

balance with the interest of keeping all European regions on the same track. Thus, in this particular instance the Baltic Sea's environment suffers from the fact that institutional and legal instruments that might be beneficial in the case of the Baltic Sea do not provide useful tools in the case of the Mediterranean region and consequently have been refused completely.

However, more decisive than contrasting regional environmental conditions and needs like in the case of the Baltic Sea and the Mediterranean region might be tensions which arise from different perceptions regarding general objectives within the process of European integration. Seen in this way, the conclusion would be that the Baltic Sea's environment suffers from political clashes, which originate at the polity level and from there spill over to the policy level. Central European member states (e.g. Germany) and actors (e.g. the European Commission) pursue other concepts, when considering the actual and preferred future state of the European Union as a political community, than Northern European countries. Whereas the former tend to emphasize an ever closer harmonization of policies and a centralization of decision making procedures within the process of European integration, the latter favor more heterogeneous and flexible approaches when shaping the common European polity.[51]

During the debate on the Marine Strategy Directive in the European Parliament this discrepancy was reflected in a contribution of the French MEP Marie-Noëlle Lienemann. Referring to the proposal of explicitly mentioning the Baltic Sea region as a pilot region in the new directive, which had been made by MEPs from Northern Europe, she expressed her reservations as follows:

"Finally, our fellow Members from the Baltic wanted the Baltic to be a sort of pilot project enabling us to move more quickly, in view of the urgency of the situation. They were not completely satisfied because the tradition in our institutions is not to single out any particular area (European Parliament 2007)."

Such differing priorities regarding general attitudes towards the process of European Integration are relevant in the context of combating Baltic Sea eutrophication since they have an impact on the formulation of hidden agendas. They play a role in policy making processes which only superficially seem to deal with environmental protection. The Nordic initiative to introduce a particular Baltic Sea regional specific approach into the EU's marine protection

[51] The British scholar Christopher S. Browning has conceptualized the underlying conflict as a struggle between "Westphalian" and "neomedieval" approaches to European Integration. These terms represent two diverging blueprints which actors have in mind when considering their preferred idea for the final state of the emerging European polity. Whereas the former notion emphasizes the nation state or empire like character of the EU, the latter highlights a "Europe of Olympic Rings" where flexible integration patterns prevail and decision-making is decentralized and shared with multiple (macro-)regional institutions and networks (Browning 2005).

policy could thus be interpreted as an attempt to exploit environmental concerns as an instrument to change the character of the European political community. In turn, actors like the European Commission would all the more defend their centralized position of power against such challenges imposed from the periphery. Seen in this way, the question about which would be the most effective measures to save the Baltic Sea seems to be relegated to a second-class status.

The underlying conflict is more than just ordinary institutional competition which in the EU typically results in a struggle for influence between the national and the supranational level. In fact, the clash between Nordic and "continental" European priorities regarding the purpose of European integration has a long tradition and has become most prominent in the notion of "euroskepticism", meaning that the Nordic states have earlier, repeatedly and more emphatically than any other member state made clear that they are not willing to support the emergence of a European federal state.[52] Instead they have tried to develop alternative or supplementary integration patterns e.g. through the promotion of independent regional cooperation in the Nordic and Baltic Sea regions. Central European actors have regarded this with distrust. For instance in a 1994 adopted resolution on the forthcoming EU accession of Norway, Sweden and Finland the European Parliament warned that a continued Nordic regional cooperation after the enlargement should not lead to the emergence of a special interest group within the EU. Instead, the Parliament made clear its expectation, that each member state should apart from pursuing its national interests only have in mind the general European interest (Schumacher 2000: 193). Another striking incident, which illustrates this skepticism towards the role of the Union's Nordic member states, could be seen in the reaction of the European Commission and the EU Council to the Finnish proposal for adding a particular Northern Dimension to the process of European Integration. Although the idea was generally accepted by the European Council in 1997, it subsequently turned out that those of its components that would have had a decentralizing impact on the EU's political system were strongly opposed by the European Commission (Sergounin 2005: 113). Also core European member states like Germany were not willing to encourage the Northern Dimension initiative (Archer and Etzold 2008: 20). Apart from Finland most support for the idea has been given by Sweden and Denmark. But due to the general reluctance and fears of decentralization in Brussels they did not succeed in giving regional institutions e.g. the Council of the Baltic Sea States a strong role in identifying and implementing political priorities under the Northern Dimension. Instead, the European Commission and the EU Council have been eager to monopolize their role as sole decision-makers in its context (Browning 2005: 92).

