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COLLECTIVE ACTION IN THE BALTIC SEA REGION

*Options for Strengthening Implementation
of the Environmental Pillar of the
EU Strategy for the Baltic Sea Region*

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Baltic Sea Basin

NASA/GSFC, MODIS Rapid Response

FINLAND

SWEDEN

St. Petersburg

• Helsinki
• Tallinn

ESTONIA

Oslo

• Stockholm

LATVIA

• Riga

LITHUANIA

Vilnius •   • Minsk

DENMARK

Kaliningrad
•

BELARUS

• Copenhagen

POLAND

• Warsaw

GERMANY   •

Berlin

Capitals
Drainage area
National border

0   600 km

Prague •

CZECH REPUBLIC

Baltic Region Illustration produced by AUTOMATTI, based on data from NASA/GSFC, MODIS Rapid Reponse.

List of abbreviations

BALTEX	The Baltic Sea Experiment	**ICZM**	Integrated Coastal Zone Management
BSAP	Baltic Sea Action Plan		
CBSS	Council of Baltic Sea States	**IMF**	International Monetary Fund
CCB	Coalition Clean Baltic	**IUU**	Illegal, unregulated, unreported
BDF	Baltic Development Forum	**M&E**	Monitoring and Evaluation
EC	European Commission	**MONAS**	Monitoring and Assessment
EU	European Union	**MSFD**	Marine Strategy Framework Directive
GDP	Gross Domestic Product		
GIWA	Global International Waters Assessment	**NEFCO**	Nordic Environment Finance Cooperation
EBRD	European Bank for Reconstruction and Development	**NCP**	National Contact Points
		NDEP	Northern Dimension Environmental Partnership
EIB	European Investment Bank		
EMODNET	European Marine Observation Data Network	**NIP**	National Implementation Programmes
HDI	Human Development Index	**POPs**	Persistent Organic Pollutants
HELCOM	Baltic Marine Environment Protection Commission (the Helsinki Convention)	**SIWI**	Stockholm International Water Institute
		USD	United States Dollar
ICES	International Council for the Exploration of the Sea	**WFD**	Water Framework Directive
		WWF	World Wildlife Fund

How to cite

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1 Executive Summary

In October 2009, the European Council adopted the European Union (EU) Strategy for the Baltic Sea Region with the ambition to launch a region-wide collective effort to achieve a sustainable environment, enhance the region's prosperity, increase the region's accessibility and attractiveness, and ensure safety and security throughout the region (EC 2009, European Council 2009). This marks the first time that the EU has developed a comprehensive "macro" strategy addressing both the environment and economic growth issues across multiple sectors in a particular geographic region. The strategy's most pressing objective is restoring and protecting the Baltic Sea environment, given the sea's highly degraded condition and its importance as a regional public good with environmental, economic, and cultural significance in the region.

This paper provides an overview of the region and the environmental and political challenges it faces. Secondly, it describes the EU's collective approach to addressing those challenges in the new EU Strategy for the Baltic Sea Region, focusing on the environmental pillar, "Making the Baltic Sea Region an Environmentally Sustainable Place". Thirdly, the paper provides an assessment of the legal framework related to the environment and water resources into which the strategy is placed relative to national law, EU law, international law, and some illustrative third party arrangements with non-EU member countries in the wider Baltic Sea region.

The paper concludes that the EU Strategy for the Baltic Sea Region is innovative in its approach to using the EU structure to unite a "macro region" across multiple sectors based on four pillars: environmental sustainability; prosperity; accessibility and attractiveness; and safety and security. More than a year into its implementation, however, the strategy has not fully tackled difficult coordination, planning and implementation challenges inherent in following the large number of laws and operating within multiple layers of governance mechanisms. Instead, the strategy takes foremost a programmatic approach based on the implementation of multiple projects rather than a policy and regulatory oriented approach. To achieve long-term impacts in line with the strategy's objectives, a dual approach of tackling governance issues (institutional reform, policy, and the regulatory framework) in parallel with the current programmatic approach is recommended.

Four specific recommendations are offered related to the governance framework on how the member states and EU institutions might move forward with implementation of the strategy's environmental pillar: 1) undertake an institutional assessment to clarify the roles of existing Baltic Sea governance bodies and institutions, their linked legal obligations, and arrangements with the EU's external partners in the Baltic Sea region (Ukraine, Belarus, and Russia); 2) establish a baseline Monitoring and Evaluation System with a cause-effect relationship to steer the implementation of the Environmental Pillar in the context of the EU Baltic Sea Strategy; 3) undertake a legal assessment of key EU Directives, priority HELCOM Baltic Sea Action Plan (BSAP) actions, and targeted provisions of international law and their status of implementation; and 4) strengthen existing EU Directive implementation through solid regional coordination mechanisms.

Photo : Jakob Granit, SIWI

The Baltic Sea is one of the world's largest brackish water bodies, with a composition that is neither ocean nor freshwater. Freshwater flows into the sea from approximately 200 rivers in the basin, contributing to the sea's generally low salinity (ICES 2003). Nearly half of the inflow comes from the catchment area's seven largest rivers.[1] (GIWA 2005; HELCOM 2002). Throughout the sea, salinity varies widely, but on average it is about one-fifth that of the world's oceans, which is too low to support most marine species and too salty for most freshwater species (Zettler et. al. 2007). The result is a unique, highly sensitive marine ecosystem.

Nine countries directly border the Baltic Sea ("littoral states"): Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Sweden, and Russia. The catchment area covers 1.7 million km² and includes five more riparian countries: Belarus, Czech Republic, Norway, Slovakia, and Ukraine. Approximately 85 million people live in the Baltic Sea region. Of those, nearly 20 million people live within 10 kilometres (km) of the sea's coastline and approximately 50 million live within 150 km of the sea. Within the region, land cover and population density vary greatly. The southern part of the region includes highly populated urban areas and vast farmland. In the north, the landscape is dominated by large expanses of forests, lakes, and wetlands and includes some very sparsely populated areas. Population density varies from over 500 inhabitants/km² in the urban areas of Poland, Germany, and Denmark, to less than 10 inhabitants/km² in the northern parts of Finland and Sweden. (GIWA 2005).

The sea region traditionally has been divided into the following sub-catchment areas: the Bothnian Bay, Bothnian Sea, Archipelago Sea, Gulf of Finland, Gulf of Riga, Baltic Proper, Belt Sea, and The Kattegat (HELCOM 2007a). The Baltic's geography makes it particularly susceptible to environmental damage. The sea is relatively shallow, with an average depth of about 55 metres and a surface area that is one-fourth the size of its catchment area. Thus, a small volume of water receives comparatively large sources of land-based pollution. Moreover, the Baltic Sea is semi-enclosed, with only a narrow outlet to the South at the Danish Straits allowing limited exchanges of water with the North Sea and eventually with the Atlantic Ocean (Telkanranta 2006). Only 3 % of the water is exchanged annually. As a result, it takes approximately 25-30 years for the Sea to replenish itself, meaning that any environmental damage may be sustained for a long time (Schiewer 2008).

Since the Middle Ages the Baltic Sea has been a unifying factor in the region, with settlements taking place along the coasts and along inland waterways providing navigation, communication and transport of goods to nearby and far away markets (Klinge 1985). Peaceful cooperation

has been interrupted by armed conflict in struggles for power and wealth (Kirby 1996). After the Second World War, the Cold War period (1945-1991) resulted in limited contacts between Eastern and Western states in the region due to different political and economic systems. The "iron curtain", a political divide between Western and Eastern states, at times blocked dialogue between the countries on issues of common concern (Ibid). The Cold War period is significant because it coincided with reconstruction in Northern Europe after the Second World War and with a strong industrialisation movement in all the Baltic Sea countries alongside a major modernisation processes in agriculture (Ibid). The large-scale industrialisation and modernisation of agriculture created great wealth for some of the Baltic countries but also major environmental damage and liabilities, including loss of biodiversity, through the release of hazardous substances and high loads of nutrients in the Baltic Sea region ecosystem (HELCOM 2010).

The transboundary nature of the Baltic Sea region ecosystem means that all basin states are affected by this damage and by environmental and water quality degradation, regardless of the source or geographical origin of pollution. The transboundary aspect of the Baltic Sea presents a classic dilemma with lack of management of a regional public good (Hardin 1968): the management of the transboundary water resources cannot be adequately addressed by individual countries acting alone without cooperation by their neighbour states, through consensus or other legitimate decision-making process (Granit 2010, International Task Force on Global Public Goods 2006).

Initial cooperative efforts to address the Baltic Sea regional environment as a regional public good can be traced to the UN Conference on the Human Environment in Stockholm (1972). This was the first global conference highlighting the linkages between human well-being and health, the environment and economic growth.[2] Beginning in the 1960s, the research community had raised alarm over the deteriorating state of the Baltic Sea ecosystem evident through the accumulation of toxic substances in fish and seals and the excess of plant nutrients causing eutrophication and massive growth of algae leading to deep water oxygen deficiency (Jansson and Dahlberg 1999). Twenty years earlier in the 1940s the Baltic Sea was a nutrient-poor sea with low biological production and clear waters (Ibid). Many scientists argue that the Baltic Sea ecosystem had turned into a nutrient rich state in a very short time (Granit 2011).