[52] A crucial event was the Danish rejection of the Maastricht Treaty in 1991.

Those tensions which arise from different basic understandings about the character and the purpose of European integration are likely to affect the opportunities to find optimal solutions for the protection of the Baltic Sea. This is all the more problematic as due to natural conditions the Baltic Sea in fact would need special treatment in terms of regulations e.g. stricter standards for waste water treatment or a reorganization of the Common Agricultural Policy on a macro-regional basis (Artioli et al. 2008: 1616). However, the European Commission and the EU Council have rejected such proposals as they fear that the EU "would split up in regions."[53]

The 2009 adopted EU Strategy for the Baltic Sea Region (EUSBSR) could be seen as a pragmatic attempt to fill the regulation gap at the macro-regional level. At first glance, such expectations seem to be quite high, when considering the fact that one of the basic prerequisites for developing the Strategy was to agree, that it should neither result in new EU legislation nor in the building of additional institutions. On the other hand, it is remarkable that the HELCOM Baltic Sea Action Plan has been integrated into the strategy, albeit not in a legally binding way. Moreover, some of the EUSBSR projects obviously have the potential to entail changes in attitudes and regulations at the national level throughout the Baltic Sea region in the direction of taking marine protection concerns more seriously into account, without necessarily requiring institutional change or new legislation at the European level.

4. Enhancing the EU's capability to tackle eutrophication

4.1. Increasing the knowledge about the Baltic Sea in Brussels

The above made analysis has revealed several weaknesses of the European political system, which have prevented the Community from developing protective policies for the Baltic Sea more successfully. While the focus so far has been on the definition and explanation of these weaknesses, the following paragraph aims at deriving recommendations for future action. Possible measures will be suggested in terms of improvements in the spread of knowledge about Baltic Sea eutrophication, the reformulation of policy contents and institutional adaptations.

It is evident that marine eutrophication will never become an issue which is likely to make the headlines in most of the EU's member states. This is due to the mostly non-alarming way in which the problem occurs, if compared to other marine disasters as for instance oil spills from tankers. Moreover, as a consequence of natural conditions, eutrophication of the open

[53] Interview with two officials at the Swedish Ministry of the Environment, Stockholm, 16.06.2010

sea is not a major problem for any other European marine environment apart from that of the Baltic Sea. Consequently, one cannot expect that marine eutrophication ever will be on top of the agenda of European environmental policy.

Notwithstanding, there seems to be scope for improvements in terms of how knowledge about the problem is spread within the EU's central institutions. It is striking, that the European Parliament in recent years has been surprisingly active in developing initiatives to save the Baltic Sea, in spite of the sea's marginal importance seen from an overall European perspective. On the other hand, a particular reluctance to acknowledge the problem of Baltic Sea eutrophication can be observed within the European Commission. Here, targeted actions to increase the relevant knowledge should be considered. This could be achieved by seminars organized in Brussels with the intention to inform Commission Officials and related experts about the special situation of the Baltic Sea. Furthermore, it is important to overcome the current situation, in which the Baltic Sea region is highly underrepresented among officials of the relevant Directorates-General. In particular it is essential to avoid a situation in which all positions of the DG Environment's marine unit are exclusively occupied by staff from Southern and Central European member states as it is currently the case. Instead, it should be ensured that experts from the Baltic Sea states' national governments, e.g. staff from environmental ministries or agencies at least take over non-permanent posts within the Commission and thus enable a continuous flow of actual expert knowledge from the Baltic Sea region to the EU's central decision making body.

Increasing the spread of expert knowledge is however not only essential to achieve a higher commitment by the EU's central institutions. It is also a necessary element in strengthening the Baltic Sea member states' own ability to act in a more target oriented and concerted way when lobbying for the inclusion of marine eutrophication concerns into Community policies. Due to differences, when assessing the causes of eutrophication and the possible abatement strategies, which prevail in national discourses throughout the Baltic Sea region, national governments pursue different and sometimes contradictory objectives under negotiations in Brussels rather than pulling in the same direction. Thus, until now concerted actions of the Baltic Sea member states have rather lead to alibi measures and only brought about results in areas, which are of minor importance within the overall context of combating marine eutrophication. The proposal for a limitation of phosphates in detergents, which was made by the Commission in 2010, can be seen as a result of such joint pressure (European Commission 2010b: 5). Notwithstanding this success, the Baltic Sea member states so far have failed to act successfully as a lobby group when addressing the real big problems e.g. the Common Agricultural Policy, too low standards in waste water treatment, shipping emissions and air pollution.

4.2. Creating win-win situations

Another approach to increase the EU's commitment to Baltic Sea protection, considering the problem's minor relevance within overall European environmental policies, would be to connect the issue to other, more dominant environmental and societal challenges and to strive for the creation of ecological and economic win-win situations. In addition to thus increasing the awareness for eutrophication even among actors and groups that so far have not been affected by the problem, such a strategy could contribute to overcome the adverse effects of policy segmentation which are typical for the EU's political system and in particular for the Common Agricultural Policy. Basically, possible win-win situations could be identified in terms of social, environmental and economic benefits. Thus, mitigating eutrophication could yield social and health benefits in the form of better quality for bathing and drinking waters and through the provision of unimpaired ecosystem services for recreational purposes (e.g. tourism, recreational fishing, boating). At the same time, it is important to highlight, that a more environmentally friendly agriculture would neither automatically lead to income losses for farmers nor to falling crop yields. As a recent UNEP study has shown, increasing fertilizer efficiency could even help to meet rising global food demands, while at the same time reduce the application of nitrogen to farmlands.[54]

When looking for possible win-win situations, which may arise in the context of combating eutrophication, a crucial task should be to focus on the interrelation with other environmental challenges. This is due to the fact that as long as several ecological threats are not regarded within a common overall context, which ensures that abatement measures are created in a mutually supportive way, the eutrophication issue would in most cases end up in a position of secondary importance. The consequence would either be that it is simply overseen as a threat that requires immediate action or in the worst case that measures targeted to address other environmental challenges would be designed in a way that would make the eutrophication problem even worse. The latter is for instance the case when the EU supports the cultivation of energy crops as part of a strategy to combat global warming without taking the risk of increasing nutrient discharges to sensitive water environments into account.

Instead, it should be highlighted that various interconnections exist between the fight against climate change and combating eutrophication. Measures such as increasing fertilizer efficiency would not only contribute to improved water quality through a decrease of nitrate

[54] The United Nations Environment Program assumes that if fertilizer efficiency would be increased on a global scale it would be possible to meet the 38% rise in food demand projected for 2025, while at the same time to decrease Nitrogen fertilizer application by 25% (UNEP 2010: 6).