The state of the environment was the key starting point for regional collaboration that led to the establishment of the Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area (HELCOM) to which all of the countries surrounding the Baltic Sea, including Russia, became contracting parties (Räsänen and Laak-

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[1] The Neva (Russia), Vistula (Belarus, Czech Republic, Poland, Slovakia, Ukraine), Duagava (Belarus, Latvia, Russia), Nemunas (Belarus, Lithuania, Poland, Russia Kaliningrad Oblast), the Kemijoki (Finland), the Oder (Czech Republic, Germany, Poland), and the Göta Älv (Sweden). (GIWA 2005)

[2] Declaration of the United Nations Conference on the Human Environment, www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503, accessed 1 February 2011

konen 2007) in 1974 and which entered into force on 3 May 1980. According to Joas et.al. (2008) HELCOM became the first international management agreement on the protection of a regional sea based on non-binding commitments to address environmental issues. The Helsinki Convention was a general convention covering all the pollutants known at the time of its inception and was later used as a model for other international environmental conventions such as the Protection of the Mediterranean Sea against Pollution (Räsänen and Laakkonen 2007).[3]

Following the Cold War period and in parallel to HELCOM's development and growth and the EU's enlargement, many other intergovernmental institutions, such as the Council of the Baltic Sea States (CBSS), were created to address regional development issues (Kern and Löffelsend 2008). Similarly, civil society organisations such as the Baltic Development Forum (BDF) and the Coalition Clean Baltic (CCB) were created promoting transborder dialogues, environmental safeguards, and trade and investment (Ibid). The region was shifting from limited dialogue and cooperation during the Cold War period to a region where cooperation between countries and their citizens could again begin to take shape (Joas et.al. 2008). HELCOM responded to these political changes and in 1992 a new Convention was signed that also took developments in international environmental and maritime law into account.[4] The new convention "… covers the whole of the Baltic Sea area, including inland waters as well as the water of the sea itself and the sea-bed." and was ratified in 2000 (Ibid).

Simultaneously, governance in the region has undergone a period of swift change, with the fall of the Soviet Union and the expansion of the EU. Sweden and Finland became members of the EU in 1995 and were subsequently joined as members of the EU by Estonia, Latvia, Lithuania, and Poland in 2004. This "Europeanisation" process has presented new opportunities to manage the Baltic Sea as a regional environmental public good and to fortify cooperative efforts to restore the Sea (Joas et.al. 2008).

Although these changes have improved the political environment for collaboration, there remain differing economic, social and environmental starting points for the participating countries. Some of the wealthiest and some of the poorer EU member states border the Baltic Sea, with the division largely occurring between East and West. Estonia, Latvia, Lithuania, and Poland have an average annual per capita Gross Domestic Product (GDP) of approximately 15,100 USD. In contrast, the western member states bordering the Sea (Denmark, Finland, Germany, and Sweden) have an annual average per capita GDP of approximately 52,700 USD (table 1). The difference in GDPs reflects the large economic gap between the Western and the Eastern parts of the Baltic Sea basin which also helps explain the different development priorities of the basin countries and the particularly strong focus on economic growth in the eastern states. All of the member states in the region have been affected by the recent global economic crisis, as reflected by lower GDPs and other indicators. The Eastern states, except Poland, have been the hardest hit, further widening the economic gap between some Eastern and Western states in the region. In recommending certain actions of member states as part of a collaborative regional strategy, the differing financial and economic abilities of the member states need to be considered and addressed, as do the different governance capacities of the member states.

In spite of the solid work on environmental policy and guidelines for action through HELCOM since 1972, evidence of ecosystem degradation indicates that this cooperation and coordination have been inadequate to tackle the root causes of the degradation (Joas et.al. 2008). The EU Strategy for the Baltic Sea region attempts to overcome these inadequacies by providing a new way of working together and addressing both the environment and economic development and by building regional coherence and ownership of the Baltic Sea, in a way that will help bridge East-West divisions exacerbated during the Cold War. The next section provides more detail about some of the region's challenges related to the degradation of the common environment.

Country	2008	2009	2010	2011	Estimates Start After
Belarus	6 400	5 191	5 800	7 091	2009
Czech Republic	20 816	18 171	18 288	20 738	2010
Denmark	62 359	56 052	56 147	60 962	2010
Estonia	17 651	14 402	14 836	15 273	2009
Finland	51 020	44 556	44 489	48 188	2009
Germany	44 525	40 832	40 631	43 205	2010
Latvia	14 913	11 466	10 695	11 662	2010
Lithuania	14 084	11 056	11 044	12 323	2010
Norway	93 253	78 183	84 444	96 811	2009
Poland	13 887	11 299	12 300	13 079	2010
Russia	11 701	8 614	10 437	13 543	2009
Slovak Republic	17 543	16 187	16 104	17 509	2009
Sweden	52 729	43 404	48 875	58 228	2010
Ukraine	3 921	2 569	3 000	3 483	2008

Table 1. Annual gross domestic product per capita, current prices for EU Baltic Sea Basin States (USD). International Monetary Outlook Database, IMF 2011, accessed online 2 May 2011.

[3] HELCOM Contracting parties: Denmark, Estonia, European Union, Finland, Germany, Latvia, Lithuania, Poland, Russia, and Sweden. Observers: Belarus, Ukraine and several Intergovernmental and International Non-Governmental Organisations. www.helcom.fi, accessed 2 May 2011
[4] www.helcom.fi/Convention/en_GB/convention/, accessed 2 May 2011

The health of the entire Baltic Sea ecosystem is severely degraded. In May 2010, HELCOM released its first holistic assessment of the sea's ecosystem health, based on data from 2003-2007. The report concludes that none of the sea's open-water basins currently has a "good environmental status." Only a very few coastal areas along the Gulf of Bothnia can be considered "healthy" (HELCOM 2010). Pressure from agriculture, fisheries, industries, and the maritime sector have severely compromised the sea's health, with most areas now affected by eutrophication, hazardous substances, and degraded biodiversity (HELCOM 2010).

Five factors are generally recognised as leading to the sea's deterioration and present the immediate challenges for reform. These are: 1) eutrophication; 2) hazardous substances; 3) maritime activity; 4) overfishing and invasive species; and 5) climate change (HELCOM 2010). The development of these five factors into environmental challenges is closely related to the industrial development path and the modernisation of agriculture in the region during the last century (Kirby 1996).

3.1   Eutrophication

Eutrophication is a sign of an aquatic ecosystem severely out of balance. Its primary symptom is a layer of greenish-brown or orange sludge on the water's surface, the visible accumulation of algae. On the Baltic, this sludge has become a common sight, especially in the summer months, when warm temperatures intensify algae growth and make many of the Baltic's waters unsuitable for swimming. In July 2010, a European Space Agency satellite captured images of a massive algal bloom stretching from Finland to Germany and Poland, covering 377,000 km^2 of the sea (roughly the size of Germany).[5]

Eutrophication occurs because of excessive nutrients, primarily nitrogen and phosphorous, in a waterbody. These nutrients feed plant growth, particularly the growth of blue-green algae blooms. In turn, the plants and organic matter grow and then decay, causing sediment to fall to the seabed, where it consumes oxygen. Large volumes of sediment consume large quantities of oxygen, and as oxygen is leached from the water, the marine environment becomes increasingly unable to support fish and plant life. Areas of the Baltic seabed are so oxygen-depleted that they have become hypoxic "dead zones" that can no longer support any marine plant and animal life. In all, about 100,000 km^2 of the Sea are affected in this way. (Diaz and Rosenberg 2008, HELCOM 2009a).

Agriculture and livestock operations and urban wastewater effluent are major sources of nutrient pollution in the Baltic. Other sources include air emissions, untreated sewage,

cruise ships that dump human waste directly into the sea, stormwater runoff from cities, energy production, and transport. During the twentieth century, nitrogen levels in the Baltic have increased fourfold, and phosphorus levels have increased eightfold (Larson et. al. 1985). The total input of nitrogen to the Baltic Sea is almost 837,500 tonnes per year, of which about 75% enters from waterborne sources and 25% from the atmosphere (HELCOM 2009b).

Significant reductions in loads from point sources have been achieved in some countries. Today, around 95% of the urban sewage in e.g. Sweden is subject to secondary treatment and phosphorous removal. Through de-nitrification methods about half of Sweden's sewage undergoes treatment to remove nitrogen. With sophisticated treatment processes more than 90% of the nitrogen can be removed. As a result, the discharges of nitrogen from Swedish municipalities fell by almost a third between 1995 and 2002. Through chemical treatment, discharges of phosphorus have been reduced by more than 90%. Discharges from industry in Sweden have been reduced at a similar rate. (Lundqvist et.al. 2007).