discharges but they are also suitable to address the emission of greenhouse gases in two respects. On the one hand, the amount of carbon emissions would decrease, which are generated during the energy intensive process of producing nitrogen fertilizers. On the other hand, nitrous oxide (N_2O) emissions would be reduced which otherwise occur as a consequence of nitrogen applications to farmland. [55] Apart from these benefits, which would arise from increased fertilizer efficiency, another aspect, where agriculture contributes to both global warming and eutrophication, is intensive livestock farming because of the resulting emissions of methane and ammonia. Thus, measures aiming to support the development of more integrated farming systems and efforts towards changing eating habits in the direction of reduced meat consumptions would be promising strategies for addressing both challenges at the same time (Xue and Landis 2010). Since the threat of climate change is a very prominent topic in current environmental debates at both the domestic and the international level, it will probably continue to strongly impact the political agenda over the coming years, with the IPCC holding an influential position in shaping policy priorities. There might be a chance that climate change subsequently could develop into a topic, powerful enough to break up the hitherto rather closed circle of policy making within the European agricultural sector.[56] Since agriculture also is mostly responsible for the pollution of the Baltic Sea, this constitutes a great opportunity for a careful integration of the eutrophication issue into the wider debate on agriculture and climate change.

Finally, some other cases should be mentioned in which the fight against eutrophication could provide multiple benefits, not only in terms of promoting integrative approaches for environmental protection[57] but also with respect to economic development and new business opportunities. The Baltic Sea's fisheries sector's prosperity is highly interrelated with the eutrophication problem. Since oxygen deficiency in deep water layers leads to increased cod egg mortality, fish stocks are declining. In turn, declining fish stocks can further increase the symptoms of eutrophication, because the ecological balance becomes distorted if plankton is not longer consumed by higher organisms. To put it shortly, it would be highly important to integrate marine eutrophication into the development of the Common Fisheries Policy for the Baltic Sea both as a tool to address the problem of nutrient loads and as a strategy to

[55] Nitrous oxide is a powerful greenhouse gas, which is responsible for about 10% of global warming potential resulting from these gases (UNEP 2010: 13).

[56] EEB Press Release, "*CAP Health Check*: Is there a doctor in the house?", Brussels, 20 November 2007

[57] Another win-win situation in environmental protection could emerge from air pollution control measures (e.g. reduction of nitrogen oxide emissions would in addition to eutrophication also address ground level ozon and acidification).

increase future catches and thus stabilize the economic situation of the fisheries sector (Österblom et al. 2010).

The fight against eutrophication may even open up perspectives for the development of basically new business opportunities. Various kinds of green technologies are being developed to mitigate harmful gas emissions and nutrient losses from agriculture. Fertilizer spreaders are available, which ensure that just exactly the amount of nutrients is injected to the soil which is necessary to ensure the optimal fertility. Furthermore, techniques are available for cattle farming enabling a special slurry treatment which would significantly reduce ammonia and methane emissions from slurry management and storage.

The installation of biogas plants may also become a promising way to reduce emissions and to get rid of manure surpluses from intensive farming. However, as already mentioned, regarding bioenergy it is important to ensure that it is developed in a way that does not impose additional pressure to sensitive water environments. This would for instance be the case, if energy crops were cultivated in such areas or if residues were used, which in fact are suitable to protect the soil from nutrient losses (Blanco-Canqui et al. 2009).

Instead, making biofuels from algae should be considered as a possibility to produce energy, which at the same time reduces nutrient loads in marine waters. The EU's Directive on renewable energy explicitly mentions that such a strategy would deserve support (2009/28/EC: 26). Generally, harvesting in the sea offers great potentials both in terms of environmental and economic benefits. Algae and mussels could not only be used for biofuels but also for the production of animal feed and food. The advantage is that in contrast to fish farms they do not need extra feeding since they exclusively consume those nutrients that are already available in the Baltic Sea and thus contribute to clean up marine waters (DBU 2010; Gren, Lindahl and Lindqvist 2009). There are thus various starting points for anti-eutrophication measures that would create multiple benefits. It is important to highlight that pushing for marine protection in the case of the Baltic Sea does not automatically mean to decrease income opportunities for any particular professional group. To the contrary, the whole society could profit through cost savings, the development of new economic branches or in general through the provision of unimpaired ecosystem services. It is up to the political actors to transform these potentials into practical policies that are suitable to encourage the concerned parties to proceed in the right direction and thus to fulfill the regional specific needs of the Baltic Sea.