Eutrophication remains, however, a major concern in most areas of the Baltic Sea. Over the period 2001-2006 diffuse sources were the main contributors of nitrogen and phosphorous to the sea (39% and 48%, respectively), while point sources contributed 11% and 21% of nitrogen and phosphorous, respectively. Despite measures taken in the region, the HELCOM assessment reported no obvious reduction in nitrogen and phosphorous loads attributable to those measures from 1995-2006. Any improvements were attributable largely to hydrologic variability (i.e. dry years vs. wet years). The Bothnian Bay and the northeastern parts of the Kattegat are the only open sea areas not affected. According to HELCOM, the five largest sources of nitrogen and phosphorus are the rivers Vistula, Neva, Oder, Daugava and Nemunas where significant investment in wastewater treatment still is needed to reduce nutrient input to the sea. (HELCOM 2010).

3.2   Hazardous Substances

In addition to the inputs of nutrients, a number of other pollutants enter the Baltic Sea. Man-made chemical compounds, heavy metals, and radioactive substances pose a threat to the ecosystem (HELCOM 2010). According to HELCOM (2010) "Hazardous substances include compounds that have adverse effects on the ecosystem and human health by being toxic, persistent and bioaccumulating". This means that these substances are found in higher concentrations in animals that are high in the food chain (Jansson and Dahlberg 1999). Metal concentrations such as for cadmium, lead, mercury and zinc are shown in studies from sediments in the Baltic proper to start to rise in the

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[5] www.esa.int/esaEO/SEMKO50PFBG_index_0.html, accessed 2 May 2011

1950s and peak during the 1960s and 1970s and then begin to decrease in the 1980s (Ibid). As the sediments show large quantities of heavy metals were discharged into the Baltic Sea during the last century. For example, a single smelter in the north of Sweden annually emitted over two thousand tonnes of arsenic and a hundred tonnes each of lead, copper and zinc into the Bothnian Bay (Lundqvist et.al. 2007). With modernisation of industry discharges of metals from point sources are now substantially reduced.

Similarly, persistent organic pollutants (POPs) such as PCB that were used in electrical equipment, paint and plastics began to be used in the 1930s. The use of these chemical compounds was intensified in the 1960s and 1970s. DDT that was used as an insecticide in agriculture was also used intensively in the same period as PCB. During the 1980s the concentration of these three compounds in the Baltic Sea ecosystem continued to decrease. (Jansson and Dahlberg 1999).

However, HELCOM reported in 2010 "that all open-sea areas of the Baltic except the western Kattegat were classified as being disturbed by hazardous substances" (HELCOM 2010). The concentration of Dioxins and furans from, for example, the burning of waste and as a byproduct from the pulp and paper industry still exceed the safety criteria for seafood in the northern and northeastern part of the Baltic Sea and new threats from brominated substances used as flame retardants are emerging (Ibid).

3.3 Maritime Activities and Other Sea Uses

Maritime transport is intensive on the Baltic Sea, and accidents and a combination of intentional and non-intentional spills and dumping contribute a significant load of pollutants. The Baltic Sea has some of the busiest shipping routes in the world, hosting approximately 15% of the world's maritime transportation. At any given time, approximately 3,500 ships are on the sea, including approximately 2,000 large ships, such as oil tankers, cargo ships, and passenger ferries. With growing economies, traffic on the Baltic is increasing and overall shipping traffic is expected to double by 2030 (WWF 2010; Swedish Environmental Protection Agency 2008). Oil shipping, in tonness, is predicted to grow by 64% by 2030 (HELCOM 2009c). During the period 2001-2008, 61 shipping accidents were reported to have occurred resulting in some pollution (HELCOM 2010).

Other uses include commercial and recreational fisheries, offshore alternative energy projects, oil and gas exploration and drilling, mineral mining, port expansions, tourism and research opportunities, and coastal development (GIWA 2005). Historically, these uses have been largely uncoordinated and often inadequately monitored and controlled. Given the variety and volume of uses on the sea, lack of coordinated planning increases the likelihood of accidents and pollution incidents.

3.4 Overfishing, Invasive Species, and Habitat Biodiversity Impacts

A limited number of species have been able to adapt to survive in the sea's brackish environment and are therefor particularly sensitive to changes in water quality, alterations to salinity, water temperature, and the low oxygen content of bottom areas. Climate variation and hydrographic changes, eutrophication, and fishing pressure have all harmed the Baltic's sub-ecosystems and biodiversity to varying degrees (ICES 2010).

The main fish species commercially fished in the Baltic Sea include cod, herring, sprat, and salmon. Allocation of fishing opportunities to member states occurs annually at the EU level in accordance with EU regulations under the Common Fisheries Policy. Other species fished, mostly in coastal waters, include, among others, species of trout, eel, and perch. Fleet overcapacity and overfishing – often well

beyond limits recommended by scientific advice and worsened by illegal, unregulated, and unreported (IUU) fishing – as well as the effects of eutrophication and oxygen-depletion on species and their habitats, has resulted in the decline of Baltic stocks, especially cod and eels (ICES 2010). Certain fishing practices, especially bottom trawling, destroy fish habitat and result in the by catch of non-target species, such as marine mammals and birds. Invasive species have been introduced to the sea from sources such as ship ballast water, crowding out or otherwise adversely altering native species' habitat.

Biodiversity in almost all Baltic Sea areas is classified as ranging from "bad" to "moderate" in the HELCOM Assessment (HELCOM 2010). Biodiversity has been severely affected as a result of all of the activities cited above, and the effects are apparent on the species within the Baltic Sea ecosystem.

3.5 Climate Change

BALTEX (2006) reports that the region has experienced a "marked [temperature] increase of more than 0.7 ºC " over the last century which is larger than the global increase of about 0.5 ºC. Increase in winter runoff, shorter ice seasons and reduced ice thickness on rivers and lakes are further evidence of the increase in temperature but may not shown to be larger compared to natural variability (Ibid). HELCOM (2007b) in its thematic assessment on climate change in the Baltic Sea Area states that "the projections for future climate change in the Baltic Sea basin, with …(its) uncertainties, indicate that atmospheric temperatures will continue to warm during the course of the 21st century in every sub-region of the Baltic Sea basin". Regional modeling studies, further, indicate a warming of the mean annual temperature in the order of 3 ºC to 5 ºC for the total basin during this period with the largest part of this warming to occuring to the east and north of the Baltic Sea during the winter months and to the south of the Baltic Sea during summer months (HELCOM 2007b).

With a continuous increase in temperature, a number of changes will affect the marine environment. Increased temperature will increase retention of nutrients, but at the same there is a risk for increased leaching of nutrients with increased precipitation and faster turnover of water (Lundqvist et.al. 2007). Increasing summer temperatures may also enhance algae blooms (BALTEX 2006) supported by an increase in nutrients. It is extremely difficult to predict whether the inflow of salt water from the Skagerrak to the Baltic will increase or decrease, but a reduced solubility for oxygen with increased temperature is likely (Lundqvist et.al. 2007).Higher temperatures and increased soil moisture could also, potentially, increase the competitiveness of the region's agriculture and animal husbandry businesses with longer growing seasons (Ibid).

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[5] http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm, accessed 1 May 2011.

4   A Regional Response: The EU Strategy for the Baltic Sea Region

4.1   The Development of a Regional Strategy

With the accession of Estonia, Latvia, Lithuania and Poland to the EU in 2004, eight of the nine countries bordering the Baltic Sea became members of the EU, which, as has been stated, makes the Baltic "something of an EU inland sea" and its "state of health a matter of concern for the entire EU" (European Parliament 2006). The European Parliament's Committee on Foreign Affairs saw these challenges and opportunities and in 2006 urged "…the commission to come up with a proposal for an EU Baltic Sea strategy in order to reinforce the internal pillar of the Northern Dimension, cover horizontally different aspects of regional cooperation, promote synergies and avoid overlapping between different regional bodies and organisations . . ." The concept promoted was based on the need to improve the ecological status of the Baltic Sea and the desire to make the most out of the dynamic economies in the Baltic Sea region and to create a brand for the region as "…as one of the most attractive and competitive areas in the world" (European Parliament 2006).

The EU further noted that existing international agreements and national laws as currently implemented and enforced have not brought about the needed changes in the Baltic Sea region (EC 2009). EU membership would present an opportunity to develop a strategy that would address the needs and challenges of the region in dialogue with non-EU member states. The "introduction of EU rules, and the opportunities created by EU instruments and policies opened important new possibilities for a more effective co-ordination of activities" and the chance for the region to take "full advantage of the new opportunities that EU membership provides" (EC 2009).

Although the region as a whole includes broad economic, environmental, and cultural differences, the countries in the region "share many common resources and demonstrate considerable interdependence" which means that actions in one area can very quickly have consequences for other parts, or the whole, of the region" (Ibid). Thus, it became apparent to the EU and the member states in the region that economic and environmental challenges, as well as safety and security and accessibility, required a coordinated region-wide response across multiple sectors to succeed. Not only would the effort focus on addressing the prevalent environmental challenges in the region but also on addressing regional economic challenges and linking what are often considered divergent sectors in the process.

Recognising this opportunity, the European Council in its Presidency Conclusions on December 14, 2007, invited the Commission to present a European Union Strategy for the Baltic Sea Region by June 2009. Development and adoption was a high priority during the Swedish Presidency of the EU in the latter half of 2009. In June 2009, after intensive consultation with member states and stakeholders, the European Commission presented its proposal for an EU Baltic Sea Region Strategy to the Council. When presenting the strategy, Commissioner Danuta Hübner emphasised that "[the] EU is well-placed to coordinate the work that needs to be done in order to make the most of available resources to save the Baltic Sea, boost trade, and improve the quality of life of everyone in the region."[6] The EU Strategy for the Baltic Sea Region was adopted by the European Council in October 2009 (Ibid).

The EU Strategy for the Baltic Sea Region is described in a communication from the European Commission to the Council and the European Parliament and in an action plan that complements the communication (EC 2009). The strategy is meant to be a continuously adapting and developing document, with a 'rolling' action plan that will adjust with the region's needs. The most recent version of the action plan was issued in May 2010.[7]

Working across multiple sectors and with all of the countries bordering the Baltic, the strategy includes measures to restore and protect the Baltic Sea environment while promoting economic growth and competition throughout the region. The EU Baltic Sea Strategy is composed of four "pillars," each focusing on a specific regional challenge: (1) Improving the environmental state of the Baltic Sea region and especially of the sea; (2) Making the Baltic Sea region a more prosperous place by supporting balanced economic development across the region; (3) Making the Baltic Sea region a more accessible and attractive place for both its inhabitants and for tourists; and (4) Making the Baltic Sea region a safer and more secure place (see chart 1).

There are also "horizontal strategy goals," which include "aligning available funding and policies with the priorities and actions of the EU Strategy for the Baltic Sea region" and "cooperating on the transposition of EU Directives." The strategy emphasises that actions are grouped into pillars for ease of analysis but that "every pillar relates to a wide range of policies and will have impacts on the other pillars." (EC 2009).

4.2   Macro-Region Approach

A "macro-region" strategy is a new method of guidance and planning at the EU level, and formulation of the approach is still developing. The strategy defines a macro-region as "an area including territory from a number of different countries or regions associated with one or more common features or challenges," although there is no standard definition of the phrase.[8] It further defines a "macro-regional strategy"

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[6] http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/893>, accessed 3 February 2011

[7] http://ec.europa.eu/regional_policy/cooperation/baltic/documents_en.htm>, accessed 26 October 2010

[8] http://ec.europa.eu/regional_policy/cooperation/baltic/pdf/macroregional_strategies_2009.pdf, accessed 3 February 2011

Chart 1

The Baltic Sea Region Strategy and Action Plan

PILLAR 1

Make the Baltic Sea Region an Environmentally Sustainable Place

1. Reduce nutrient inputs the sea acceptable levels

2. Preserve natural zones and biodiversity, including fisheries

3. Reduce the use and impact of hazardous substances

4. Become a model region for clean shipping

5. Mitigate and adapt to climate change

PILLAR 2

Make the Baltic Sea Region a Prosperous Place

6. Remove hindrances the internal market in the Baltic Sea Region including by improving cooperation in the customs and tax area

7. Exploit the full potential of the region in research and innovation

8. Implement the Small Business Act: promote entrepreneurship, strengthen SMEs, and increase the efficient use of human resources

9. Reinforce sustainability of agriculture, forestry and fisheries

PILLAR 3

Make the Baltic Sea Region an Accessible and Attractive Place

10. Improve the access, and the efficiency and security of the energy markets

11. Improve internal and external transport links

12. Maintain and reinforce attractiveness of the Baltic Sea Region in particular through education, tourism and health

PILLAR 4

Make the Baltic Sea Region a Safe and Secure Place

13. Become a leading region in maritime safety and security

14. Reinforce protection from major emergencies at sea and on land

15. Decrease the volume of, and harm done by, cross border crime

Horizontal Actions

- Align available funding and policies the priorities and actions of the EU Strategy for the Baltic Sea Region
- Cooperate on the transposition of EU Directives
- Develop integrated maritime governance structures in the Baltic Sea Region
- Become a pilot project in implementing the Marine Strategy Framework Directive
- Encourage the use of Maritime Spatial Planning in all member states around the Baltic Sea and develop a common approach for cross-border cooperation
- Develop and complete Land-based Spatial Planning
- Transform successful pilot and demonstration projects in full-scale actions
- Use research as a base for policy decisions
- Define and implement the Baltic Sea basin component of the European Marine Observation Data Network (EMODNET) and improve socio-economic data
- Build a regional identity

(EC 2009)

as "[an] integrated framework that allows the European Union and member states to identify needs and allocate available resources thus enabling the Baltic Sea region to enjoy a sustainable environment and optimal economic and social development" (Ibid).

Generally, the EU addresses policy issues across the entire EU. Through a macro-strategy, the EU can facilitate cooperation on problems affecting a smaller group of member states united by a common regional resource or other feature. Coordination can also occur across multiple policy areas in this way (e.g. economy and environment, transportation and energy). Throughout development of the EU Baltic Sea Strategy, the Commission has been clear on the point that the EU's role is one of facilitation, not direction, relying on "existing resources, legislation and structures to be better used for the benefit of the whole region." (Ibid).

While the EU Strategy for the Baltic Sea Region is the first macro-regional strategy to be adopted in the EU, and its implementation is not yet complete, development of more macro region strategies are already being discussed within the EU. Upon request by the EU member states the Commission initiated a consultation process in 2009 to develop a macro strategy for the Danube region. The EU Strategy for the Danube Region was adopted by the European Commission on 8 December 2010.[9] The way that the Baltic Sea Region Strategy was developed and is currently being implemented has become a model for other regions in the EU.

4.3 The Environmental Pillar of the EU Strategy for the Baltic Sea Region

The environmental pillar of the strategy, "to make the Baltic Sea region an environmentally sustainable place," has five Priority Areas, each addressing one of the previously-discussed major environmental challenges on the Baltic Sea. The priority areas are:

1. To reduce nutrient inputs to the sea to acceptable levels;
2. To preserve natural zones and biodiversity, including fisheries;
3. To reduce the use and impact of hazardous substances;
4. To become a model region for clean shipping;
5. To mitigate and adapt to climate change.

Numerous projects of various sizes and scale are listed within each of these priority areas. For example, in the first priority area, "to reduce nutrient inputs to the sea to acceptable levels," the following are set out as "strategic actions," to be coordinated by Poland and Finland:

• Reduce nutrients through actions including full implementation of the key EU directives relating to eutrophication and the actions listed in the section on eutrophication in HELCOM's Baltic Sea Action Plan.

• Promote measures and practices that reduce nutrient losses from farming and address eutrophication, including full implementation of the Nitrates and Water Framework Directives and full implementation of the new Common Agricultural Policy Cross-Compliance requirement to establish buffer strips along watercourses.

• Full implementation of the Water Framework Directive together with the Nitrate Directive and the Urban Waste Water Directive, in line with the objectives of the Marine Strategy Framework Directive for 2020.

"Cooperative actions" are also listed. Finally, there are "flagship projects" within the priority area, some of which are identified as "fast track" projects that should be completed immediately. Some of these projects name lead member states and have deadlines. Projects include:

• Prepare a timetable of phasing-out of use of phosphates in detergents as recommended by the HELCOM Baltic Sea Action Plan by 31 December 2012.

• Identify, build/upgrade priority wastewater treatment plants around the Baltic Sea and improve the functioning of existing wastewater treatment plants, taking into account HELCOM's ongoing processes, requirements, and timetable.

• "Put best practices in agriculture into work," by, for example, creating a formal network of specialist advisers on environmental issues within agriculture from all countries around the Baltic Sea.

• Cooperate with Russia and Belarus on a comprehensive regional pollution risk assessment", in particular in the context of the Northern Dimension Environmental Partnership.

Each of the priority areas in the environmental pillar of the strategy is similarly structured, identifying ambitious projects that need to be implemented to improve the health of the Baltic Sea ecosystem. In October 2009, guidance was issued advising priority area coordinators on the role they are expected to play in the strategy.[10] According to the guidance, the coordinators' "primary role is to take the appropriate measures so that, as far as possible, the actions and projects mentioned in the action plan are implemented as foreseen and on time." Priority area coordinators will then report on progress in their area, which will contribute to annual implementation reports to the commission.