4.3. Avoiding policy segmentation

As described earlier, some of the major obstacles to the development of efficient protection policies for the Baltic Sea are related to the segmentation of policies and to institutional barriers that characterize the EU's political system. These barriers affect processes of decision making both in a horizontal and a vertical dimension. Whereas horizontal blockades result most of all from the sector-specific Council configurations and the splitting up of competencies among the individual Directorates-General within the European Commission (Hedemann-Robinson 2004: 152), vertical barriers affect the development of optimal policies as a consequence of contradictory distributions of competencies between the Community and the Member State level.

The development of the Marine Strategy Framework Directive (MSD) demonstrates very clearly how policy segmentation within the EU impedes optimal policy solutions. In spite of the programmatic label "Integrated Maritime Policy" the MSD is far from serving as a proper "environmental pillar" of the EU's maritime policy since it does not provide a suitable framework for the horizontal integration of sector policies. This is for instance illustrated by the fact that it does not address the Common Agricultural Policy or ship emissions. At the same time the MSD is lacking a vertically integrative approach as it largely delegates responsibility for achieving quality improvements for marine waters to the national level, notwithstanding the fact that member states do not have the necessary competences to change those community policies that cause the bad conditions for the marine environments.

The consequence of such a diffusion of competencies is that within public debates responsibilities cannot clearly be attributed to concrete actors and levels. Moreover, NGOs have problems to find proper access points for lobbying activities (DNR 2007: 24). At the same time, political actors have the opportunity to easily excuse a lack of engagement for environmental protection by shifting away responsibility to other actors and levels within the system. These circumstances provide comfortable positions for those lobby groups, who are interested in maintaining the status quo. Agricultural organizations utilize the contradictory distribution of competencies between the European Union and the member states in playing off both levels against each other, and thus strive for impeding legislation which is not in their interest.[58] Since the Common Agricultural Policy (CAP) is conducted rather isolated from

[58] Interview with a Member of the European Parliament, Brussels, 15.09.2010; similar games were played as part of the farmer organizations' strategy to avoid community legislation regarding the development of a Soil Framework Directive and the introduction of an obligation to establish buffer strips along water courses. In both cases the COPA COGECA opposed the suggestions arguing that the intended objectives could better be achieved through legislation at the national level. The latter would however probably result in the adoption of less strict standards, a weakening of the European

other policy areas, it is often simply forgotten in debates about environmental politics. If nonetheless the question arises, whether also agriculture should contribute to the solution of environmental problems, politicians and government officials repeatedly have to admit that they do not dare to approach this sector because it appears to be far too big and too complex. The problem is that because of the exclusive and exceptional character of agricultural policy there seems to be no pragmatic middle way between either challenging the whole system totally or, leaving everything as it is.

However, in spite of these structural obstacles, there are some possible starting points to overcome policy segmentation within the EU. It constitutes a promising tendency that the Agriculture and Fisheries Council's dominant position has decreased in recent years, while other actors, which basically pursue a more cross-sectoral approach in policy making, acquire a more influential role within the CAP. The European Parliament has repeatedly managed to strengthen environmental standards in legislation, which indirectly has also affected the farming sector (e.g. in the case of the Groundwater Directive). The extension of the codecision procedure to the CAP in 2010 has opened new opportunities for the Parliament to shift discussions on agricultural issues away from closed circles and to make them a topic of public debates. However, there may also be a risk that the Parliament's environmental-friendly profile will suffer from its increased power position, as this will probably have the effect that farmers' interest groups will strengthen their efforts to impact the parliamentarians (Knill and Liefferink 2007: 99).[59]

A more promising role may be taken over by the European Commission. NGO representatives have recently reported a considerable openness of the Commission towards suggestions about how to achieve farmers' commitments to environmental values.[60] Enhancing her position within environmental politics is in line with the Commission's general interest in increasing institutional scope and authority. Given a rather small room of maneuver with regard to budgetary decisions this policy field opens up the opportunity to extend regulation capacities at the Community level while not involving additional financial resources (Knill and Liefferink 2007: 82). It also fits well to the general notion that the EU's supranational bodies (e.g. the European Commission, the European Parliament and the

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Commission's role in enforcing the measures taken and an overall diffusion of responsibilities (COPA COGECA 2007 and COPA COGECA 2008).