4.4 An EU Regional Governance Model for the Baltic Sea Region

It is clear that in developing the EU Baltic Sea Strategy, a purely cooperative model was preferred. The EC has emphasised as one of the strategy's strengths the fact that the strategy contains no new funding, no new laws,

[9] http://ec.europa.eu/regional_policy/cooperation/danube/documents_en.htm, accessed 3 February 2011
[10] Guidance to the Priority Area Coordinators http://ec.europa.eu/regional_policy/cooperation/baltic/pdf/events/1009_warsaw_guidance.pdf, accessed 13 September 2010

and no new governance entities. Behind this approach may be the hope that member states and existing Baltic region institutions, instead of competing against each other for funding, and relieved of the administrative burden associated with implementing yet another law, will be free to focus voluntarily on cooperative efforts and how to best use existing resources.

Consequently, the EU Baltic Sea Strategy does not offer incentives in the form of funding or disincentives in the form of sanctions but seems to rely instead on member states' unity of vision for the Baltic region and on their continuing belief that the strategy will yield long-term gains as the impetus for adherence to the strategy.

Although no new institutions are to be developed under the strategy, the EU has developed a guidance structure in an attempt to coordinate the number of actors and organisations in the Baltic Sea region. This structure is made up of directorate General for Regional Policy that is in charge of day to day coordination, monitoring and reporting to the council; a high level group of officials from the EU 27 members states and the Committee of the Regions together with the European Investment Bank; and finally National Contact Points (NCP) in the eight member states.[11]

4.5 A programmatic approach

The strategy includes an agreed action plan that identifies more than 80 projects in 15 priority areas within the four pillars. In each of the priority areas there are also a number of flagship projects, some of which are branded high visibility "fast track" projects. These projects are expected to demonstrate concrete results in a short time frame. Member states or organisations are named as responsible for priority areas and particular projects.[12] The strategy with its action plan can therefore be considered to take a programmatic approach to reach the agreed strategic objectives by identifying and implementing a number of projects in different priority areas (World Bank 2005). This process is based on the notion that the combined results from a large number of projects will collectively lead to outcomes as defined in the four pillars of the strategy.

This approach is in contrast to an approach focusing more on setting strategic outcome oriented goals to be achieved in the region by more directly addressing the governance, policy and regulatory framework itself and thus working to change the behavior of institutions and interest groups (Olsen 2003). Olsen (2009) defines governance as the values, policies, laws and institutions by which a set of issues can be addressed. The ultimate outcome of a strategy process would be to contribute to higher level outcomes such as improved and sustained high quality of life measured by improvement in, for example, the Human Development Index (HDI). HDI indicators address issues such as reduced inequality, greater life expectancy, access to knowledge and standard of living[13] as well as greater confidence in the future and hope.

When managing complex regional programme it is essential to put in place a baseline analysis in terms of governance and environment indicators to monitor progress (or lack of it) providing guidance to the many stakeholders involved (World Bank 2005). The EU Baltic Sea Region Strategy lacks such a baseline analysis in terms of governance and environment indicators and has a complex governance system including the rotation chairmanship of the EU, support by the EU Commission and implementation by the member countries and other regional institutions.

The following sections will analyse the existing EU legal framework that guides member states in their actions.

Photo: Jakob Granit, SIWI

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[11] http://ec.europa.eu/regional_policy/cooperation/baltic/documents_en.htm, accessed 31 January 2011
[12] Ibid
[13] http://hdr.undp.org/, accessed 3 February 2011

On paper, the Baltic Sea is highly regulated. It is subject to a complex web of laws at the international, EU, and national levels. The implementation, application, and enforcement of these laws involve numerous entities, including EU institutions, regional organisations, and local and national governments, authorities, and courts. It was into this legal framework that the EU Strategy for the Baltic Sea Region was introduced. Long term success of the environmental pillar of the strategy therefore depends heavily on the implementation of existing laws and initiatives.

As noted, some of the most severe environmental problems affecting the Baltic Sea have developed only in the last 60 years, a period simultaneously marked by rapid changes in governance in the region, particularly in former Soviet states. With these changes in governance have come new national laws, often reflecting changing priorities. Governance changes have also occurred as the EU has grown in membership and scope, establishing an expanding layer of supranational law in that same time frame (Joas et. al. 2007).

Policy considerations have also shifted in the past 50 years. When the European Community was first established in 1957, the treaty among member states focused almost exclusively on economic issues and contained no provisions on the environment (Sohar 1999). As the region increasingly realised the costs of policies that prioritised economic development at the expense of the environment, laws, policies, and conventions have emerged intended to halt or reverse environmental damage (Jordan 2002). In the last decade alone, several major EU directives focusing on water quality and the marine environment and have been adopted, including the Water Framework Directive (Directive 2000/60/EC, OJ L 327, 22/12/2000) and the Marine Strategy Framework Directive (Directive 2008/56/EC, OJ L 164, 25/6/2008, among others.

It is clear, however, given the condition of the Baltic Sea, that current law and policy as implemented have been ineffective in restoring the health of the sea. This reflects a need for better coordination, enforcement, and consistent interpretation and application of law throughout the region. This section discusses first the general legal framework on Baltic Sea environmental issues; second, the major EU laws affecting the Baltic Sea environment; third, the major international agreement (the Helsinki Convention) affecting the Baltic Sea environment; and finally it provides an overview of other EU policies with neighboring countries.

5.1   National Law

In each of the sovereign countries surrounding the Baltic Sea, laws at the national and sub-national levels are passed to carry out national policies and priorities. Effective implementation and enforcement of these laws depend on national priorities, too, as well as on available resources and capacity. Some national laws passed by EU member states are not the result of individual nations' priorities but are implemented as a result of EU Directives or other provisions of EU law.

Historically, differences in national priorities, resources, and governance capacity among nations surrounding the Baltic Sea have been especially apparent in the field of environmental protection. Some member states have a long history of prioritising protection of the environment, while others are still in the comparatively early stages of developing the necessary capacity to fully implement laws designed to protect the environment. The range has been wide among the eight EU member states bordering the Baltic Sea, directly affecting the quality of the Baltic Sea marine environment (European Commission 1998).

5.2   Regional European Union Law and Guidance

The legal relationship between the EU and its 27 member states is defined by treaty, beginning with the European Community Treaty of Rome in 1957. The current treaty is the recently-adopted Treaty of Lisbon (2009).[14] All EU nations must adopt the acquis Communitaire, a body of EU laws, principles, and objectives, including certain provisions of EU environmental legislation. Candidate member states negotiate the terms of their accession, which can establish a timeframe in which to implement certain requirements.

The EU may directly regulate activity throughout the EU and impose binding requirements on member states in areas where the EU has "exclusive competence." The Treaty of Lisbon identifies these areas as: 1) the customs union; 2) competition rules for the functioning of the common market; 3) monetary policy for member states whose currency is the Euro; 4) the conservation of marine biological resources under the Common Fisheries Policy; and 5) common commercial policy. These policies typically are implemented by regulations, which are "binding in [their] entirety and directly applicable in all member states". The EU also has "concurrent competence" with member states in some areas. In areas of concurrent competence, the EU may directly regulate the member states, but only under certain circumstances, respecting the principle of "subsidiarity." Traditionally, this has included measures related to energy and the environment.

The EU uses a number of types of instruments with varying degrees of enforceability to implement policies. These include, among other things, directives, decisions, communications, strategies, and policies. EU Directives establish mandatory objectives, which member states are

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[14] http://europa.eu/lisbon_treaty/index_en.htm, accessed 3 February, 2011

required to "transpose" into national law and implement and enforce nationally. While directives require member states to achieve particular results, the member states may choose the "form and methods" for implementation. Thus, member states have flexibility in determining how they implement the directives and meet those objectives.

Other categories of EU instruments generally provide guidance rather than establish hard legal requirements. Although frequently issued, EU recommendations have no binding force on member states nor do "strategies." Thus, for example the recommendation on Integrated Coastal Zone Management creates no binding obligation on member states and cannot be enforced, nor can the Recommendation on the EU Strategy for the Baltic Sea Region.

Member states generally have the main responsibility "for the correct and timely application of EU legislation and treaties" and are "responsible for the direct application of EU law, for the application of their national laws implementing European Community law, and for the many administrative decisions taken under those laws" EC 2007). The EU may take action against member states that do not properly or timely transpose, implement, or enforce provisions of EU law.

Effective implementation of several EU directives is critical to restoration of the Baltic Sea environment and to the success of the environmental pillar of the EU Strategy for the Baltic Sea Region. Foremost among these directives are the Water Framework Directive and the Marine Strategy Framework Directive. Although not a binding directive, the Integrated Coastal Zone Management Recommendation and its relation to marine spatial planning under the recent Integrated Maritime Policy is important as well.

5.2.1   Water Framework Directive (2000/60/EC)

The EU Water Framework Directive (WFD) primarily addresses freshwater quality, an issue fundamentally related to the health of the Baltic Sea ecosystem (European Parliament and Council (2000). Adopted in 2000, the WFD represents a major restructuring in water management in the EU, integrating multiple directives and their requirements into one framework and requiring that member states manage water resources by river basin and adopt an ecosystem approach to such management. The directive requires member states to achieve "good status" for certain waters by 2015, including lakes, streams, rivers, estuaries, and groundwater bodies, and "taking into consideration" near-shore coastal waters. Under certain limited circumstances, the directive allows member states to work on a longer timeframe.

Member states were required to transpose the WFD into their national laws by 2003. They were also required to identify river basin districts, appoint competent managing authorities, and to identify international river basin

districts covering the territory of more than one member state. Draft river basin management plans were required by 2008, with the finalised plans due in 2009. For shared river basins, the directive requires coordination among the relevant member states in developing river basin management plans but does not impose legal obligations in that regard nor provide specific details on how to effectively manage those river basins jointly.

5.2.2   Marine Strategy Framework Directive (Directive 2008/56/EC)

The Marine Strategy Framework Directive (MSFD) was adopted in 2008, recognising that "the pressure on natural marine resources and the demand for marine ecological services are often too high and that the [EU] needs to reduce its impact on marine waters. …" (MSFD, § 2) The strategy aims to achieve "good environmental status" for marine waters, providing "ecologically diverse and dynamic oceans and seas which are clean, healthy, and productive; and the sustainable use of the use of the marine environment."(MSFD, Art. 3, § 5).

Member states are required to develop and implement "marine strategies" to achieve good environmental status in marine waters for which they are responsible by 2020. Coastal waters that are not addressed in other EU legislation, such as the WFD, are included. Measures to attain good environmental status must be operational by 2016 and must use adaptive management on an ecosystem approach. (MSFD, Art. 5, § 2).

The directive divides Europe's seas into four regions, one of which is the Baltic Sea region. Good environmental status will be determined at these regional levels. Member states in the same region are required to coordinate with each other and with relevant third countries. Member states are also encouraged to work within existing regional institutions and to build upon relevant programmes (MSFD, Art. 6).

As a preliminary step, EU member states must assess the ecological status of their waters and the impact of human activities on the marine environment and define "good environmental status" on the basis of criteria in the directive. It is anticipated that HELCOM's initial holistic assessment of the Baltic Sea's ecosystem health will provide the basis for meeting this requirement for member states in the Baltic region (HELCOM 2010). Member states then must identify measurable objectives and indicators to achieve good environmental status within the required timeframe and must establish coordinated monitoring programmes in order to regularly evaluate the status of the waters for which they are responsible.

Where urgent action is needed, member states bordering a marine region may develop a plan of action and request approval as a "pilot project" with earlier deadlines for operation of marine strategy measures. Key elements of the

strategy will be reviewed every six years and interim reports will be required every three years.

5.2.3 Integrated Coastal Zone Management (ICZM) Recommendation (2002/413/EC)

Recognising that the coastal zone "is of great environmental, economic, social, cultural and recreational importance to Europe", the commission in 2002 issued a recommendation on Integrated Coastal Zone Management (EC 2002). The recommendation noted that effective, integrated management of the coastal zone would require "strategic, coordinated and concerted action at the local and regional level, guided and supported by an appropriate framework at the national level." As a recommendation, rather than a directive or other legislative instrument, the ICZM provisions were not enforceable, and member states were not required to implement this approach to managing their coasts.

The recommendation was adopted to address problems that arose with coastal management policies largely driven by sectoral interests with differing priorities for uses of limited coastal resources. Without clear policy or legislative direction, coastal management often dealt with development or resource conflicts or legal implementation problems as they arose, and often without the extensive advanced planning needed to carry out long-term plans for a sustainable development strategy. (EC 2007). To address these difficulties, the recommendation established eight principles for effective integrated coastal zone management, including protection of the coastal environment based on an ecosystem approach and sustainable management of coastal zone land and sea resources (EC 2002). Member states were "invited" to develop national strategies for managing their coastal zones, applying the principles in the recommendation.

Although the EU has expended considerable effort in developing and promoting the ICZM principles, the sectoral approach to coastal planning still prevails. (EC 2007). Member states that responded to the 2002 call to implement national strategies have only begun to implement those strategies. In the Baltic Sea region, member states are at various stages of developing ICZM strategies, and their legal and regulatory capacity to undertake and implement the plans varies greatly.

The future of the ICZM principles lies in their integration into the EU Maritime Policy and, the EU Marine Strategy Framework Directive, especially as a strategic component in maritime spatial planning requirements. The EU in 2011 launched a public consultation to assess the status and future of Maritime Spatial Planning (MSP) and Integrated Coastal Zone Management (ICZM) in the EU, with the goal of guiding future action in these areas. The consultation announcement states that "[the] information gathered through this consultation will be used as part of an impact assessment and may be used to prepare draft proposals on Maritime Spatial Planning and/or Integrated Coastal Zone Management."[15]

5.2.4 Integrated Maritime Policy

In 2007, the commission adopted an Integrated Maritime Policy for the European Union (2008), marking the adoption of an EU-wide maritime policy for the first time in 50 years. The commission recognised that use of the Baltic Sea "needs to be sustainable as the marine environment is the base resource for all maritime economic activities." The maritime policy calls for "good governance and an integrated approach . . . that joins up sectoral policies for maritime activities and environmental policy relating to Europe's seas." (European Parliament and Council (2008))

Key elements of the EU Integrated Maritime Policy include national "integrated maritime policies" to be developed by EU member states; a programme of marine spatial planning; elimination of pirate fishing and destructive high seas bottom trawling; a strategy to mitigate the effects of climate change on coastal regions; creation of a European network for maritime surveillance to ensure the safe use of the seas and the security of the EU's maritime borders, among other things.

5.3 International Law

The EU and individual member states are parties to various international agreements, many of which contain provisions relevant to restoration of the Baltic Sea environment. An international agreement between the EU and a third party forms an "integral part of Community law" that binds all member states and can be enforced in court. If a treaty provision is clear and unconditional and requires no further implementing law, then that obligation is directly effective on member states. Otherwise, provisions in international agreements must be adopted through implementing legislation by the EU or by individual Member State signatories, depending on the circumstances.

5.3.1 The Baltic Marine Environment Protection Commission (HELCOM)

The main agreement relevant to the Baltic, which originally focused on hazardous substance pollution, is the Convention on the Protection of the Marine Environment of the Baltic Sea Area (the Helsinki Convention), which has been signed by the European Union and by all of the countries bordering the Baltic, including Russia. Adopted in 1974, with a new version adopted in 1992 and entered into force in 2000, it established the Baltic Marine Environment Protection Commission, known as the Helsinki Commission or HELCOM, to oversee its implementation. As noted in earlier in this paper the HELCOM Initial Holistic Assessment (2010) concludes that none of the Baltic Sea's open water basins currently has a "good environmental

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[15] http://ec.europa.eu/fisheries/partners/consultations/msp/index_en.htm

status." Eutrophication, hazardous substances and loss of biodiversity continue to be the main challenges.

The HELCOM vision of "a healthy Baltic Sea environment, with diverse biological components functioning in balance, resulting in good ecological status and supporting a wide range of sustainable human economic and social activities"[16] has not been achieved despite almost forty years of collaboration. The over 200 recommendations[17] developed and approved throughout the years have reflected best practices in management, technology choice and regulation, covering aspects ranging from sewerage treatment and port management to solid waste management. While HELCOM recommendations may form the basis for environmental legislation in the Baltic Sea area, it is through the national legislation that the recommendations become effective. For the EU members states, this may have changed over time since, as a signatory to HELCOM in 1992, EU can directly implement measures, or in areas of joint competence, issue a directive and then work with the member states who would implement through national legislation.

Over time there has also been concerns related to Monitoring and Evaluation of HELCOM recommendations and overall progress in reaching the HELCOM Vision as expressed by the contracting parties. The HELCOM initial holistic and thematic assessment 2010, referred to in this report, is preliminary and covers eutrophication, hazardous substances, biodiversity and maritime activities. Data presented in the report is from the period 2003-2007. The HELCOM Monitoring and Assessment Group (MONAS) is currently developing a system for targeted and timely assessments to better and in a more timely manner "present the state of the marine environment, long-term trends in the pollution load, other human activities and their impacts on the Baltic ecosystems and also recommendations for future actions".[18]

In 2007, HELCOM adopted the Baltic Sea Action Plan, a comprehensive plan designed to restore the Baltic marine environment's good ecological status by 2021. Like the EU Strategy for the Baltic Sea Region, the plan is centered on particular environmental problems affecting the sea. As with the EU Baltic Sea strategy strategy's environmental pillar, the issues to be addressed include eutrophication, hazardous substances, maritime activities, and conservation of biodiversity. Most notably, the plan seeks country-specific reductions in nitrogen and phosphorus inputs to the Sea, based on HELCOM's calculation of the maximum allowable annual nutrient pollution inputs the Sea can tolerate while achieving "good ecological status." Those calculations determined that annual reductions of approximately 15,000 tonnes of phosphorus and 135,000 tonnes of nitrogen would be required. To reach the plan's annual targets for both nitrogen and phosphorus, the plan recommends that HELCOM countries develop national implementation programmes (NIP) by 2010; implement specific measures to improve the treatment of wastewater, including increasing phosphorous removal from 80 % to 90 %, substituting phosphorous in detergents; and implement measures to drastically reduce agricultural inputs, including changes in manure handling and fertilisation practices. (HELCOM 2007a).