[59] This could already be observed during the development of the Directive on Industrial Emissions in 2009. When voting on the Commission's proposal, the European Parliament watered down those provisions of the draft legislation that would have allowed to effectively addressing emissions from industrial-scale farming activities (EEB 2009).

[60] This concerns for instance the idea of regarding agricultural subsidies as payments which the farmers get in exchange for delivering "public goods", interview with a staff member of the European Environmental Bureau, Brussels 16.09.2010

European Court of Justice) have often utilized environmental policies to improve their reputation in public perception and thus to increase their institutional legitimacy (Bongardt 2007: 66).

Finally, the European Council has to be mentioned. The Heads of State or Government obviously represent a level within the EU's political system, which more than any other has the capacity to integrate sector specific interests into the development of general objectives and policy lines. This goes in particular for agriculture. As has been described earlier, in the hitherto two main reform steps made in 1992 and 2000/2003 it was primarily due to cross-sectoral interest intermediation by the European Council that pressures arising from other policy areas (e.g. international trade and budget concerns) could lead to substantial changes in the Common Agricultural Policy. One of the strategic advantages of the European Council emerges from the fact that since it enables the subordination of agricultural topics to other urgent questions in European politics, responsibilities for such reforms appear more diffuse and decision makers may easier escape from being blamed by lobby representatives (Daugbjerg and Swinbank 2007: 6). Shifting political action to the Heads of State or Government level may thus constitute a promising strategy to circumvent the influential position of the agricultural "inside" lobbies, which otherwise strongly affect decision making processes within the Council, the European Commission and the European Parliament.

4.4. Encouraging macro-regional approaches

The notion of promoting policy objectives through the application of macro-regional approaches has recently become a prominent topic in EU politics and resulted in the 2009 and 2010 adopted Strategies for the Baltic Sea and Danube Regions. The underlying idea of establishing a level of governance, which is located between the national state and the supranational community, with the intention to facilitate concerted action within a group of selected member states is not new. It has always played a strong role in European politics either in the form of institutionalized member state alliances, e.g. Franco-German-, Benelux- or Nordic Cooperation,[61] the formation of functional groupings, e.g. the Schengen states or the euro zone or in the ideas of creating a "core" or "multi-speed Europe", which in form of the provision for "Enhanced Cooperation" has since the Treaty of Nice become a part of European constitutional law.

Notwithstanding these longer ranging traditions, the newly developed Strategies for the Baltic Sea and the Danube Regions have to be seen as an attempt to open up a new dimension in

[61] For a general assessment on the potential of member state alliances to impact EU politics see Schumacher (2000).

European politics. In contrast to the above mentioned traditional groupings of member states the macro-regional strategies are not primarily regarded as intermediate steps on the way to deepen integration within the whole Community. The idea is rather that groups of states in a distinct geographic region shall be encouraged to jointly develop policy solutions which are tailored to serve the specific needs of that region. After the recent enlargements it would overstress the EU's political system if every regional issue would be dealt with in forums in which all member states participate at the same time.