Sweden currently holds the Chair of HELCOM (2010-2012) and has set as one of its four priorities during the Chairmanship to "Strengthen the role of HELCOM in the implementation of EU policies relevant to the Baltic Sea region".[19] The Swedish Chair stress that the EU Baltic Sea Strategy is a "major policy initiative to give more EU attention to the Baltic Sea region and to strengthen the implementation of the Baltic Sea Action Plan" with clear linkages to the EU Marine Strategy Directive (2008).[20] Specifically improving overall regional coordination among the many different institutions and regulatory frameworks has not been addressed as a priority during the Swedish Chairmanship.[21]

Table 2	HELCOM Baltic Sea Action Plan	Integrated Maritime Strategy	Marine Strategy Framework Directive	Water Framework Directive	Integrated Coastal Zone Management Strategy	Others
Reduce nutrient inputs to the sea to acceptable levels	✓			✓	✓	Nitrates Directive
Preserve natural zones and biodiversity	✓	✓	✓	✓	✓	Common Agriculture Policy
Reduce the use and impact of hazardous substances	✓	✓	✓	✓	✓	Birds and habitats directives
Become a model region for clean shipping	✓	✓	✓		✓	Common Fisheries Policy

Illustration of how existing laws address multiple objectives in the environmental pillar of the EU Baltic Sea strategy

[16] www.helcom.fi/BSAP_assessment/en_GB/main, accessed 3 February 2011 [17] www.helcom.fi/Recommendations/en_GB/valid, accessed 3 February 2011
[18] www.sweden.gov.se/sb/d/12811/a/148728, accessed 3 February 2011   [19] www.sweden.gov.se/sb/d/12811/a/148728, accessed 3 February 2011
[20] Ibid   [21] www.helcom.fi/stc/files/BSAP/5StakeholderConf_Lindholm.pdf, accessed 3 February 2011

5.4 A Complex Picture of National, EU, International Law and Policy

As discussed in this paper, a complex set of national, EU, and international law and policy are at play in shaping the implementation of environmental requirements by the states within the Baltic Sea region. Table 2 illustrates how legal requirements in areas critical to the sea's health overlap, providing areas for collaboration and coordination within the region. This table does not include national legislation, although that is an area in which member states could coordinate and learn from one another regarding effective implementation of EU law and effective regulation at the national level. The table provides an argument for a deepened analysis of the regulatory framework at both the national, regional and international level to clarify this framework for effective coordination regarding key objectives of the environmental pillar of the EU Baltic Sea Strategy.

5.5 External Action – Non-Binding Cooperation Programmes with EU neighbours

Collaboration between the EU and its neighbouring states through third party arrangements is important for the EU to avoid the emergence of new dividing lines between the enlarged EU and its neighbours. EU Neighbourhood policies are e.g. designed to support collaboration between the EU and its neighbours through dialogue and development initiatives.[22] The policy mix is broad including bilateral agreements through guidelines and legislation.[23]

This type of engagement with EU neighbours was explicit already in the Baltic Sea Communication by the EU Parliament (2006) and clearly described in the EU Baltic Sea Region Strategy Communication (2009). The Northern Dimension is one of the key third party arrangements. "The Northern Dimension is a common policy and funding framework for dialogue and concrete cooperation to support economic integration, competitiveness and sustainable development in the Baltic and Barents Seas region" shared by four equal partners the EU, Norway, Iceland and the Russian Federation.[24] The Northern Dimension Environmental Partnership (NDEP) promotes co-ordination between the European Commission, partner governments and international financial institutions such as the European Bank for Reconstruction and Development (EBRD) Nordic Investment Bank (NIB), European Investment Bank (EIB), Nordic Environment Finance Cooperation (NEFCO) and the World Bank to facilitate financing for environmental projects in water and wastewater treatment, management of municipal and agricultural waste, energy efficiency and nuclear safety projects. Cooperation with the non-EU members Russia and Belarus as partner countries is a key building block in the NDEP work.[25]

Another key policy for partnership between the EU and its Eastern neighbours is the Eastern Partnership. The Eastern Partnership explores new association agreements including deep and comprehensive free trade agreements with those countries willing and able to enter into a deeper engagement and gradual integration in the EU economy. Issues considered include easier travel to the EU through gradual visa liberalisation, promotion of democracy and good governance, strengthened energy security, and environmental protection. In the Baltic Sea region Belarus and Ukraine are part of this framework.[26]

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[22] www.eeas.europa.eu/regional_policies/index_en-htm, accessed 1 May 2011 [23] www.eeas.europa.eu/policies/index_en-htm, accessed 1 May 2011
[24] www.eeas.europa.eu/north_dim/index_en-htm, accessed 1 May 2011   [25] www.ndep.org/, accessed 26 October, 2010
[26] www.eeas.europa.eu/eastern/index_en.htm, accessed 26 October, 2010

The EU Strategy for the Baltic Sea Region is innovative in its approach to using the EU structure to unite a "macro region" across multiple sectors reflecting the priorities of the member states, the history of the region and international obligations. The strategy has taken a programmatic approach and is built on multiple projects, each ultimately with the purpose of contributing to the overall objectives of the four pillars. Within the environmental pillar it is especially clear that currently there is not a clear baseline to measure progress at the outcome level. This makes the assessment of progress and the steering of the strategy difficult. Focus likely will be on independent projects and their completion, rather than on necessary governance measures that would change behavior, encourage full compliance with existing laws, and have lasting impact on the health of the Baltic Sea.

While the EU Baltic Sea Strategy recognises that governance reform, largely in the form of full implementation of certain laws and policies integral to the sea's recovery, it does little in the way of formulating an actual "strategy" on how to utilise the legal, regulatory and institutional framework to strengthen on-the-ground integrated planning and subsequent action. Nor does it make hard decisions where multiple objectives, particularly across the pillars (e.g. infrastructure development and environmental protection), are likely to conflict. Ideally the strategy should focus on both strategic governance reform and policy change for behavioral change as well as results through specific projects.

The following four steps are proposed as recommendations on how to move forward with the implementation of the EU Baltic Sea Strategy to strengthen regional governance and the implementation of the strategy with the overall ambition of support to a sustainable and secure Baltic Sea region:

1. Undertake a regional governance assessment to explore governance reforms and the role of governance bodies within the region;
2. Establish a monitoring and evaluation system for the EU Baltic Sea Strategy to support and measure its long-term implementation and success;
3. Undertake a legal assessment of key EU Directives, priority HELCOM BSAP actions, and targeted provisions of international law and their status of implememmentation; and
4. Strengthen existing EU Directive implementation through solid regional coordination mechanisms focusing on broader needs within the region.

Steps one to three can be undertaken in parallel and as a part of the ongoing monitoring work of the EU Commission and in partnership with the rotating Chairmanship of the EU, the member states, and designated project coordinators.

The fourth step would follow this analysis and be well grounded in lessons learned from the first year of implementing the EU Strategy for the Baltic Sea Region, Lisbon Treaty implementation, and the EU Growth Strategy 2020.[27]

6.1   Undertake an Institutional Assessment to Clarify the Roles of Existing Baltic Sea Governance Bodies and Institutions

Introduction of the EU Baltic Sea Strategy's macro-region concept presents an opportunity to discuss how governance can be carried out more efficiently within the region even though the strategy is explicit on the issue that it is agreed on the basis of the principle of no new institutions, no new funding and no new legislation. As part of a regular review process of the strategy an initial goal should be to better define how the new, macro-regional approach will work in relation to existing organisations, the political and institutional frameworks and the role of the EU (figure 1). Within the framework of the strategy an assessment should be made of the current institutions and actors and how they contribute to implementation of the environment pillar with linkages to the other three strategic pillars. Based on this assessment, options to improve the governance framework and particularly institutional interaction could be explored. One year into the implementation of the strategy this issue has not been addressed.

Ten out of the 14 basin countries are EU members. To tackle the environmental challenges of the basin all of the basin countries need to be involved. The environmental challenges are linked to the three other pillars of the strategy. For the region to be successful it needs to be prosperous, attractive, and secure. In that regard the EU member states should invest heavily in a dialogue coupled with actions to achieve similar objectives in the non-EU member states. The Eastern Partnership and the Northern Dimension frameworks are paths towards meeting this objective. Other paths involve increasing Foreign Direct Investment and knowledge and innovation partnerships. Clarity on the regional governance frameworks will stimulate this engagement process. In the longer run a central focal point for all the basin countries would support the implementation of the EU Strategy for the Baltic Sea Region.

For the strategy to be effective and achieve the objectives in the environmental pillar of the strategy, an approach that both focuses on the implementation of projects with concrete results managed in major programmes by responsible priority area managers should be coupled with an approach that also focuses on necessary governance reforms in the area of institutions and regulations to promote effective management of programmes and projects by the members states.

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[27] http://ec.europa.eu/europe2020/index_en.htm>, accessed 4 March, 2011

6.2 Establish a Baseline Monitoring and Evaluation System with a Cause-effect Relationship to Steer the Implementation of the Environmental Pillar in the Context of the EU Baltic Sea Strategy

An overall ambition would be to create a cause-and-effect relationship between the strategy's stated inclusive ambitions and objectives across the four pillars and how they relate specifically to the objective of the environmental pillar, its 15 priority action areas, linked projects and the horizontal actions. This would clarify assumptions being made on these linkages and highlight institutional strengthening opportunities. The ultimate outcome of a strategy process would be to explore its direct contribution to achieve higher level outcomes such as those defined in the EU's Growth Strategy 2020.[28]

A baseline monitoring framework is lacking for the EU Baltic Sea Strategy as a whole and for the environmental pillar specifically. This makes monitoring progress in terms of implementation of the environmental pillar and its projects difficult. Without a Monitoring and Evaluation System (M&E) in place that is linked to the annual reporting system and used by all priority coordinators, the management of the EU Strategy for the Baltic Sea Region by the EU's Directorate General for Regional Policy and implementation of the Strategy by Members states and other actors will be difficult. Necessary change in governance and management of programme and projects in line with the overall strategy objectives will not be easily addressed by the annual reporting team nor the responsible programme and project actors. An M&E framework with an agreed baseline will be critically important considering the rotating country chairmanship of the EU to get a good overview of progress and adaptive management steps to take. The EU Baltic Sea Strategy Action Plan and its activities will be evaluated during the Polish Presidency in the autumn of 2011.
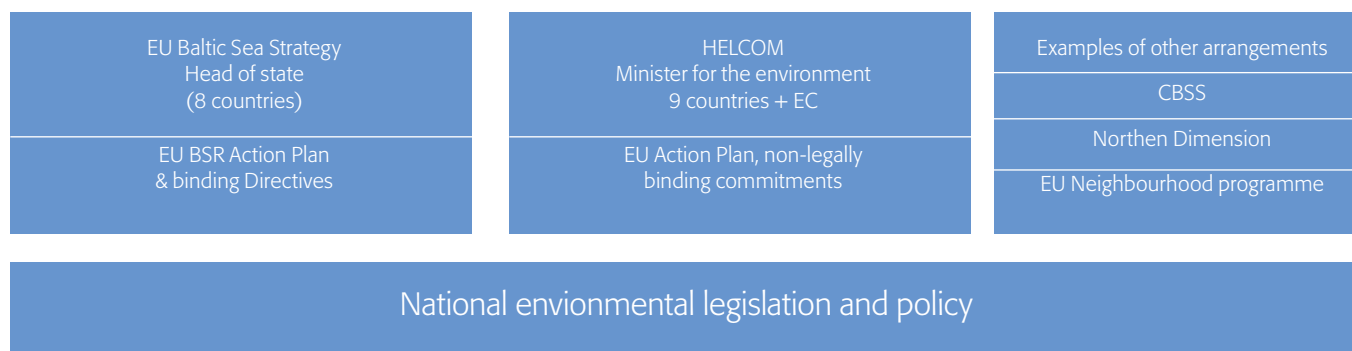
In terms of monitoring progress in the area of environmental indicators, the work by HELCOM MONAS[29] to measure progress in implementing the HELCOM Baltic Sea Action Plan is a promising M&E framework. The emerging M&E framework could be strengthened and supported through the EU Baltic Sea Strategy Action Plan and adapted also for its implementation. Similar M&E framework for monitoring progress in the other three pillars can also be explored and designed to allow for monitoring outcomes at the macro region level in a coordinated way.

6.3 Undertake a Legal Assessment of Key EU Directives, Priority HELCOM BSAP Actions, and Targeted Provisions of International Law and Their Status of Implementation

The Strategy emphasises that it involves no new laws or regulations; but it offers scarce practical guidance, on how it will work within the existing laws to improve environmental conditions on the Baltic Sea. Currently, the strategy recognises the importance of several existing laws or policies by including their full implementation on the list of "strategic actions" to be carried out as part of the Action Plan. For example, the EU Baltic Sea Strategy Action Plan lists implementation of HELCOM's entire Baltic Sea Action Plan, which alone contains 135 recommended actions, as a "strategic action." Similarly, the strategy Action Plan lists implementation of the EU Water Framework Directive and the EU Nitrates Directive in their entirety as elements of the Action Plan. The EU member states are already legally required to transpose these directives into national laws and to take certain actions; thus, although inclusion of an entire directive may reflect the importance attached to the directive, it adds little from either a process or substance perspective.

Ineffective implementation, inconsistent application, and a lack of enforcement throughout the region have hampered the effectiveness of certain laws within the region. The EU

Figure 1

EU Baltic Sea Strategy Head of state (8 countries)	HELCOM Minister for the environment 9 countries + EC	Examples of other arrangements
		CBSS
EU BSR Action Plan & binding Directives	EU Action Plan, non-legally binding commitments	Northen Dimension
		EU Neighbourhood programme

National envionmental legislation and policy

An illustrative view of the current governance framework for Baltic Sea Region (BSR) sustainable development.

[28] http://ec.europa.eu/europe2020/index_en.htm>, accessed 4 March, 2011
[29] Helsinki Commission Monitoring and Assessment Group, www.helcom.fi/groups/monas/en_GB/monas_main, accessed 4 March, 2011

itself has devoted considerable attention to analysing what is necessary for effective application of EU law and for developing better regulation within the EU and has emphasised that to achieve more effective regulation within the EU, "it is necessary to attach high priority to the application of law, to identify why difficulties in implementation and enforcement may have arisen and to assess whether the present approach to handling issues of application and enforcement can be improved."

A necessary first step for better integrating and complying with existing laws would be to assess current laws that contribute to the strategy's goals and thoroughly evaluate member states' compliance with these relevant laws to identify gaps in effective implementation. This would include identifying the connections between EU Directives, HELCOM and the Baltic Sea Action Plan, and relevant provisions of international law. For each of the objectives in the environmental pillar the legal assessment should:

- Compile the existing laws whose full implementation will contribute to achieving the particular environmental objectives.
- Assess the extent to which these legal requirements have been carried out and whether they have been effective in meeting their goals.
- Identify why difficulties in implementation and enforcement have arisen and what is preventing the proper implementation and enforcement of these laws; and,
- set specific goals to remedy identified difficulties in cooperation with the relevant member states as part of a truly strategic approach to targeting difficulties in law and governance in the region.

From here, efforts can be targeted on specific implementation problems, rather than on the general goal of implementation of entire laws. In this way, the strategy efforts can focus on encouraging effective implementation of laws where member states are having difficulty, identify where specific investments in capacity building are needed, and consider whether additional legal action may be warranted to ensure implementation.

6.4 Strengthen Existing Directive Implementation Through Solid Regional Coordination Mechanisms

The EU Baltic Sea Strategy should undertake efforts to encourage coordinated regional implementation of the major EU directives affecting the Baltic Sea environment. As discussed, laws historically have been implemented individually by the member states with limited coordination among the neighbouring member states. Meaningful consultation among member states in the region is essential to the effective implementation of the Water Framework Directive and the Marine Strategy Framework. For the Baltic Sea region, a key issue in development and implementation of the Marine Strategy Directive will be coordinated development of a unified plan for achieving "good ecological status" for the Baltic Sea. The Marine Strategy Framework establishes ambitious goals that leave actual development of measures to the member states. Designation of the Baltic Sea as a pilot project under the Marine Strategy Framework may provide opportunities for this essential coordination, but plans ultimately must be coordinated across the Baltic Sea region.

As the EU member states begin to implement Basin Management Plans prepared under the EU Water Framework Directive, member states have an opportunity to collaborate on several levels in a manner that would contribute to the EU Baltic Sea Strategy, perhaps by adding a regional implementation element, particularly regarding international River Basin Districts. Member states should be coordinating not only with other member states with whom they share international river basin districts, but throughout the basin to determine how the River Basin Plans may be used to meet the strategy objectives and whether actions are possible within the framework of the Water Framework River Basin Management Plans regarding water quality measures needed to restore the Baltic Sea as a whole.

By building on the institutional assessment (1), a cause-and-effect analysis of objectives, actions and their outcomes in a wider EU perspective in the EU Baltic Sea Strategy (2), and the legal assessment (3), recommendation number four can result in a strategic regional coordination mechanisms that supports the current governance system and/or the reformation of a new governance system for a strategic and long term approach to implementation of the EU Strategy for the Baltic Sea Region.

Photo: Jakob Granit, SIWI

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[30] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0502:FIN:EN:HTML, accessed 4 March, 2011

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