Another aspect, which discerns these strategies from traditional groupings of states, is the fact that the concept of "macro-regionalization" has been consciously elaborated by the European Commission's DG Regio as a new tool for the EU's regional policy. Starting with the Baltic Sea and Danube regions the concept is basically open to be transferred to any other parts of Europe (e.g. the Alpes, Atlantic or North Sea regions) and in the maximum case even to cover the entire territory of the EU (Schymik 2011: 23). Macro-regional strategies are thus not only an instrument which may be applied to enhance governance structures in maritime regions. However, as the idea was originally invented within a Baltic Sea context[62] and has from the beginning been regarded as a model for the implementation of the Integrated Maritime Policy on a regional sea's basis, the concept has strong implications for the management of challenges that are related to the marine environment.

In fact, the Strategy for the Baltic Sea Region aims to address exactly those structural weaknesses of the EU's political system, that so far have prevented effective protection policies for the sea's marine environment. Of major importance is the strategy's inherent potential to facilitate cross-sectoral policy coordination (Joenniemi 2009: 5).[63] This has been proved already during the preparation phase, which involved extensive cooperation across 19 different Directorates-General, an experience that so far had been unprecedented in the working procedures of the European Commission.[64] The strategy also encourages policy integration in other institutional contexts. While involving rather different sectors, i.e. environment, economy, infrastructure as well as security and safety it allows for the creation of package deals across various issues and thus opens up possibilities to achieve commitment on questions that would not have been possible if bargaining would take place

[62] The initial step was made in 2005 by the European Parliaments Baltic Intergroup, which called for the EU to develop a comprehensive approach in Baltic Sea related policies (Bengtsson 2009: 2).

[63] This advantage is also stressed in a position paper on the Baltic Sea Strategy published by Baltic Sea 2020 on 21.09.2009: http://www.balticsea2020.org/attachments/183_200909%20Baltic%20sea%20strat%20position_eng.pdf

[64] Interview with an official at the Permanent Representation of Sweden to the European Union, Brussels, 03.12.2009

only within one and the same policy area. The EU's regional Commissioner Samecki highlighted this opportunity by saying:

"The benefits of the macro-regional strategy derive, to a large extent, from its highly integrative approach. By being comprehensive, the strategy can recognize the varying weights that partners will place on different elements and thus allow all participants to identify benefits that outweigh any costs that may arise from accepting other parts of the strategy (European Commission 2009d)."

In the same speech the commissioner identified the lack of opportunities for cross-sectoral approaches as a major cause for the failure of previous attempts also by other organizations (e.g. HELCOM) to clean up the Baltic Sea as they have "time and again stumbled on the disconnect between environmental concerns and economic concerns."

Moreover, there is also a chance that the strategy contributes to overcome policy inertia even through action from the inside of certain economic branches, which otherwise would be highly resistant to change. For instance, German agriculture has been described as the "weakest link" if compared to all other Baltic Sea member states as far as the willingness to accept water protection measures is concerned.[65] Engaging representatives from the German agricultural sector in joint cross-border projects together with colleges from other Baltic Sea countries as it is currently the case in one of the Flagship Projects[66], intended to facilitate the exchange of best practice examples, may thus be a promising way to break this particular resistance and increase German farmers' commitment to Baltic Sea protection measures.

Apart from the effects that the strategy will probably entail in terms of improved patterns for cooperation and exchange among political and societal actors throughout the Baltic Sea Region, another positive effect can be expected to arise from the long-term implications that it will probably have on the EU as a whole. In fact, it is evident that the strategy will not only impact developments within the targeted region but in turn also will open up increased opportunities for the region to influence decision making processes within the EU's central institutions. This may be possible in two ways (Schymik 2011: 10). First, the Baltic Sea Region could serve as a model region, a testing ground for the development of policies and management strategies which, if successful, can be applied also in other European macro-regions or even inspire the development of new EU legislation. Second, as the strategy

[65] Interview with an official from the European Commission, 15.09.2010

[66] The Flagship Project „Putting best practices in agriculture into work" is conducted under the Baltic Sea Strategy's first priority "To reduce nutrient inputs to the sea to acceptable levels". The German Farmers' Association is one of the project's leadpartners together with Swedish, Danish and Finnish agricultural associations.

stimulates an increased cooperation and a more intensive exchange of views among regional actors, there is a chance that it will enable member states to perceive common challenges in a more similar way and thus encourage them to agree jointly on strategies to address these issues. If in this way overall processes of political opinion formulation on problems related to the region become more coherent, a consequence might be, that national governments find it easier to engage in concerted actions and thus to increase their bargaining power by setting up a Baltic Sea member state alliance when pushing for marine protection measures at the European level (Schymik 2009: 2).[67]

In other respects, however, the Baltic Sea Strategy falls short to fill out the earlier attested regulation gap at the macro-regional level. One of the prerequisites for engaging the EU in developing the strategy had been to concede that it must neither involve new legislation nor additional funding but rather should bring about better coordination in implementing and applying existing regulations and financial support mechanisms. Thus, the strategy can hardly be regarded as an adequate alternative to the establishment of a pilot region as it originally was intended under the Marine Strategy Directive. The Baltic Sea Strategy does not directly imply the adaptation of European environmental law to the special protection requirements that result from the sea's particular sensitive ecosystem. Neither does it provide additional financial means, which for instance would be necessary to support an upgrading of waste water treatment plants to the needed level throughout the whole Baltic Sea catchment area. It remains to be seen whether the new mechanisms of cooperation and indirect opportunities to impact EU politics, which nonetheless are provided for in the strategy, will be sufficient to indirectly achieve these necessary steps.

Another approach to fill the EU's regulation gap at the macro-regional level would be to enhance the role of the regional seas' conventions as an integral component of the EU's policy to protect the marine environments. Both the Marine Strategy Directive and the Strategy for the Baltic Sea Region as such do not provide a legally binding links to the objectives of these conventions, albeit the Baltic Sea Strategy's Action Plan is repeatedly referring to the HELCOM Baltic Sea Action Plan and requires its implementation as part of several of its strategic actions.

[67] In at least two incidents this mechanism has already proved to function quite well. One case is the Commission's proposal for a stricter legislation on phosphates in detergents, which was made in 2010 as a reaction to joint pressure from those member states, that participate in the Baltic Sea and Danube Strategies (European Commission 2010b: 5). Another example is provided by the fact that the governments of the EU's Baltic Sea member states during the preparation phase of the strategy succeeded to bring about a European Council decision according to which the protection of the marine environment should become the most central pillar. In contrast, the other policy objectives had been left open to be decided within the further process of developing the strategy (Schymik 2011: 15).

Both good reasons and quite realistic starting points exist for the incorporation of the regional seas conventions and in particular of the HELCOM objectives into European environmental law. A positive example is provided by a case, in which the European Commission successfully took France to the European Court of Justice (ECJ) for having failed to comply with some of the obligations regarding pollution from land-based sources under the Barcelona Convention (IEEP 2006: 7). In another incident the ECJ decided that in cases, in which provisions of international agreements fall within Community competence and both the EU and member states are parties to these agreements, the Court can function as a vehicle to enforce implementation of international obligations by the EU member states (Ebbesson 2007: 703). Thus, there is no reason to fear legal uncertainty when establishing a binding link to the regional seas' conventions.

Even in terms of the practical procedure the Baltic Sea Strategy's Action Plan offers a rather concrete suggestion for the inclusion of the HELCOM obligations. The principal purpose of one of its horizontal actions is that the Baltic Sea shall "Become a pilot project in implementing the Marine Strategy Framework Directive" (European Commission 2010: 71). This programmatic action is further substantiated by declaring that the HELCOM BSAP accurately fulfills those eligibility conditions that are laid down in the Marine Strategy Directive for justifying a pilot project. It hereby refers to the fact that the BSAP includes several requirements, which are stricter than the corresponding EU protection standards. Member states should together with the Commission proceed from that basis and use the BSAP as the legal foundation for the establishment of a pilot project to enhance the protection of the Baltic Sea.

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